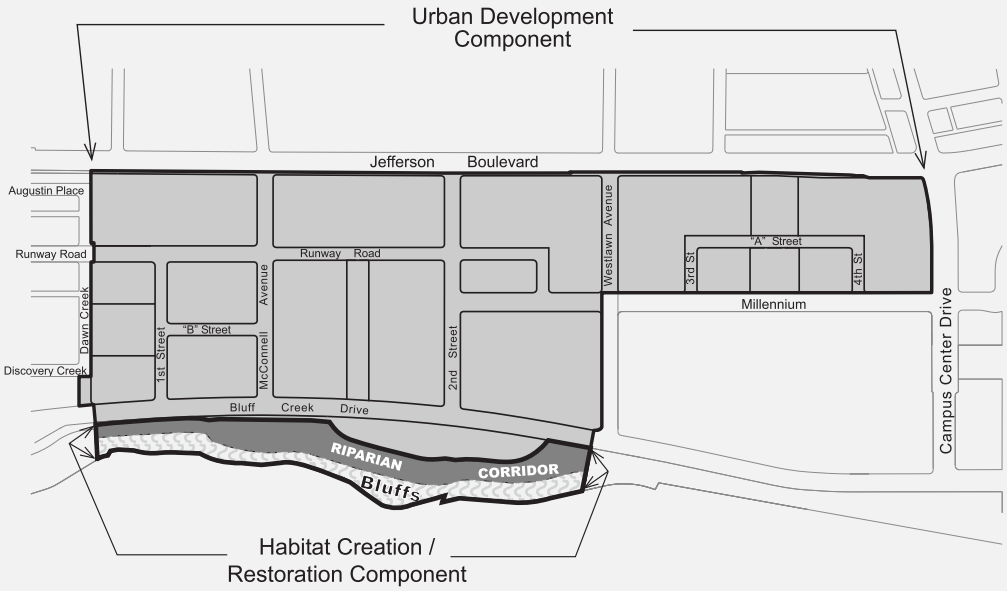
FINAL RECIRCULATED SECTIONS
OF
ENVIRONMENTAL IMPACT REPORT
(Final RS-EIR)

VILLAGE AT PLAYA VISTA



VOLUME IV

APPENDIX F
(Cont.)

City of Los Angeles/EIR No. ENV-2002-6129-EIR

2009

STATE CLEARINGHOUSE NO. 2002111065

FINAL RECIRCULATED SECTIONS - ENVIRONMENTAL IMPACT REPORT (FINAL RS-EIR)

VILLAGE AT PLAYA VISTA APPENDICES

VOLUME IV

APPENDIX F:
RS-DEIR COMMENT LETTERS (CONT.)

City of Los Angeles
EIR No. ENV-2002-6129-EIR

State Clearinghouse
No. 2002111065

2009

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APPENDIX F: RS-DEIR COMMENT LETTERS (Cont.)

APPENDIX F:
RS-DEIR COMMENT LETTERS (CONT.)

Marianne Brown

[redacted] is also on the City of LA Westside Planning Commissic

SEE comments regarding Methane PM

April 2, 2007

S. Gail Goldberg, AICP
Director of Planning
Los Angeles Department of City Planning
200 North Spring Street, Room 525
Los Angeles, California 90012-4801

Dear Director Goldberg,

This is the Ven-Mar Neighborhood Association's Response to your request (02/07/07) to submit written comments regarding "The Village" at Playa Vista, Playa Capital, LLC's Second Annual Report (12/01/06) of its compliance with the Development Agreement for Phase II development of PV between the City of LA and Playa Capital, LLC.

After reading the Development Agreement of 02/02/05 and the three-page Annual Report from Playa Vista, signed off by J. Marc Huffman, V.P. of Entitlements at Playa Vista, we – as members of Ven-Mar, a neighborhood which is impacted by PV development -- have a number of areas of concern. One such concern is that the builder, Playa Capital, LLC appears to be the one reviewing its *own* progress in compliance with the Agreement. These are some questions we need answered:

1. How can we community residents be confident that PV, LLC is being objective in its very cursory reports -- considering its self-interest in this project? For example, what other outside/objective means are being used by your Department, the Department of Transportation, the Department of Building and Safety, the Fire Department, and any other relevant city departments, to determine compliance?
2. Were attachments submitted with the Report which give detailed information on the very cursory descriptions in their three-page report? We are specifically concerned about such topics as: the Playa Vista Educational Trust, Additional Transportation Improvements in the Del Rey Community, and the Mar Vista Neighborhood Traffic Management Plan. For example, how much money was given to each of the programs listed in the PV Educational Trust section? And whereas funding for schools are clearly for "educational" purposes, *why* are "youth programs" such as Westchester Family YMCA, Venice Marina Lions, LAPD Pacific Area Boosters, Boy Scout Troop 927, Westchester Lariats considered "educational" programs?
3. Why is methane monitoring and venting at Playa Vista not reported on in this annual report?

Traffic Impact

In order to get Phase 2 approved Playa Vista, LLC had to show through a traffic planning model how the increased traffic could be absorbed by neighborhood streets, including those running through Mar Vista and Venice. To our dismay, we have been informed

See pg. 3

#10 monitoring

that PV, LLC secretly used in its traffic planning computer model 3 *collector* streets – Inglewood Boulevard, Beethoven Avenue, and Walgrove Avenue to absorb this increased traffic. These residential collector streets were not designed to handle as many cars as PV generates. For example, Walgrove is designed to carry about 200-300 cars/hour maximum. Traffic monitoring devices owned by the Mar Vista Community Council have registered traffic on Walgrove upwards to 1400 cars/hour at peak times currently. Beethoven Avenue is not supposed to have more than 400 cars/hour. Currently at peak hours there are 1,000 cars/hour. Further development at PV and the Marina area will only lead to even more unacceptable loads on our collector streets. (In addition, Centinela Boulevard is a major traffic artery and alternate to the freeway; it has also experienced a stead increase in traffic as development in the SM and PV areas surges)

Of course, we are aware that the surge in condominium building and related development in the Marina area have contributed significantly to this traffic increase -- as well as the city of Santa Monica's business growth and Culver City's building of Costco on Washington Boulevard. Clearly, both the Departments of Planning and Transportation now need to be much more proactive during the PV development phases and find ways to create incentives for PV and other builders and business interests to adequately pay for the infrastructure improvements needed.

The quick and short of it is that this increase in traffic is unacceptable, and the one time $150,000 provided by PV is insufficient to mitigate the increase in traffic as Phase 2 moves forward. In fact, a local traffic expert estimates that when Phase 2 is completed the currently deplorable traffic load in our area will be tripled!

Methane Monitoring and Venting

We have examined the files in the Department of Planning regarding methane gas monitoring and venting at the PV site. What we have found are contracts with companies to primarily monitor any escaping gas. Although a venting program was required under the Environmental Impact Report, there is very little evidence that such a plan exists. It is our understanding that there was an agreement between the City and PV to establish an outside, objective Taskforce to look at methane management at the PV site? Has a Taskforce been formed and, if so, what are there findings?

We note that the actual reports of PV monitoring and venting activities are not kept at Planning but instead are kept at the Fire Department and at the Department of Building and Safety – in two different locations in the City. This makes it very cumbersome for community residents, and we suspect for you in Planning, to monitor Playa Vista's compliance or non-compliance with respect to methane gas protections for residents and the surrounding community. This is very disturbing. We recommend that even the Department of Planning, keep copies of all records regarding PV compliance with EIR-mandates and other such requirements.

SEE Rosendahl's comments to the Meth. Task Force.

Only 1 meeting has occurred (1 meet in 2007) ever LADBS is still non-responsive to questions posed by the public & data posed by public.

Lastly, we would like to know what it would take to open up the Playa Vista Development Agreement for Phase II again so that some of these issues can be responsibly addressed by this multi-billion dollar, 1,100 acre development?

Thank you for encouraging this input and thanks also to Meredith T. Elguira in the Department of Planning's Playa Vista/Airport Unit in assisting us in finding relevant reports/materials on the Playa Vista development.

Sincerely,

Marianne P. Brown, Coordinator
On behalf of the
Ven-Mar Neighborhood Association (VMNA)

PS: The VMNA runs from East to West from Centinela to Lincoln Avenues and North to South from the border with the City of Santa Monica to Washington Boulevard.

From: "Tom Ponton" <tponton@newstogo.net>
Subject: **Methane task force**
Date: May 2, 2007 1:33:40 PM PDT
To: Patricia McPherson <PatriciaMcPherson@earthlink.net>
Status: U
Return-Path: <tponton@newstogo.net>
Received: from noehlo.host ([127.0.0.1]) by mx-coward.atl.sa.earthlink.net (EarthLink SMTP Server) with SMTP id 1hJlvH5cl3Nl36K0; Wed, 2 May 2007 16:33:13 -0400 (EDT)
Received: from sandrock.mpowercom.net ([208.57.196.157]) by mx-coward.atl.sa.earthlink.net (EarthLink SMTP Server) with ESMTP id 1hJlvG4eW3Nl36K0 for <patriciamcpherson@earthlink.net>; Wed, 2 May 2007 16:33:12 -0400 (EDT)
Received: from [192.168.1.21] (lgb-static-208.57.25.67.mpowercom.net [208.57.25.67]) by sandrock.mpowercom.net (Postfix) with ESMTP id 7A0403F0316 for <PatriciaMcPherson@earthlink.net>; Wed, 2 May 2007 13:33:01 -0700 (PDT)
X-Mailer: Microsoft Outlook Express Macintosh Edition - 4.5 (0410)
Mime-Version: 1.0
X-Priority: 3
Content-Type: multipart/alternative; boundary="MS_Mac_OE_3260957620_434975_MIME_Part"
Message-Id: <20070502203301.7A0403F0316@sandrock.mpowercom.net>
X-Mpower-Mailscanner-Information: Please contact the ISP for more information
X-Mpower-Mailscanner: Found to be clean
X-Mpower-Mailscanner-Spamscore: 6
X-Mpower-Mailscanner-From: tponton@newstogo.net
X-Elnk-Received-Info: spv=0;
X-Elnk-Av: 0
X-Elnk-Info: sbv=0; sbrc=.0; sbf=00; sbw=000;

Dear Neighborhood Council Leaders in Pacoima & Mid City,

The LA City Methane ordinance which passed a few years ago required a task force to be created by Building and Safety to study and evaluate the experimental mitigation measures currently being used to see if they're working or not and to find out if any other toxic gases are endangering the public. At the first meeting in October 2006, I was the only member of an NC to attend, although it was announced that they had invited someone from Pacoima NC and from Mid City NC. It's also supposedly a public meeting and the agenda lists public comment although there was none. If you can find someone knowledgeable about methane mitigation you may want to have them represent your NC and attend this next meeting on May 22nd. I personally felt like a fish out of water at the last task force meeting. In fact, about all I got out of the last meeting was that the whole thing seemed like a setup where the industry consultants had already gotten together and decided how they can get away with easing their legal requirements in the current methane law. It felt like I was just being used to make it look like they cooperated with neighborhood councils. Building and Safety basically told this group of consultants for developers that they would need additional testing documentation to convince the City Council to change the current law. I thought Building and Safety would be the ones doing the testing and inspecting, but apparently they don't have the expertise in this area. Most of the people at the first meeting seemed to already know each other. It seems like there should be some independent experts there with knowledge about methane, representing the public and Neighborhood Councils on this task force. What about the Fire Department? Seems like they should be involved on this task force? The purpose of the task force was supposed to be to study and evaluate the experimental mitigation measures to see if they're working or not and to see if any other toxic gases are endangering the public. Has that been done? The task force has not met since November 2006, but now will be considering recommendations from the industry. No wonder Playa Vista and the city keep getting sued. I just don't see any real accountability or oversight on this.

Tom

>From: "Norman Kulla" <norman.kulla@lacity.org>
>To: "Tom Ponton" <tponton@newstogo.net>
>Subject: second Methane Task Force mtg is 5/22 at 3 p.m. 201 N. Figueroa, 9th floor
>Date: Mon, Apr 30, 2007, 10:40 AM
>

> Tom,
>

> I got a call from Colin Kumabe moments ago saying he has sent out notice
> for next Methane Task Force mtg to be held on 5/22 at 3 p.m. 201 N.
> Figueroa, 9th floor. Please put on your calendar - I've put on mine.
>
> I asked Colin what he's done since first meeting - he said he's asked some
> of technical members to prepare reports...I asked about what...he said
> appropriate depth of holes for testing purposes....
>
> I was also thinking that given your role on NC Commission you might want to
> give a heads-up to Pacoima NC and Fairfax-La Brea NC whose representatives
> didn't come to first meeting...probably due to same lack of notice we suffered...
>
> All good wishes, Norman

AGENDA

Public Informational Meeting, June 15, 2007

RE: HEALTH & SAFETY ISSUES Pertaining to Oilfield and Landfill Gas Migration; City of LA - Accountability and Adherence to State and Federal Law; State Oversight

1. Opening Introductions
2. Presentation of Concerns by Grassroots Coalition, Patricia McPherson
   - Public Methane Task Force
   - City Controller Audit – June 5, 2000
   - Potential state and federal violations – Playa Vista bonds & LADBS/ Union Conflicts of Interest
3. Public discussion of concerns and Legislative staff response regarding LA City's lack of accountability and recommendations for achieving accountability and enforcing local, state and federal law.
4. Closing remarks and follow up.

MEETING JUNE 15, 2007 Public Meeting, Location- Councilman Rosendahl's Westchester office- Community Center

RE: CITY OF LA FAILS TO PROVIDE ACCOUNTABILITY FOR ASSURANCE OF PUBLIC'S HEALTH & SAFETY

WHAT ACTION CAN BE TAKEN BY STATE LEGISLATORS TO ENSURE SAFETY AND WELL BEING OF THE PUBLIC FROM HAZARDOUS MIGRATING OILFIELD AND LANDFILL GASES?

-How can state legislators step in to provide for:
- a full investigation of construction projects and methane mitigation systems & enforcement protocol in Los Angeles
- a state investigation of city's failed oversight of methane mitigation (eg. Playa Vista Phase 1: Playa Vista Methane Prevention Detection and Monitoring Program and the Citywide Methane Code)
-What steps can state legislators take to enforce state and federal codes?
-What steps can state legislators take to provide for full disclosure and enforcement of state and federal law? Eg. Playa Vista- Potential bond fraud (CDLAC & Mello Roos) and potential Ricoh violations

1) **LA CITYWIDE METHANE CODE- Public Methane Task Force Meeting May 22, 2007** (Citywide Methane Code based upon Playa Vista Phase 1 Code)

Ordered into existence by the LA City Council in 2004, to include the public, experts, neighborhood councils, interested parties to scrutinize the methane mitigation systems and determine what has been implemented, what hasn't; what works, what doesn't and how to provide for better safety. The Los Angeles Building and Safety Department (LADBS) was ordered to facilitate the Task Force's creation and continuation -**the first publicly attended Public Task Force Meeting did not occur until May of 2007. As of May 22 , LADBS has not provided any communications for further meetings or responded to questions posed on the 22nd. What recourse do citizens of Los Angeles have to compel compliance by LADBS?**

- May 2007 meeting: LADBS was requested to place, on hold, any and all potential changes to the code in order for the Task Force to engage with LADBS in a learning experience as required by the 2004 City Council Order. (LADBS provided various changes of the Code to the Task Force on May 22 requiring a response by month's end. LADBS would then be able to bring the changes before Council, bypassing the Task's Force's overall needs for review time and investigation of protocol and actual systems)

- LADBS was unable to answer most questions posed by the public

and was unable to provide authorship or data support for the proposed changes to the methane code.

- Parties present expressed a general consensus that LADBS was evasive and non-responsive.

- After repeated requests for LADBS to discuss protocol for implementation of the 2004 directives and requests for discussion of potential time frames, none was offered by LADBS except that LADBS recognized the need for further review time but would go ahead with plans to provide its changes to Council and stated that the public task force could use next year for comments.

- GC PRA response to request for "minutes of past DBS methane code meetings" , DBS response- it is in the public's better interest not to know than to know.

- GC PRA request for required licenses of soil gas testing companies. DBS response- GeoScience Analytical is the only license provided. Problem- Multiple companies are performing soil gas testing, providing conclusory reports for multiple sites across LA without license.

2) CITY CONTROLLER'S JUNE 5, 2007 AUDIT OF CITY'S OVERSIGHT OF PLAYA VISTA PHASE 1

NBC interview with Controller Chick:
"Poor record keeping, in my opinion, is the surest way to cover things up."

"I am not vouching for anything. I had 3 departments disagreeing with each other, and it was hard to get sound, solid facts."

""What we found, quite frankly, was mush."

"This audit didn't look at safety issues and it didn't look at the development – it looked at the City's oversight."

(See attached Chick comments transcribed from NBC's interview regarding the Playa Vista Phase I audit.)

When I asked Controller Chick's staff what follow-up investigations would now proceed as a result of the 4 month investigation's findings, I was told, none.

In her own words of such improper oversight and potentially deliberate cover-up, Controller Chick's recommendations not only fail to require a safety audit of all methane safety systems at Playa Vista but, instead

simply request better coordination and bookkeeping from the same persons she cites as part of a potential cover-up.

Background:
Playa Vista Phase 1 methane mitigation is governed by the 2001 City Council approved Chief Legislative Analyst's Report (CLA Report-'01) and its Directives. Within this body of information and directives is the Playa Vista Methane Prevention Detection and Monitoring Program (PVMPDMP).
The 2004 Citywide Methane Code is based upon the Playa Vista Phase 1 methane mitigation measures.

The Grassroots Coalition, ETINA Appellate Court lawsuit (ETINA v City of LA) which requested a Supplemental or Subsequent EIR to be performed upon Playa Vista Phase 1, was won in 2005. The rulings of the Appellate Court provide authority and clarity to the City's role and requirements to implement the 2001 CLA Report and Directives.
The City Controller's investigation did not include this information.

AUDIT INCONSISTENCIES-
Controller Chick's audit report of June 5, 2007 purports to provide a wide scope of review for the Playa Vista (PV) site, " ..Department oversight of residential developments of Playa Vista –Phase 1." (pg. 2 of 7) and, "we found that the **required inspections, testing and approvals related to the installation of methane mitigation systems** were performed"..(pg. 2 of 7).

However the report actually only provides a very narrow review of some residential information pertaining to some detection devices.

Grassroots Coalition has numerous inspection records of numerous PV sites that reveal sanitized documents, unfinished system installation, or no installation and no testing as required and, incomplete approvals. Controller Chick was given some of this information as documents yet there is no mention of this in the audit. (Some of this information has already been documented and aired on NBC- Burning Questions)

50' Vent Wells- Most Critical Safety System Is Not Mentioned In Audit

The Playa Vista site was determined by DBS and the City's Peer Reviewer- Exploration Technologies Inc.(ETI) to be too dangerous to develop without functioning 50' vent wells. These determinations, part of the CLA Report, were approved by the City Council via the City Council's approval of the CLA Report in 2001.

I have Public Record Act requested the performance data of the 50' vent wells. DBS' response was that no data exists. Grassroots Coalition provided this documentation to Controller Chick. (PRA and DBS response also are shown on NBC's Burning Questions)

- No performance data
- No annual testing data
- No certification of operational status
- Installation records are incomplete and missing for most high gas sites.

Missing too is any information pertaining to review of numerous other components of the methane mitigation systems: the so-called impervious membrane; sub-slab portal testing (ETI stressed that without this laboratory data to determine true levels of gas under the buildings, there is no way to determine if the gas detection devices are registering true levels of gas); the 50' vent well early warning system having real-time online gas monitoring data or any so-called 24/7 gas level monitoring data online. (ETI stressed that without this safety monitoring of the gas levels in the 50' aquifer, there would be no time to respond to surges in gas levels. (CD & Summary- Still Workin On It, ETI)

Audit Cites No Legal Authority For Conclusory Statements Made, Contradicting Existing City Ordinances, The CLA Report and the Court of Appeals

Controller Chick's audit points out that DBS (Andrew Adelman – General Manager), under its own discretion and jurisdiction, is changing the 2001 CLA Report & Directives requirements. (No changes to the 2001 CLA Report & Directives have been approved by the City Council.)

- **The audit arbitrarily cites LAFD as not having authority over single family dwellings.** (page.3, bullet point 3)
- The audit refers to an "agreement" signed by DBS and LAFD in 2005 that removes LAFD from inspection of methane detectors at single family homes at Playa Vista, Phase 1.

What legal authority do DBS/LAFD have to alter directives within the CLA Report?
In an inspection "matrix" prepared by DBS and used at Playa Vista, LAFD is directed to, "submit certification that testing and service has been completed and certify that all methane systems are operational." This matrix echoes explicit directives within the CLA Report for LAFD's performance of this certification process.

LAFD to test all gas detection devices according to existing city ordinance.
Sec. 91.7106 (A.). Testing, Maintenance and Service of Gas-Detection and Mechanical Ventilation Systems.

A. **Fire Department.** The manufacturer's instructions shall be approved by the Fire Department. Testing and servicing of each system shall be performed by a person certified by the Fire Department.

What legal authority does DBS have to contradict the ordinance by substituting inspectors certified by the installer?

The audit review fails to include any legal authority for statements made regarding DBS or LAFD jurisdiction and discretionary authority and contradicts the Appeals Court ruling in ETINA v City of LA and Playa Capital (10/26/05) which defines discretionary authority for approvals of the 2001 CLA Report & Directives.

For example, **the audit notes that** (the audit invents its own interpretive word- "guidelines" instead of the inclusive 2001 CLA Report & Directives) the, **"'guidelines' were subject to interpretation by both DBS and LAFD."**

However, the Appeals Court found that,
"....the record shows that the purpose and effect of the CLA process was to allow the city council to consider the information gleaned through a careful evaluation of environmental issues of concern to both the public and councilmembers' and decide whether and how to proceed with the development. Moreover, the decision by the city council to 'note and file' the CLA report and adopt the recommended methane mitigation measures involved the exercise of subjective judgment and **was a discretionary approval**.
We reject the argument by Playa Capital that the decision by the city council was not a discretionary approval because the Department of Building and Safety had already 'approved' the methane mitigation system in its letter of January 31, 2001. The Department of Building and Safety was one of several public agencies whose recommendations the CLA considered in preparing its report, which was submitted to the city council for its approval. **The approval by the city council is the operative approval because the city council was the final administrative decisionmaker."** Emphasis added. Tahoe Vista Concerned Citizens v. County of Placer (2000) 81 Cal. App 4th 577, 594.)

Thus, the 2001 CLA Report & Directives is the final City Council mandated authority for the methane systems and inspection requirements at Playa Vista, Phase 1, and no city agency has the right to modify the requirements without City Council approval.

DBS Eliminates Gas Detection Devices At One PV Housing Site (Capri Court 1) Deviating From CLA Report Directive that ALL Buildings Must Have Gas Detection Devices.

The audit on page 3, bullet point 1 cites, "**DBS considered the elimination of a detection system**, as endorsed by a qualified methane engineer citing the adequacy of prevention systems for these homes, **as an 'approved equivalent'."**
(DBS admits Capri Court Homes have no gas detection systems- documented by GC)

Does the elimination of a safety system provide an "approved equivalent"?
Not according to Attorney General Bill Lockyer's interpretation of the equivalency standard and his emphasis on the need for "specific evidence" that a proposed design change meets code standards. Lockyer ruled that Pasadena's adoption of Ordinance No. 6847, derived from a local building standard, was found to be inconsistent with state law.

Ops Cal Atty Gen 01-306
"The legislature has enacted the California Building Standards Law (Health and Safety Code 18901 to 18949.31) and the California Building Standards Code (California Code of Regulations Title 24). The California building code is based on the 1997 edition of the Uniform Building Code. 24 California Code of Regulations 104.2.8 permits a building official to approve of alternate materials and designs, but such approval must be based on

specific evidence that the proposed design is at least the equivalent of that prescribed by the California Building Code in strength, effectiveness, fire resistance, durability, safety and sanitation. Because the building official did not make such a determination but relied on the proceedings of the International Code council to validate the international Building Code, Ordinance No. 6847 does not comply with state law."

Thus, three legal authorities- Ops Cal Atty. Gen 01-306, the CLA Report and Municipal Code 91.706 (A), appear to contradict the legality of DBS' decision and LAFD's cooperation to: eliminate LAFD's methane inspection duties at Capri Court 1; to allow inconsistent inspections of gas detection devices at single family homes at Capri Court 2 and; allow the substitution of an installer (Taft Electric) to also perform as certified inspectors.

Examples of Erroneous Comments stated in the audit:

a. "...there is no mention in the CLA guidelines of Planning's role over the project."p. 4 of 7.

One of the Directives of the City Council approved 2001 CLA Report states,

"DIRECT and AUTHORIZE the Director of Planning Department to require the California Environmental Quality Act CEQA mitigation monitor currently overseeing the implementation of CEQA mitigation measures at the Playa Vista Development site to also oversee implementation of methane mitigation measures by all agencies and entities constructing facilities or utilities at the site."

And, 2.3.3 Mitigations (2001 CLA Report),
"An individual or group should be engaged to monitor and oversee implementation of methane mitigations in all development, including infrastructure installed by various entities. This oversight should authority to review design, installation, and initial operation of the required methane mitigation measures. **The monitoring entity should report to the Planning Department**. (emphasis added)

However, it has become clear through Public Record Act requests to Planning regarding the new (2001) City Council approved gas mitigation monitor that Planning does not have the required information/ data and is not fulfilling its CLA required role. It's self evident that if such requirements had been fulfilled, there would have been no need for an audit by the City Controller or if an audit is done then the City Controller would have been provided with all of the required data and information and we would not have what Controller Chick describes as "Mush" , "Very sloppy" and a site that she would not vouch for its safety.

b. Bullet point 3 on page 5:
"As a result, the testing was performed by contracted installers who provided only a certification that the system was installed, <u>calibrated and functional...</u>"

According to PRA responses and documents from LAFD including the installer's (Taft Electric) reports, Taft does not provide certification/calibration. PRA responses from DBS have included documentation- an internal memo- from Taft to the owners of Fountain Park Apartments. The memo specifies and confines Taft's responsibilities as installation of the detection devices and taking readings from the devices for use in annual reports. Taft does not take responsibility for testing the device itself.

BOND Disclosure Statements of Methane Mitigation Measures At Playa Vista Do Not Reflect Methane Mitigation Measures Actually Implemented.

Methane Mitigation measures cited in the bond documents at eg. Fountain Park Apts. are not at Fountain Park Apts.

The City Controller's audit does not utilize or review for city oversight any of the California Debt Limit Allocation Bond disclosure statements (these funds built the Fountain Park Apts. and originate in federal funds to the state.)

Conflict of Interest Concerns were not reviewed as part of the City's oversight of Playa Vista.

Union ties to both ownership of Playa as well as LADBS ties may be in violation of state and federal conflict of interest laws. These issues have been brought to the attention of the City Controller yet there is no review of this issue within the audit review of the city's oversight of Playa Vista.
(Documentation regarding this issue has been provided to the Controller's Office.

Post Meeting Note: The documentation was not included in the audit review as it is not listed in the document review spreadsheets or in the Table of Contents for the notebook.

POST MEETING NOTE:
Since this meeting, Grassroots has reviewed a notebook of "any and all" materials used for the 4 month investigation and report(s) PRA'd from the Controller's office. The notebook reveals that the Controller's office excluded documents provided by Grassroots Coalition. The Controller's office provides no acknowledgement of or explanation for excluding the pertinent city documents provided by city department outsiders.
The notebook reveals that there was no inclusion of financial (bond) disclosure review.

MEETING ATTENDANCE

PROJECT NAME Methane Task Force

5/22/07

NAME	ORGANIZATION	PHONE # AND FAX #
Patricia McPherson	Grassroots Coalition	310 397 5779
Dan Cohen	Grass Roots	310-313-3383
Jim O'Sullivan	Mid City West	213 840 0246
Kathy Knight	Sierra Club	310-450-5961
Norman Kulla	CD 11	310.575.8461
Isaac Lieberman	CD 11	310-568-8772
Rene Krischer	Friends of the Children	(323) 939-0065
Diana Spielberger	Marina Peninsula Neighborhood Assn	(310) 914-1880
[illegible]	self	323-286-6667
Joyce Dillard		~~323~~ 323 225-6620
Colin Kumabe	LADBS	~~323~~ 213 482-0447

MEETING ATTENDANCE

PROJECT NAME Methane Task Force

5/22/07

NAME	ORGANIZATION	PHONE # AND FAX #
DAVID MYERS	LAFD	(213) 482-6908 / 6928
HUGH AVERY	TERRA – PETRA	213 4580494 / 909 6248834
George Johnson	Kleinfelder	909 3860335 / 909 3961324
JESUS I. SOTELO	DTSC	(916) 2556620 / 916 2553697
Ken Chiang	DTSC	(818) 551 2860 / 2832 Fax
Andy Kao	Env. Affairs Dept.	(213) 978-0873 / 0890 FAX
HECTOR BUITRAGO	LADBS	(213) 4820440
Martin Fragoso	LADBS	(213) 482-0439
Nick Dellaquadri	LADBS	213 482-0440
ADNAN SIDDIQUI	CA RWQCB	(213) 576-6612
Edgar SAENZ	Rep. M. Waters	(310) 642-4610

no mitigation
monitor

ZINNER Consultants

ENERGY
ENVIRONMENT
TRANSPORTATION

824 Harvard Street, Santa Monica, CA 90403
(310) 828-6051, Fax (310) 828-4639
jszinner@aol.com

August 7, 1998

Mr. Gordon Hamilton
Deputy Director
City of Los Angeles
Department of City Planning
221 N. Figueroa Street, Room 1640D
Los Angeles, CA 90012

Subject: Playa Vista Mitigation Monitoring Responsibilities

Dear Mr. Hamilton:

As required by the Final EIR, the following monitors have been retained by Playa Capital Partners, LLC, to carry out the Playa Vista monitoring and reporting requirements. This list supercedes the list submitted on March 21, 1996.

Enclosed, as also required by the Final EIR, are qualifications for the air quality and noise monitors.

1. Overall Mitigation Monitor: Coordination of overall monitoring compliance and reporting

   Zinner Consultants
   Attn: John Zinner
   824 Harvard Street
   Santa Monica, CA 90403
   (310) 828-6051

2. Archaeological Monitor

   Statistical Research
   Attn: Jeff Altschul
   6099 E. Speedway Boulevard
   P.O. Box 31865
   Tucson, AZ 85751-1865
   (520) 721-4309

3. Paleontological Monitor

   LSA Associates
   Attn: Steve Conkling
   One Park Plaza, Suite 500
   Irvine, CA 92614
   (714) 553-0666

4. Biological Monitor

Psomas
Attn: Edith Read
3187 Red Hill Avenue, Suite 250
Costa Mesa, CA 92626
(714) 751-7373

5. Air Quality Monitor

Brown & Caldwell
Attn: Carrie Taylor
16735 Von Karman Ave., Suite 200
Irvine, CA 92606
(714) 660-1070
(310) 448-4714 (project site)

6. Noise Monitor

Brown & Caldwell
Attn: Carrie Taylor
16735 Von Karman Ave., Suite 200
Irvine, CA 92606
(714) 660-1070
(310) 448-4714 (project site)

If you have any questions regarding any aspect of this program, please let me know.

Sincerely yours,

John S. Zinner

cc: Bruce Harrigan/Playa Capital Partners
Robert Miller/Playa Capital Partners
Tim Connors/Playa Capital Partners
Pat Larkin/Playa Capital Partners
Wayne Smith/Psomas
Mitigation monitors

Enclosure

CITY OF LOS ANGELES
CALIFORNIA

ANTONIO R. VILLARAIGOSA
MAYOR

September 23, 2005

PR05-4996

Patricia McPherson
Grassroots Coalition
3749 Greenwood Ave.
Los Angeles, CA 90066

Re: Public Records Act Request, Dated July 25, 2005, for Documents Related to the Playa Vista Project

Dear Ms. McPherson:

This letter is in response to your Public Records Act request, dated July 25, 2005, and addressed to myself, Custodian of Records, Los Angeles Department of Building and Safety (LADBS).

First Portion of Your Letter
The first portion of your letter requested that you be allowed to view and/or copy the following reports dated 2000 through August 2005: (Each portion of your request has been restated verbatim in italics below, followed by LADBS' response.)

1. *Phase I design of the required mitigation and monitoring system for the 50-foot gravel aquifer beneath the Fountain Park Apartments. (This requirement is stated in a June 9, 2000 LADBS letter LOG NO. 29469 SOILS/GEOLOGY FILE – 2)*

   There are no documents responsive to this portion of your request.

2. *Test and design of the required mitigation and monitoring system for the 50-foot gravel aquifer within Phase I of the Playa Vista Development. (This requirement is stated in a June 9, 2000 LADBS letter LOG NO. 29469 SOILS/GEOLOGY FILE – 2)*

   There are no documents responsive to this portion of your request.

3. *Please provide any and all updated information (from 2000 to August 2005) regarding the mitigation and monitoring of the 50' aquifer. Please include any and all files containing e-mails, memos, or other interdepartmental communications regarding the PV MPDP including but not limited to the mitigation and monitoring of the 50' aquifer.*

There are no documents responsive to your request regarding the 50' aquifer.

annual reports show no 52' mitigation

LADBS has previously provided a listing of available documents for use at the public counters to retrieve the information requested. Furthermore, the required annual reports certifying that the methane mitigation systems are working as designed have been previously provided.

4. *Map locations for any/all 50-vent wells in Phase I. Provide any and all data, including monitoring data collected from the 50-vent wells.*

LADBS does not maintain a master map indicating the location of each 50-vent well. The 50-vent well is part of the methane mitigation system for individual buildings within the Level III area.

Pursuant to the Public Records Act, attached to this reply is an index of documents residing in LADBS' document imaging system (Internet Document Imaging System, IDIS) for each property address you provided. Plans can be located under the Plan Maintenance document type. Plans can be viewed by you or your staff Monday through Friday, from 7:30 a.m. to 4:30 p.m., except Wednesdays, at the following two LADBS locations (the Records Counters are closed on Wednesday until 9:00 a.m.):

Los Angeles District Office (Metro)
201 N. Figueroa St., First Floor
Los Angeles, CA 90012

Van Nuys District Office
6262 Van Nuys Bl., Room 251
Van Nuys, CA 91401

State Health and Safety Code Section 19581 prohibits you from reproducing in any form building plans, architectural blueprints, and schematics without written permission from the current owner and the licensed professional that signed them. However, you may view these documents at either the Metro or Van Nuys offices.

5. *Provide any/all monitoring information, data, reports or gas levels withing the 50' aquifer in Phase I.*

There are no documents responsive to this portion of your request.

6. *Provide any/all data of maintenance reports by any and all companies performing said maintenance of the 50' vent wells and 50' vent well monitoring data.*

There are no documents responsive to this portion of your request.

7. *Provide any/all 24/7 online monitoring (of gas levels within the 50' aquifer) that was and is to be provided as an early warning system. Provide website location and any/all decoding information that may exist to read and understand the website.*

   There is no online monitoring required of the 50-foot aquifer. The requirement for gas level monitoring applies to the below building slab methane gas data. Website data is accessible to LADBS, LAFD, and the property owners or Homeowners Association.

   A compact disk of the available data, as of September 9, 2005, will be made available to you to view and copy Monday through Friday after 7:30 a.m. in the office of the Custodian of Records. Our office closes at 4:30 p.m. Please contact the Custodian of Records staff at (213) 482-6770 to schedule a date and time to view and copy this disk.

   The charge for copying a compact disk is $10.50. Charges for copying public records are in accordance with California Public Records Act Sections 6253(b), 6253.9(a)(2), and 6253.9(b); Los Angeles Municipal Code Section 98.0405, and Los Angeles Administrative Code Sections 12.40 and 19.44.

8. *Provide identity of the City Council directed methane mitigation monitor.*

   a. *Provide any/all reports, communications (e-mail, memos, phone logs) between the methane mitigation monitor and any/all City personnel, agency personnel and Play Vista entities.*

   The City Council did not name a methane mitigation monitor; however, the Council received and filed the Report on the Playa Vista Development Project Site of June 1, 2001 from the CLA that per recommendations #2 and #3 identifies the Director of Planning as the overall coordinator of the implementation of CEQA mitigation measures.

   LADBS has previously provided you the written annual reports of 2004 and 2005 that were given to the City Planning Department.

Second Portion of Your Letter

The second portion of your letter requested that you be allowed to view and/or copy the following documents, dated from 2001 through August 2005, for 252 addresses that you attached which are located within the Playa Vista Project: (Each portion of your request has been restated verbatim in italics below, followed by LADBS' response.)

1. *Any and all annual reports that supply any and all data required in the PV MPDP. Please include but not limit information of all subslab portal testing. Please provide any and all laboratory information of the analysis of the subslab portal data that reveals the actual gas levels under each building.*

All data for testing of existing systems is provided in the annual reports. LADBS previously provided copies of the 2004 and 2005 annual reports on September 17, 2004 and September 16, 2005.

2. *Provide any and all vent riser data that is logged in any format.*

   All data for testing of existing systems is provided in the annual reports. LADBS previously provided copies of the 2004 and 2005 annual reports on September 17, 2004 and September 16, 2005.

3. *Provide any and all post occupancy membrane integrity testing data. Please include the identity of the methane specialist of record for each building area.*

   All data for testing of existing systems is provided in the annual reports. LADBS previously provided copies of the 2004 and 2005 annual reports on September 17, 2004 and September 16, 2005.

4. *Provide any/all active methane system information including but not limited to the active turbine designs and systems.*

   All data for testing of existing systems is provided in the annual reports. LADBS previously provided copies of the 2004 and 2005 annual reports on September 17, 2004 and September 16, 2005.

5. *Provide any/all methane alarm reports for all building areas. Please provide all reports from 2001 through August 2005.*

   LADBS does not maintain methane alarm reports. Please contact the Los Angeles Fire Department for documents responsive to this portion of your request.

There are no documents being withheld as exempt under the Public Records Act pertaining to this request. Please feel free to contact me at 213-482-6762 if I can be of further assistance.

Sincerely,

Teresa M. Abraham

Teresa M. Abraham
Office of the Custodian of Records

attachment

(L:\PRA Public Records Request\PR05-4996 2nd Response.wpd)

DEPARTMENT OF
CITY PLANNING
200 N. SPRING STREET, ROOM 525
LOS ANGELES, CA 90012-4801
CITY PLANNING COMMISSION

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FAX: (213) 978-1275
INFORMATION
(213) 978-1270
www.lacity.org/PLN

October 15, 2004

Ms. Patricia McPherson
Grassroots Coalition
3749 Greenwood Avenue
Los Angeles, CA 90066

RE: PUBLIC RECORDS ACT REQUEST

Dear Ms. McPherson:

This is a follow up to your facsimile received on October 5, 2004 requesting to view and/or copy information and correspondents regarding the methane mitigation and implementation program. The Custodian of Records for the Los Angeles Department of Building and Safety (LADBS), Teresa Abrams, will be able to assist you with your request. The Department of Building and Safety receives and reviews methane reports submitted by the Playa Vista applicants. The LADBS office is located at 201 N. Figueroa St., Room 786, Los Angeles, California. You may contact Ms. Abrams at (213) 482-6762 for further information.

If you have any further questions please do not hesitate to contact me at (213) 978-1394.

Sincerely,

Meredith T. Elghira
City Planning Associate

Oct. 5, 2004

TO: LA CITY PLANNING
Meredith Elquira,(IRIS F. AWAKUNI)
FAX213 978 1373

FROM: GRASSROOTS COALITION
Patricia McPherson
3749 Greenwood Ave.
LA, CA 90066 310 397 5779

RE: PUBLIC RECORD REQUEST ACT REQUEST:

Dear Ms. Awakuni,(Elquira)

Grassroots Coalition sent you a Public Record Request on March 3, 2004 and subsequently followed up with you, though a phone conversation approximately 2 weeks later, regarding that request. The Public Record Request, requested any and all data, reports etc. that the Planning Dept.has from the Playa Vista site's thermogenic gas, mitigation monitor. When we spoke you had told me that you didn't know what I was referring to but that you would check and get back with me.
This letter is another follow-up to my original PRA request in March 2004 as I have still no information from you.
Sincerely,

Grassroots Coalition,
Patricia McPherson

DEPARTMENT OF
CITY PLANNING
N. SPRING STREET, ROOM 525
LOS ANGELES, CA 90012-4801

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ROBERT H. SUTTON
DEPUTY DIRECTOR
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FAX: (213) 978-1275

INFORMATION
(213) 978-1270
www.lacity.org/PLN

March 15, 2004

Patricia McPherson
Grassroots Coalition
3749 Greenwood Avenue
Los Angeles, CA 90066

PUBLIC RECORD ACT REQUEST FOR PLAYA VISTA PROJECT

Dear Ms. McPherson:

We received your California Public Records Request letter dated March 2, 2004, requesting public records pertaining to the Playa Vista Development Project, on March 3, 2004 via facsimile. In response to your request, the Planning Department has the following records for review and copy:

1. CLA Report dated, May, 2001
2. CDM Soil & Groundwater Investigation which can be found in the DEIR Appendix J, Volume XIV
3. Safety and Risk of Upset, found in DEIR Appendix J, Volume XVI

On the first paragraph of your public record act request, you stated, *"Please provide for viewing and/or copying "MONITOR ENTITY" communications with the City of Los Angeles. As stated in File No. 99-0385-84 of the PLANNING AND LAND USE MANAGEMENT Committee report adopted on June 12, 2001 (included as attachment), pages 2-3. Pages 2-3 state, The CLA recommends that an individual or group should be engaged to monitor and oversee implementation of methane mitigations in all development, including infrastructure installed by various entities. This oversight should include authority to review design, installation, and initial operation of the required methane mitigation measures. The monitoring entity should report to the Planning Department."*

After a diligent search of City Planning Department files, we concluded that no case exists under the File No. referred to above. We learned that File Number 99-0385-84 is incorrect; the correct File No. is Council File No. 99-0385-S4. Therefore, Council File No.

99-0385-S4 and Council File No. 97-2237 can be retrieved for review and copying from the City Clerk's Office. For more information on how to obtain these files, please call the City Clerk's Office at 213-978-1043.

Lastly, there is no Monitoring Entity Report at this time. The first annual report is expected to be received in August of this year. When the report is received, it will be available for viewing and/or copying at the Planning Department consistent with the Public Records Act.

Sincerely,

Iris F. Awakuni
CUSTODIAN OF RECORDS
Department of City Planning

213 978 1395

March 2, 2004

March 3, 04
Custodian of Records
PLANNING -
Iris Fagal Iwakemi
FAX 213 978-1263
p. 1395

TO: CUSTODIAN OF RECORDS, DBS- Teresa Abraham
201 N. Figueroa
LA, CA 90012
FAX 213 482 6889

FROM: GRASSROOTS COALITION, Patricia McPherson
3749 Greenwood Ave. LA CA 90066
310 397 5779, 310 737 1111

RE: PUBLIC RECORD ACT REQUEST (Cal. Gov. Code 6250 et seq.)
(Re: Playa Vista)

Dear Ms. Abraham, Ms. Iwakemi

Please provide for viewing and/or copying 'MONITOR ENTITY' communications with the City of Los Angeles. As stated in File No. 99-0385-84 of the PLANNING AND LAND USE MANAGEMENT Committee report adopted on June 12, 2001 (included as attachment), pages 2-3. Pages 2-3 state, "The CLA recommends that an individual or group should be engaged to monitor and oversee implementation of methane mitigations in all development, including infrastructure installed by various entities. This oversight should include authority to review design, installation, and initial operation of the required methane mitigation measures. The monitoring entity should report to the Planning Department."

Please provide for viewing and/or copying any/ all guarantee of findings by consultants as requested in the Planning and Land Use Management Committee report dated June 12, 2001, "The Committee also recommended that Council instruct the CLA to report Council relative to the qualifications of the various consultants and contract agencies which contributed to the CLA's study, the extent to which collected data and studies can be substantiated, and whether said consultants and contract agencies are willing to guarantee their findings."

Please provide for viewing and/or copying any/ all communication of the 'MONITOR ENTITY' acting as a LIAISON between the EPA agencies, the LARWQCB (Los Angeles Regional Water Quality Control Board) and DTSC (Dept. of Toxic Substances Control), and the City of Los Angeles regarding the Playa Vista site. (The communications as liaison was a condition predicated for further development to occur at Playa Vista, as stated in various City documents pertaining to the Playa Vista site subsequent to the Chief legislative Analyst's Report (CLA Report 2001)).

Please provide for viewing and/or copying, the full Council File No. 97-2237.

This request includes all records, including technical indexes/ attachments/protocol regardless of form, including but not limited to letters, memorandum, telephone log

entires, visitor log entries, message receipts, notations of conversations, meeting minutes/notes, e-mail messages or other magnetic media, fax cover sheets, reports, statistics, calendar entries, permits, questionnaires, photographs, audio tape, film, and videotape.

This request reasonably describes identifiable records or information produced therefrom and I believe no express provision of law exists exempting the requested records from disclosure. Should your agency find any portion of any requested record exempt from release, I ask that you carefully consider the public interest served by the full disclosure of all requested records.

The requested records relate to an important issue in which the public has expressed an enormous amount of interest. The public interest in these records clearly outweighs all other interests. Therefore, I request that you release non-segregated copies of each of the requested records otherwise exempt under California Government Code 6254 (a).

Should you find any portion of any requested record exempt from release, I ask that you exercise your discretionary authority to release the requested record in its entirety. If you decide to withhold any portion of any requested record, I ask that you provide me a list identifying what you have withheld. I also ask that you cite the specific exemption(s) being relied upon to withhold information. In addition, if you deny all or part of this request, Gov. Code Section 6256.2 requires that you provide the name and title or position of each person responsible for the denial of this request. Should you decide to withhold any information, Gov. Code Section 6256 requires that you notify me of the reasons for this determination no later than 10 days after receipt of this request. Gov. Code Section 6256.2 prohibits the use of the 10 day period, or any provisions of the Public Records Act, "to delay access for purposes of inspecting public records."

I also request any records that indicate, suggest, or otherwise identify the prior existence of other records related to my request that may have been destroyed or modified. California Government Code Section 14755(a) makes clear that "(n)o record shall be destroyed or otherwise disposed of by any agency of the state "unless (1) the Director of the Department of General Services has determined that 'the record has no further administrative, legal or fiscal value," and (2)"the Secretary of State has (also) determined that the record is inappropriate for preservation in the State Archives." The 'willful removal' or 'destruction'" of agency records in violation of these statutory mandates can result in the imposition of criminal sanctions. (See, Cal. Gov. Code 6200 (felony offense for destruction of records by 'custodial officer'" and Cal. Gov. Code 6201 (misdemeanor offense for destruction of records by 'noncustodial officers').)

Please call me at 310 397 5779 or 310 737 1111 or fax me at 310 737 1030 if you have any questions or need additional information. Thank you for your continued assistance and cooperation with this matter.

Sincerely,

Patricia McPherson, GRASSROOTS COALITION

Still Workin On It 44/49 (L)

the site to increase significantly.

The installation of real-time monitoring systems installed in the vent risers in the Playa Vista buildings could provide significant protection, provided that they are properly calibrated and demonstrated to be responding to the actual gas levels, which accumulate under the buildings foundations. This testing has not been done, and must be completed as part of the due diligence before occupancy

---

4.0 RECOMMENDATIONS

1) As with the April 17, 2000 report, this additional regional soil gas data set collected within areas A, B and C in the Phase 2 area should be supplemented and confirmed by collection and analysis of the associated dissolved gases contained in the Ballona gravel aquifer. Using the soil gas anomalies as a guide, a minimum of 18 additional monitor well locations have been selected to supplement the original 42 already installed. Installation of these wells should follow the same procedures used in the ETI April 17, 2000 report, with both free gases and dissolved gases collected and analyzed as described in Appendix B of the ETI April 17, 2000 report. All monitor wells (both the original 41 and the 18 proposed new wells) should be sampled at one time in order to generate a uniform aquifer data base for evaluation of the free and dissolved gas content in the Ballona gravel aquifer.

2) As agreed to by Playa Vista and LADBS, 100 foot grid spacing soil gas surveys shall be conducted over all Phase 1 or Phase 2 sites before construction may proceed. (*)

3) If soil gas concentrations exceed 12,500 ppmv, then an additional soil gas survey shall be conducted over the planned building foundation using no less than 50 foot centers. Flux chamber measurements should not be used without adequate guidance by gridded soil gas surveys.

4) Buildings should not be constructed over the Playa del Rey Gas Storage Facility in Areas A and B. For maximum safety the areas directly over the gas storage field should be reconfigured as open space.

5) The Del Rey 1 and Del Rey 2 abandoned wells in Area C should be reabandoned to current DOGGR standards if this area is to be developed.

6) Based upon the results of the regional soil gas survey under current grid spacing, and favorable results from the additional proposed wells discussed in (1) above, it does not appear that methane concentrations are high enough to warrant methane mitigation and monitoring for planned construction in Areas A, B, and C of Phase 2 provided that the above recommendations are adhered to.

7) The methane mitigation systems proposed for these buildings must be thoroughly tested to insure that their performance meets the specifications. Gas samples must be collected from the sampling ports located both above and below the membrane and analyzed in a laboratory for their methane through butane contents. Simultaneous sample collection must be performed in the vent risers in order to determine how closely the vent monitoring system meets the requirements of monitoring the gas concentrations under the slab and in reducing the methane gas concentrations below the membrane to below 3.75%. If these testing and reporting procedures are not followed, then a hazardous

(*) This is the testing required by mitigation monitoring @ PV

DEPARTMENT OF
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November 29, 2006

Patricia McPherson
3740 Greenwood Ave
Los Angeles, CA 90066

Dear Ms. McPherson:

RE: Public Records Act Request For Records Regarding The Playa Vista Mitigation Monitor

This letter is in response to your request dated November 16, 2006 seeking from the Department of City Planning pursuant to the California Public Records Act (CPRA), any and all documents of the Playa Vista mitigation monitor volumes yearly reports pertaining to the Methane Mitigation.

In regard to the question of a contract for any CEQA methane mitigation monitor for Playa Vista Phase 1, documents (Attm. A) showing that Playa is in compliance with the requirements of the Tract and EIR conditions in regards to an EIR monitor. Tract Condition No. 12 requires Playa to abide by the requirements of the tract conditions/mitigation measures and identify/pay for a mitigation monitor for the entire project. This condition was cleared through a Master Covenant and Agreement between Playa and the City, thus, a separate contract was not required for the EIR monitor.

I have also included a list of monitors (Attm. B) showing that Zinner and Consultants is the overall monitor for the project. A portion of the attached tract condition clearance includes only the first portion of Appendix D which gives an overview of the mitigation monitoring and reporting program.

Documents relating to your request have been copied and are available for pickup in the Automated Records & Files Unit, Rm 575, City Hall. The fees total $16.70 per the Los Angeles Administrative Code section 12.40

If I can be of further assistance, please contact me at (213) 978-1260.

Sincerely,

Mark Lopez
Custodian of Records

review of all major sites including the Hughes site of the Super Fund issues, are there any other outstanding issues that you think deserve to be addressed further? Is there any equivocation that you feel is appropriate now in the report itself?

MR. MILLER: I believe that the report covers all of the issues and I believe that we have the enforcement agencies with the state engaged to ensure that there is clarity on the remediation plan for the ground water and soil contamination.

MR. FEUER: What would be the implication if the DTSC letter becomes more than a comment letter? We've attempted to -- apparently your office has been in communication with DTSC and they may not have reviewed the data that was the predicate for the report which is a pretty big deal.

Let's assume they conduct that review. And let's assume that they emerge with further concerns. How should the city deal with those if the report is received in file?

MR. MILLER: The monitor that we're recommending be hired, one of their duties should be to be the liaison among those agencies to make sure that there is communication back and forth and that if DTSC continues to express concerns that those concerns are addressed by

the EPAs appointed enforcement agency here which is the Water Quality Control Board.

MR. SVORINICH: Is there any other council member that wishes to speak on this item? Push your button, Mr. Holden.

MR. HOLDEN: President, members, I'm looking at this report and this report emanated from a request made by Holden Goldberg and I think Mr. Feuer at a subsequent date where they approved Playa Vista for development project.

I think I have voted no from the very beginning. I am already reelected. I have two years left. But the fact of the matter is that when it discovered that we had methane gas problems in that area, we thought that it's incumbent upon the city to find out whether or not, one, what's the -- how prevalent is the problem and, No. 2, if there is a problem, what could be done in order to give us some assurance that if you are going to build housing there that the people can live there without being harmed in any way?

So when you come back and you look at all of these prevention systems which you listed on page 17, you recognize, one, that there is a problem, and, two, you're saying here is where you are going to fix it and they are required to fix it. Underneath the building 12-inch

Legal

Legal

(This lawsuit of ETINA/GC represented by ELF was put on hold. Same suit ongoing now with ELF takeover.)

ENVIRONMENTAL LAW FOUNDATION

1736 Franklin Street, 9th Floor, Oakland, California 94612 • 510/208-4555 • Fax 510/208-4562
www.envirolaw.org • envlaw@envirolaw.org

December 24, 2003

VIA CERTIFIED MAIL

TO: Bill Lockyer, Esq., Attorney General, State of California
Steve Cooley, Esq., District Attorney for Los Angeles County
Rockard Delgadillo, Esq., City Attorney for the City of Los Angeles

RE: 60-Day Notice of Violations of Proposition 65, California Health and Safety Code Section 25249.5.

NOTICE OF VIOLATION OF PROPOSITION 65

California Health and Safety Code sections 25249.5 et seq.

Dear Messrs. Lockyer, Cooley and Delgadillo:

This 60-day notice letter notifies you of violations of Health & Safety Code § 25249.5, the discharge provision of Proposition 65. The particulars are set forth below. You may bring an action to enforce the law under Health and Safety Code section 25249.7(c).

The noticing parties are as follows:

Environmental Law Foundation
1736 Franklin Street, 9th Floor
Oakland, CA 94612
(510) 208-4555

Environmentalism Through Inspiration and Non-violent Action (ETINA)
20110 Rockport Way
Malibu, CA 90265
(310) 456-2267

Grassroots Coalition
11924 W. Washington Blvd.
Los Angeles, CA 90066
(310) 397-5779

The Environmental Law Foundation (ELF) is a California non-profit environmental organization established to protect the public from exposures to toxic substances in their homes, workplace and environment.

Environmentalism Through Inspiration and Non-violent Action (ETINA) is a California non-profit that is dedicated to enforcing environmental laws and full public disclosure of public health issues.

Grassroots Coalition is a California non-profit organization established as an educational and watchdog group that works to enhance awareness of public health and safety issues.

The noticing parties referenced above are represented by ELF's in-house counsel in this matter. All communications should be addressed to: Philip Shakhnis, Environmental Law Foundation, 3250 Ocean Park Blvd., Suite 300, Santa Monica, CA 90405. Please contact Mr. Shakhnis at (310) 450-7226 should you have any questions.

STATEMENT OF PARTICULARS

Identity of Violator:	Sempra Energy 101 Ash Street San Diego, CA 92101-3017 Southern California Gas Company 8141 Gulana Avenue Playa Del Rey, CA 90293
Identity of Chemicals:	Benzene, Toluene
Sources of Drinking Water:	Ballona Aquifer, Silverado Aquifer, Gage Aquifer and Ballona Creek

Identification of Discharge and/or Release: The Southern California Gas Company operates an underground natural gas storage reservoir located approximately 6,000 feet below its facility in Playa Del Rey, California. The reservoir is connected to the surface with a network of wells that are owned and/or operated by Sempra Energy and the Southern California Gas Company. These wells are located within Playa Del Rey and the Venice Peninsula which are both within the City of Los Angeles as well as within Marina Del Rey which is an unincorporated segment of Los Angeles County.

Some of these wells are operational and are used for purposes that include: injecting or withdrawing natural gas to and from the reservoir, withdrawing water from the reservoir, retrieving migrating gas that seeps out of the footprint of the reservoir and observation wells. Some of these wells are abandoned oil wells for which the Southern California Gas Company retains responsibility. Many, if not all, of these wells (both within the City of Los Angeles and within the unincorporated segments of Los Angeles

County) leak storage reservoir natural gas that has been enriched with benzene, toluene and other toxic chemicals. The leaks occur as a result of cracks and holes in well-associated equipment. The leaks also occur because of the unsealed annular space that exists between the well casing and the drilled well hole in all wells.

The wells referenced in this sixty-day notice intersect one or more of the aquifers referenced as sources of drinking water above. In addition, Ballona Creek is a surface body of water that overlies the gas storage reservoir. Because the gas stored in the reservoir is placed under high pressure, the storage gas is constantly forced towards the surface via cracks and holes in well-associated equipment (including the annular space surrounding well piping). Once the storage gas escapes out of the storage reservoir, it migrates towards the surface via wells or other natural points of least resistance in the rock surrounding the well such that the storage gas passes into or probably will pass into one or more of the sources of drinking water referenced above. In this manner the Ballona Aquifer, Silverado Aquifer, Gage Aquifer and Ballona Creek have been, and continue to be, contaminated with benzene and toluene and other toxic chemicals from the upwardly migrating storage reservoir natural gas. Moreover, these sources of drinking water are threatened daily by further contamination from storage gas that has escaped from the storage reservoir and is upwardly migrating towards these drinking water sources.

The natural gas storage reservoir is situated within an abandoned underground oil field. This oil field contains crude oil as well as native oil field gases that contain toxic chemicals that include benzene and toluene. The crude oil and native oil field gases co-mingle with the injected natural gas and thereby enrich the natural gas with benzene, toluene and other toxic chemicals. As a result of the high pressure under which the storage reservoir gas is stored, the native oil field gases are constantly being forced out of the oil field towards the surface. As with the storage reservoir gas, the native oil field gases are forced towards the surface via cracks and holes in well-associated equipment (including the annular space surrounding well piping). Once the native oil field gas escapes out of the storage reservoir, it migrates towards the surface via wells or other natural points of least resistance in the rock surrounding the well such that the oil field gas passes into or probably will pass into one or more of the sources of drinking water referenced above. In this manner the Ballona Aquifer, Silverado Aquifer, Gage Aquifer and Ballona Creek have been, and continue to be, contaminated with benzene and toluene and other toxic chemicals from the upwardly migrating native oil field gas. Moreover, these sources of drinking water are threatened daily by further contamination from native oil field gas that has escaped from the storage reservoir and is upwardly migrating towards these drinking water sources.

As a result of being placed under high pressure, the storage natural gas as well as

native oil field gas are constantly forced to migrate laterally outside of the designated boundaries of the storage reservoir. These gases then escape to the surface via wells (or other natural points of least resistance in the soils surrounding the wells) that are not owned or operated by the noticed parties. As such, the Ballona Aquifer, Silverado Aquifer, Gage Aquifer and Ballona Creek have been, and continue to be, contaminated with benzene and toluene and other toxic chemicals from the gases that laterally migrate out of the noticed parties' storage reservoir. Moreover, these sources of drinking water are threatened daily by further contamination from these gases that have escaped from the storage reservoir and are upwardly migrating towards these drinking water sources. These gases upwardly migrate via wells that are located within the City of Los Angeles and via wells that are located within the unincorporated segments of Los Angeles County (i.e., Marina Del Rey).

Duration of Violations: Unlawful discharges and releases of natural gas into the Silverado, Ballona and/or Gage Aquifers and/or Ballona Creek have been occurring since at least 1986 when Proposition 65 was enacted. Violations have occurred every day and are ongoing. Under Proposition 65, each discharge or release constitutes a separate violation. Health and Safety Code § 25249.7(b). The maximum penalty for each such violation is $2,500. Id. These same facts constitute a violation of Business and Professions Code § 17200 et seq.

Please advise us as soon as possible of your plans for initiating action under Health and Safety Code § 25249.7(c) in this matter. Please also provide us with copies of any pleadings you file in this matter and any communications you initiate with any of the parties named in the notice. If we do not hear from you within 60 days of the date of this notice, we will be legally entitled to file an action pursuant to Health and Safety Code § 25249.7(d).

Respectfully submitted,
ENVIRONMENTAL LAW
FOUNDATION

PHILIP SHAKHNIS

Enclosures

DECLARATION OF WALTER MERSCHAT

I, Walter R. Merschat, declare as follows:

1. I have over 30 years experience in the field of geology, which includes extensive work with several major oil companies including Union Oil Company of California and Gulf Oil Company and worldwide consulting projects specializing in exploration and environmental geochemistry.

2. I obtained my B.S. and M.S. in Geology from Ohio University in 1967 and 1971, respectively. I am a Certified Petroleum Geologist (CPG 4252) with the American Association of Petroleum Geologists and a Professional Geologist (PG 51) with the Wyoming Geological Association.

3. I am presently President of Scientific Geochemical Services and have been so employed since 1987. As part of my duties, I routinely consult on oil and gas exploration, associated environmental impacts, and related geology issues. I specialize in collecting soil gas samples for both exploration and environmental projects. I also issue reports interpreting the results of the soil gas analyses. I have successfully conducted soil gas surveys in many parts of the United States as well as Mexico, Panama, Peru, Argentina, Egypt, Yemen, Ethiopia, and Namibia. In California, I collected samples at the Playa Vista site and the Port of Oakland.

4. In 1999, the City of Los Angeles hired Exploration Technologies, Inc. (ETI) as its independent peer reviewer to investigate possible methane gas seepage at the Playa Vista development site. Earlier testing by Playa Vista consultants (Camp Dresser and McKee) was found to be questionable; therefore, new testing was required. Dr. Victor Jones, President of ETI, called me and stated he needed someone he could rely on to collect approximately 60 samples at the Playa Vista site.

5. After I collected the first 60 samples and continuing through 2000, and 2001, I and my crew followed the direction of Dr. Victor Jones and collected over one thousand six hundred (1600) soil gas samples spaced over the entire Playa Vista site, including the Phase One and Phase Two area. The City of Los Angeles' Department of Building and Safety and Dr. Victor Jones insisted on my sampling effort in order to maintain a consistent sampling protocol and methodology.

6. The samples were collected from four feet below the ground surface, stored in glass vials and shipped overnight to laboratories in Pittsburgh, Pennsylvania and Houston, Texas for analyses.

7. Starting with Gulf Research in the 1980's and continuing to today, I have personally collected and am aware of the analytical results of tens of thousands of soil gas samples taken from around the world with the same sampling methodology and analyzed with the same laboratory protocol as the samples that I took at the Playa Vista site. I can say that the methane values and seeps at Playa Vista were some of the highest I have ever seen. The methane seepage at Playa Vista was (and may still

be) so strong and widespread that I was able to light (ignite with a match) many areas of the ground. This was so intriguing to me that I photographed (camcorder) the process of directing methane seepage through a funnel and igniting it, or, simply placed a 3 foot by 3 foot piece of plastic on the ground, sealed the edges with clods of dirt, let the methane fill and raise the plastic off the ground, then poked a hole in the plastic and lit a match. A small explosion followed.

8. Some measurements (Hydrogen Sulfide) were conducted "real time" in the field. The sampling was part of the effort to identify areas in the shallow subsurface where elevated levels of certain gases such as methane, Hydrogen Sulfide, and BTEX (benzene, toluene, ethylbenzene, and xylene [oilfield gas as well as contamination constituents]) were present.

9. As a result of this sampling work, I became familiar with other aspects of the Playa Vista development site including:

a. The location and distribution of the anomalous concentrations of soil gases.
b. An understanding of the geology in the Playa Vista area.
c. The types of construction activities employed at the site.

10. In addition to my soil gas sampling work, I was involved with the design, construction, location and distribution of methane vent wells.

11. Additionally, I was involved with many of the work sessions at Playa Vista's office and created a series of maps including:

d. Top of 50 Foot Gravel Layer
e. Initial Potential of Vent Wells
f. Initial Potential/Soil Gas Comparison
g. Top of 50 Foot Gravel Cross Section
h. Crescent Drive Block Diagram
i. Well Blowout-Source B
j. Long Term Vent Well Locations
k. Pleistocene Last Stand
l. Old Faithful 1
m. Old Faithful 2
n. Old Faithful 3
o. Sand Isopach Above 50 Foot Gravel

12. I was also involved with the plugging and re-abandonment of existing old oil wells at the Playa Vista site.

13. I reviewed parts of the Draft Environmental Impact Report for the Playa Vista Phase Two Development (Draft EIR) including Volume I, Book 1 Sections IV-A Earth, IV-C Water Resources, and Volume I, Book 2 Section I Safety/Risk of Upset and made comments thereto.

14. I have reviewed photographs of the Phase Two site. These photographs are dated March 12, 2000. True and correct copies of these photographs are attached as Exhibit F. It appears from these photos that extensive grading and surcharging has been conducted on the Phase Two site since the time I last visited the site in 2001.

15. Based upon my experience as a geologist, particularly in the field of environmental geochemistry, and my extensive work at the Playa Vista site, the ongoing grading and surcharging activities at the Phase Two site have, and will continue to, detrimentally affect the environmental resources in Area D-2 as well as adjacent areas. In addition, numerous significant environmental issues will be very difficult to address at Playa Vista Phase Two if the ongoing construction activities are allowed to continue.

16. During the approximately three years that I spent working at the Playa Vista site, I met and worked with numerous other consultants, contractors, and Playa Vista employees. Through personal communication, field observations, and reviewing reports and maps, I became aware of how the surcharging activities on Areas D-1 and D-3 (Playa Vista Phase One Development) affected the local groundwater and native soils. The grading and stockpiling that is presently ongoing at the Playa Vista Phase Two area has, and will continue to have, a significant affect on the groundwater and native soils.

17. During the time I spent collecting soil gas samples at the site, I mapped numerous methane macro-seeps over a large portion of the Playa Vista project area. Many of these seeps exhibited a constant venting (bubbling) pattern while others erupted sporadically and somewhat haphazardly. The enormous environmental impact that surcharge has on compacting the soil and thus squeezing (moving) groundwater also alters the movement of methane.

18. As mentioned earlier, the majority of my work at Playa Vista concentrated on the collection and analysis of soil gas sampling. During the collecting of soil gas samples I would often re-visit a particular area to confirm or better define a soil gas anomaly in the Phase One areas. Also, since pockets of contamination and/or methane venting could be quite localized, and the sampling spacing I followed was so wide spaced, I would increase the sample density (infill) between sample sites to better define these non-sampled areas.

19. I have reviewed my old field maps as well as several maps[1] in the Draft EIR. I am concerned to learn that a large portion of Phase Two Project Area lacks sufficient sample density to determine the presence, absence, or magnitude of methane or other vapors of concern such as BTEX and H2S. The testing must be done on at least fifty-foot centers to adequately describe the soil gas characteristics of the site. Moreover, the ongoing construction activity, especially surcharging, effectively masks the surface with cover that results in inaccurate (lower or non-detectable) readings of methane, Hydrogen Sulfide and BTEX.

20. To further demonstrate my recommendation that sampling density should be increased I conducted an experiment at site 004F located near the southeast corner of the intersection of Lincoln and Jefferson Streets (Phase I area). Since site 004F was a macro seep (visible venting at the surface) that measured 98.6% methane, I used this site as the center and marked off of a 3' X 3' area. I then divided this area into nine 1' squares and sampled in the center of each square. The results showed a wide range of methane magnitudes thus demonstrating the localized nature of macro-seepage and the need for close (more dense) sampling. In other words, significant methane magnitude variations can occur within short distances. Attached as Exhibit G is a true and correct copy of a photograph which shows the 3' X 3' sampling area that I covered with plastic and created a tent that filled with methane. After several hours, I punctured the tent and ignited the venting methane.

21. I have reviewed the letter from Dr. Victor Jones, President of ETI to Ray Chan, Chief of Grading of the City of Los Angeles' Department of Building and Safety, dated July 21, 2000. A true and correct copy of this letter is attached as Exhibit H. I agree with Dr. Jones' conclusion that no grading and no stockpiling should occur until the site is adequately tested for methane and toxic (BTEX and H2S) gases. Based on a review of the Phase Two EIR, I conclude that the site has not been adequately tested because the gas testing has not been conducted at a sufficient sample density. As stated previously, the sampling must take place on at least a 50-foot grid in order to accurately characterize the extent and concentration of the methane and toxic gas at the site. Thus, in my professional opinion, all grading, surcharging and stockpiling must cease for the foreseeable future until a proper soil-gas baseline can be obtained.

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[1] Figure 57, "Areas of Potential Environmental (Contamination) Concern Relevant to the Proposed Project Site" by Camp, Dresser & McKee, and Figure 59, "Methane Concentrations Within the Proposed Project" by Exploration Technologies, Inc.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated: JUNE 30, 2005

Walter R. Merschat

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Attorneys for Grassroots Coalition and Daniel Cohen and with permission of John Davis

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF LOS ANGELES

CENTRAL DISTRICT

ENVIRONMENTALISM THROUGH INSPIRATION AND NON VIOLENT ACTION ("ETINA"), a California non-profit corporation, GRASSROOTS COALITION, a California non-profit corporation, SPIRIT OF THE SAGE COUNCIL, a non-profit unincorporated association, JOHN DAVIS and DANIEL COHEN,

Petitioners,

v.

CITY OF LOS ANGELES, a Municipal Corporation, THE CITY COUNCIL OF LOS ANGELES, DOES 1-10,

Respondents.

PLAYA CAPITAL COMPANY, LLC, a Delaware limited liability company, et al.

Real Parties in Interest

CASE NO. BS 073182
Hon. George H. Wu

REPLY IN SUPPORT OF SUPPLEMENTAL OBJECTION TO SUPPLEMENTAL RETURN TO PEREMPTORY WRIT OF MANDATE AND PROPOSED ORDER DISCHARGING WRIT OF MANDATE; DEMAND THAT FEBRUARY 27, 2007, MARCH 31, 2006 AND JANUARY 11, 2006 VOTES OF CITY COUNCIL AND ACTIONS OF CITY ATTORNEY BE ORDERED VOID FOR VIOLATION OF THE POLITICAL REFORM ACT GOVERNMENT CODE § 87100, ET SEQ.; DECLARATION OF ALFRED Q. BABYANS; RESPONSE TO JOINT EVIDENTIARY OBJECTIONS Declaration of John Davis C.P. §§

Date: April 11, 2007
Time: 8:30 a.m.
Place: Dept. 33

DECLARATION OF ALFRED O. BABAYANS

I, Alfred O. Babayans, declare as follows:

1. I have personal knowledge of the facts set forth herein, and if I were called as a witness I would competently testify to the same.

2. I am a Registered Professional Mechanical Engineer (P.E.) with the State of California (License No. M 25865). I hold a Masters degree in Mechanical Engineering/ Chemical Engineering from the California State University at Northridge.

3. For nineteen (19) years I was employed in the City of Los Angeles Department of Building and Safety (LADBS), in which I was responsible for performing plan checks regarding Building Code compliance and in establishing design requirements for the mechanical and plumbing systems within structures being permitted and approved by the City.

4. Beginning on or about 1985 I was assigned responsibility for overseeing Building Code compliance with the City of Los Angeles Methane Ordinance that had been adopted by the City following the Ross department store explosion and ensuing methane fires that occurred in the Salt Lake Oilfield (Fairfax) area of the City.

5. I was later assigned similar responsibilities regarding Building Code compliance with the Methane Ordinance that was adopted by the City to deal with the high methane levels and explosive oilfield gas conditions discovered at the Playa Vista area of the City, and located over the old Playa Del Rey Oilfield.

6. I frequently voiced strenuous objections to my superiors within the LADBS regarding the permitting and approval process that was being employed by the City regarding the Playa Vista building site. These review procedures were substantially relaxed, and made much less demanding upon the Playa Vista building site, versus the permitting procedures

employed in the Fairfax area. It was expressly stated by my superiors within the LADBS that special accommodations had to be made for the building at Playa Vista in order to favor the building contractors, and limit the cost implications of the methane mitigation systems. I was appalled by these procedures.

7. I personally became aware that gas mitigation systems were allowed to be installed at Playa Vista, by the City, without first going through a blueprint review and design verification with the methane ordinance requirements. This violated the practices employed by the City that required that the blueprints be first approved by the permitting department of LADBS, before construction could proceed.

8. I was the Metro, Chief of Mechanical Plan Check during the time period that the Playa Vista methane mitigation system approval process was taking place. I have personal knowledge that the blueprint approval phase was often violated, as described above.

9. The methane mitigation systems that were allowed to be installed by the City at Playa Vista failed to comply with appropriate design requirements to assure safe operation over the range of anticipated operating conditions. The most dangerous features that were allowed to be installed by the City at Playa Vista, largely as cost cutting measures are described in the following paragraphs.

10. A so-called Dual System was used in which subsurface perforated gas collection pipes were simultaneously used to also collect water – that was seeping into these gas collection pipes – and drained to a sump area. This design practice is extremely dangerous because of the high probability that the perforated gas collection pipes will fill with water, especially during heavy rains, and completely defeat the passively designed gas mitigation system.

11. The above-described defective design features employed at the Playa Vista site also prevent – on an ongoing basis – the ability to detect and determine if the methane mitigation system is actually venting gas to the atmosphere, as required to protect the building structures from explosion and fires. This is the central flaw of the passive mitigation system that was allowed to be installed at Playa Vista, against my strenuous objections based upon my experience gained in evaluating similar gas hazards in the Fairfax area, as described above. This passive system was allowed to be used by the City, solely as a cost saving benefit to the builder, as opposed to an active system that would allow validation of the ongoing requirements of venting.

12. I have reviewed various Declarations that have been prepared by LADBS employees, who I formerly worked with, that purport to claim that the gas mitigation system at Playa Vista works as intended. Based upon my personal knowledge of the defects existing in this system, these Declarations by current employees of the City are only self-serving conclusionary opinions, not base upon the actual limitations of the system as installed.

13. The serious design defects that exist in the methane mitigation system installed at the Playa Vista site were deliberately and intentionally allowed to be used by LADBS officials in order to favor cost cutting measures advanced by the building developers. This violated the established practices and procedures of the LADBS, in providing protection to the public in assuring safe building practices. As a result of these violations, there is an ever present risk of fires and explosions at the Playa Vista site.

14. In my efforts to correct the above-described wrongful conduct taking place within the LADBS, I was severely sanctioned and reprimanded by my superiors within the LADBS.

15. In preparing this Declaration, I am still hopeful that steps can be taken to correct the extremely dangerous oilfield gas migration conditions existing at Playa Vista. During my tenure with the LADBS, I now realize that the soil gas measurement results generated by Exploration Technologies, Inc. (ETI) and Dr. Victor Jones, were withheld from me by superiors within the LADBS. Now that I am aware of the extremely high near-surface soil gas conditions that were measured by ETI, my opinions stated above regarding the defects existing in the methane mitigation system at Playa Vista take on even added importance. I believe these gas measurement data were deliberately withheld from me by my superiors within the LADBS.

16. As previously stated, I was involved with the permitting procedures adopted in the wake of the Ross department store explosion in the Fairfax area. Although the Fairfax area was deemed by the City to be a dangerous area as a result of the gas migration hazards, the gas levels that I am now aware of at Playa Vista are much higher.

17. During my tenure within the LADBS, my superiors routinely insisted that the requirements for Playa Vista be made less restrictive (as opposed to what I believed they should have been more restrictive). If I had been aware of the true gas levels measured at Playa Vista I would have been even more insistent upon imposing more demanding requirements upon the Playa Vista gas mitigation, versus the LADBS requirements imposed upon the Fairfax area.

I declare under penalty of perjury under the laws of the State of California, that the foregoing is true and correct. Executed on April 6, 2007 in the City of Los Angeles.

Alfred O. Babayans, Declarant

DECLARATION OF BERNARD ENDRES

I, Bernard Endres, declare as follows:

1. I am a self-employed engineer and scientific consultant, and I have been employed in this capacity for the past 25 years.

2. I hold Bachelors, Masters and Ph.D. degrees in engineering and mathematics, and I have worked professionally in these fields for the past 45 years.

3. Since the year 1985 I have specialized in two areas of engineering analysis and scientific research. Area 1 has involved gas migration from oilfields and underground gas storage project, including the environmental hazards created thereby in urban environments. Area 2 has involved the study of subsidence caused by water and fluid production from aquifers and oilfields.

4. Since 1992, and continuing to the present, I have performed detailed studies of the gas migration and subsidence hazards in the Playa Del Rey area of the City of Los Angeles, including in the immediate vicinity of the Playa Vista Real Estate Project. The study results have been reported to the City of Los Angeles in both engineering report form and by briefings presented to high level personnel affiliated with the City of Los Angeles Department of Building and Safety ("LADBS").

5. I was instrumental in convincing the LADBS of the need to investigate the gas migration hazards existing at the Playa Vista Real Estate Project, through the use of deep soil gas probes. LADBS, in response, undertook these investigations before Grading Permits were issued for the initial construction work that took place at the Playa Vista Real Estate Project.

6. The LADBS employed the services of Exploration Technologies, Inc. (ETI) of Houston, Texas, under the direction of Dr. Victor Jones, to serve as scientific consultants to the

City of Los Angeles regarding the gas migration hazards. ETI undertook an extensive study of the Playa Vista soil gas conditions using both shallow and deep soil gas probes. These studies identified very hazardous soil gas conditions extending to the most severe levels discovered at depths of approximately 50 feet below ground level.

7. These studies confirmed my earlier scientific findings, based on hydrology studies, that the true gas migration hazards at this location were centrally associated with the "50 Foot Gravel" or Ballona Aquifer, that had been extensively researched by Dr. Polland, when he worked as a hydrologist for the State of California. Dr. Polland called the primary area of concern the "50 Foot Gravel," because beginning at an approximate depth of 50 feet below the ground surface, a highly permeable sand and gravel zone begins, and extends to a depth of several hundred feet. This zone was created over geologic time by the flow of the original path of the Los Angeles Riverbed. This riverbed flowed in a down-dip direction toward the Pacific Ocean in an approximately east-to-west direction.

8. This sand and gravel zone directly overlies the Playa Del Rey Oilfield, that was converted to a very large underground gas storage operation beginning in 1942. Billions of cubic feet of natural gas are routinely imported from gas supplies located largely in Texas and Oklahoma. This gas is pumped into the old oilfield under very high pressures using surface located compressors.

9. Beginning in the 1920's and 1930's hundreds of oilwells were drilled into the Playa Del Rey Oilfield in pursuit of oil and gas production. Many of these wells intercept the gas storage zones that are operated under high pressure, with the pressure selected to maximize storage capacity, but not to minimize the gas leaks that occur along the old wellbores, largely in the permeable zones located between the drill holes and the old steel casings of the oilwells.

10. These old wellbores intercept the "50 Foot Gravel" zone, that is described above. When the upward leaking gases reach the "50 Foot Gravel" they spread out lethargically over large areas by migrating up-dip (viz., in an easterly direction), directly along the alignment of the old Los Angeles Riverbed. Much of the gas is trapped in localized gas collector zones that concentrate pressurized gas pockets as numerous undulation areas formed between an upper sand and gravel zone and a clay layer extending to a depth of approximately 50 feet, and located at the interface of the "50 Foot Gravel," as described above.

11. The above described "gas pockets" were extensively investigated by ETI, on behalf of the City of Los Angeles, and recommendations were prepared by Dr. Victor Jones of ETI regarding implementing necessary mitigation measures. In summary, he advised the City of Los Angeles LADBS that the Playa Vista Real Estate Project could not be built safely unless the 50 Foot Gravel zones were degassed. Dr. Victor Jones proposed an extensive water "Pump-and-Treat" procedure that would have allowed both the venting of the free gas, as well as the degassing of the dissolved gas contained within the "50 Foot Gravel." This was in recognition of the scientific reality that the degassing could not be performed using merely passive vent pipes extended from the surface into the shallow gas zones.

12. The gas migration, hydrology conditions, and mitigation measures were found – through extensive investigation – to closely parallel the gas conditions existing below the explosion site of the Ross Department Store in the Fairfax area of Los Angeles in 1985. That explosion was caused by a build-up of gas pressure from leaking oilfield gases from the Salt Lake Oilfield into a gas pocket located approximately 50 feet below ground surface, directly below the explosion site and the continuing surface burning of gas thereafter. The "Anthony Vent Well" was drilled into the gas pocket relieving the gas pressure, and eventually allowing the flames to be extinguished by the City of Los Angeles Fire Department.

13. This 1985 incident led the City of Los Angeles to form a large Task Force to investigate the cause of the explosion, and develop mitigation measures to prevent a reoccurrence. This Task Force developed the detailed design and construction features of the "Anthony Vent Well," that upon construction allowed the immediate gas hazards to be mitigated.

14. In 1989 there was a near repeat of the gas hazard conditions that had caused the 1985 explosion and gas fires. The City of Los Angeles discovered that the Anthony Vent Well had become clogged by the infiltration of water and scale build-up in the perforations used at the base of the vent well located at a depth of approximately 50 feet. These problems led to the formation of a second Task Force by the City of Los Angeles. The study results identified the extreme criticality of not allowing the water table to rise above the vent pipe perforations located at an approximate depth of 50 feet. Also, it was found critical not to allow scale build-up to occur within the perforations at this depth, largely caused by microbial activity occurring within the water and gas bubble interface at this depth.

15. For the foregoing reasons, and because extensive research has been performed on these detailed gas migration hazards and topics, since the 1985 explosion, today the problems have been well documented in the scientific literature. Detailed discussions of these topics are set forth in a textbook on Gas Migration that I co-authored.

16. The above findings and research confirm that degassing of the high-pressure gas pockets existing in the "50 Foot Gravel" at Playa Vista cannot be accomplished by way of drilling passive vent wells into these areas. In particular, the perforations used at the base of the vent wells will become clogged with water intrusion and scale build-up in the same manner that the Anthony Vent Well clogged in the 1989 time period, and nearly caused a repeat explosion of the 1985 Ross Department Store explosion.

17. It is necessary to perform extensive dewatering, as determined by Dr. Victor Jones of ETI, to perform adequate degassing of the 50-Foot Gravel. This dewatering must be evaluated in the context that the subject area at Playa Del Rey, including Playa Vista, has been categorized by the United States Geological Survey as a highly subsidence-prone area.

18. Official studies performed by the State of California have detailed the extent of the subsidence that has already occurred in this subsidence-prone area. These studies have attributed the largest component of this subsidence to groundwater extraction in the Playa Del Rey area. However, large quantities of fluids that are being continually produced from the Playa Del Rey Oilfield are also a significant commingling contribution of the overall subsidence problem recognized by the United States Geological Survey, in their extensive surveying of the area.

19. I have relied upon additional survey data generated by the Los Angeles County Survey Teams, who maintain permanent and ongoing survey markers throughout the Playa Del Rey area. My results have been reported to the City of Los Angeles LADBS, with emphasis upon the ongoing subsidence in the area of the Playa Vista site.

20. These results reveal that any amount of dewatering performed as part of the Playa Vista development will have a near-immediate impact upon the ongoing subsidence that has been ongoing as described above.

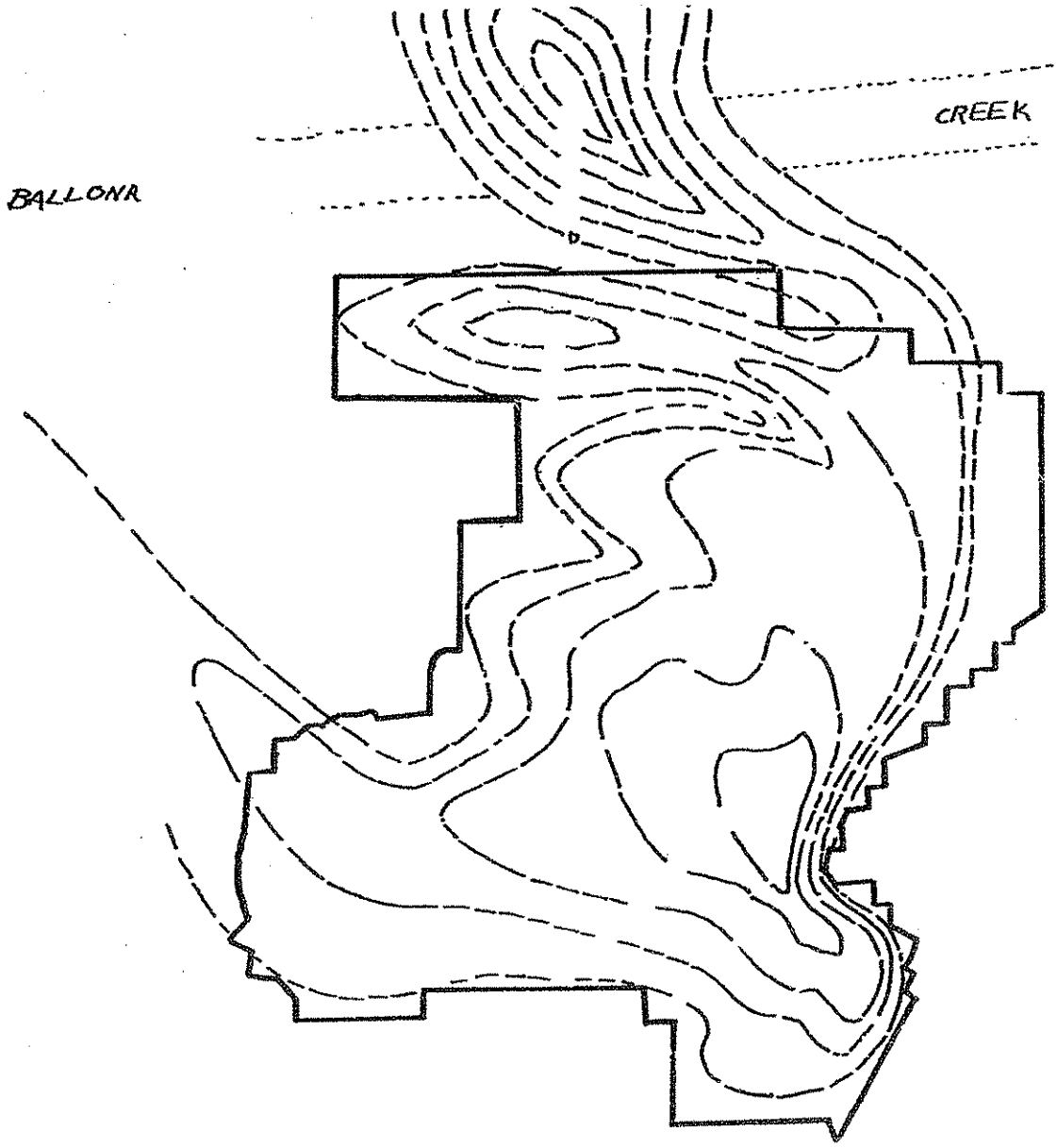
I declare under penalty of perjury that the foregoing is true and correct, and if called upon to testify would so competently testify to the foregoing.

DATED: March 28, 2007

Bernard Endres

Bernard Endres, Declarant

H_2S



LA CITY CONDITIONAL USE PERMIT
CPUC APPROVAL
240 ACRES

The Los Angeles County Air Pollution Control District

The District favors the repeal of these ordinances or a much more strict enforcement of good operating procedures in order to adequately abate a source of odor complaints. From time to time in the past, complaints have been received concerning the total oil-production operations within this area.

Investigations of the area have revealed that the oil field is a marginal productive one and that it is the only oil field in the Los Angeles Basin producing quite sour petroleum crude. The term "sour" means that there are sulfur compounds in the crude oil. When these are exposed to the atmosphere the odorous material evaporates and is quite noticeable at extremely low concentrations. Another problem of this field is its age. Being quite old, the equipment is subject to frequent breakdowns. When the sucker rods break, they have to be fished out and this allows the crude oil to be exposed to the air more than normal. The sum result is poor housekeeping and more pollution (odors) than necessary.

H_2S SOUR field

The Department of Fire states that although a conversion to subterranean operation would create fire hazards not encountered in aboveground operations, they consider that properly engineered safeguards could reduce fire hazards sufficiently to allow safe operation.

They also mention that under the present ordinance, the Fire Commission may grant variances not exceeding 10% of the required clearances. Any substantial reduction in clearances by an amending ordinance should necessarily impose additional safeguards from fire and exposure to fire.

This Department states that if this present R-1 property is to be developed in the future, tract maps should be submitted. North of Esplanade East is lacking in adequate fire protection even for R-1. Fire hydrants will be required.

The City Administrative Officer (Petroleum Administrator) states that subterranean facilities would be impractical for the Peninsula area, necessitating a large cellar. In view of the high level of the water table that would be encountered (with attendant dangers of flooding or floating phenomena), costs would be high, perhaps prohibitive, for most wells. An appraisal indicates that 2,500,000 barrels of oil will be recovered by the oil producers in the Venice Oil Field Study area within the next 24½ years. Recovery of this volume together with associated natural gas would represent a present day value of approximately

6. Ordinary non-conforming business may be relocated but it is physically impossible to move an oil well. The proposed termination constitutes an irrevocable destruction of such property. No facts have been presented to justify departure from the 20-year non-conforming period.

7. Purchase of the wells or an urban renewal procedure could accomplish immediate elimination of the wells without resort to confiscation. The City has recently purchased the mineral rights of the well on public property.

8. The oil operators further believe that the City might execute an off-shore oil lease similar to the Mobil operation to the north with the condition that the lessee purchase the existing wells on the Peninsula, eliminate all blighting wells and consolidate most of them. This proposal should be studied for possible public revenue and royalty practicability.

9. At the present time, the Peninsula comprises two distant areas. No building permits may be obtained from the side between the Lagoon and Marina. Therefore, each area should be considered separately.

10. That the present oil operations do not stymie residential construction are borne out by a 127% increase in dwelling units in 5 years.

11. The 50-foot distance requirements are archaic and stem from the early days of wood derricks. In 1962, $200,000 was expended to modernize the wells and remove the derricks. Time is necessary for amortization of this expense.

12. If placing the wells underground is uneconomic for the Southern California Gas Company, it is more so for the small operator. This subterranean requirement is confiscatory in itself. The City Administrative Officer's report of April 16, 1964 cites difficulties of such relocation due to the high water table, large cellar required for equipment and servicing, increased safety hazards and economic impracticality.

13. The Southern California Gas Company operates the 6 most southerly wells on the Peninsula. Such wells are not primarily for oil production, but rather are an integral part of the Company's Playa Del Rey underground gas storage reservoir. This reservoir is of utmost importance to gas users in the Los Angeles Basin since it enables the Company to have gas available when the need is greatest. Continued maintenance of these 6 wells is absolutely necessary in order to control the build-up of pressure in the area.

YA VISTA ARCHAEOLOGICAL AND HISTORICAL PROJECT

Archaeological Monitoring Report, May 1998

by Angela H. Keller

Knowledge + Document withheld from LA City Building & Safety until mid-2000 by Playa Capital

Submitted to
Playa Capital Company: LLC
12555 W. Jefferson Blvd., Ste. 300
Los Angeles, California
90066

Statistical Research, Inc.
Tucson, Arizona
Redlands, California

March 8, 1999

(Kathy + I provided these docs to B+S at Hearing + confronted Planning – [illegible]

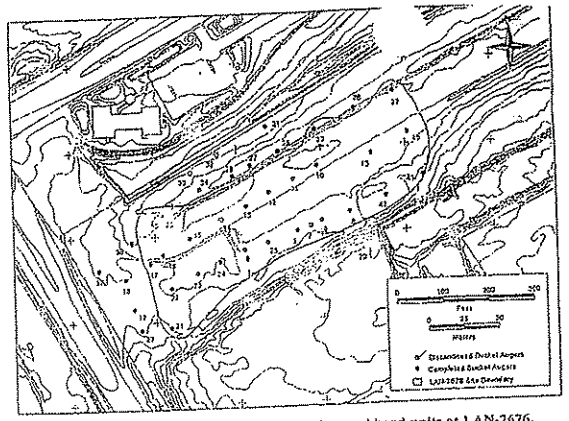


Figure 3.1. Location of bucket augers, trenches, and hand units at LAN-2676.

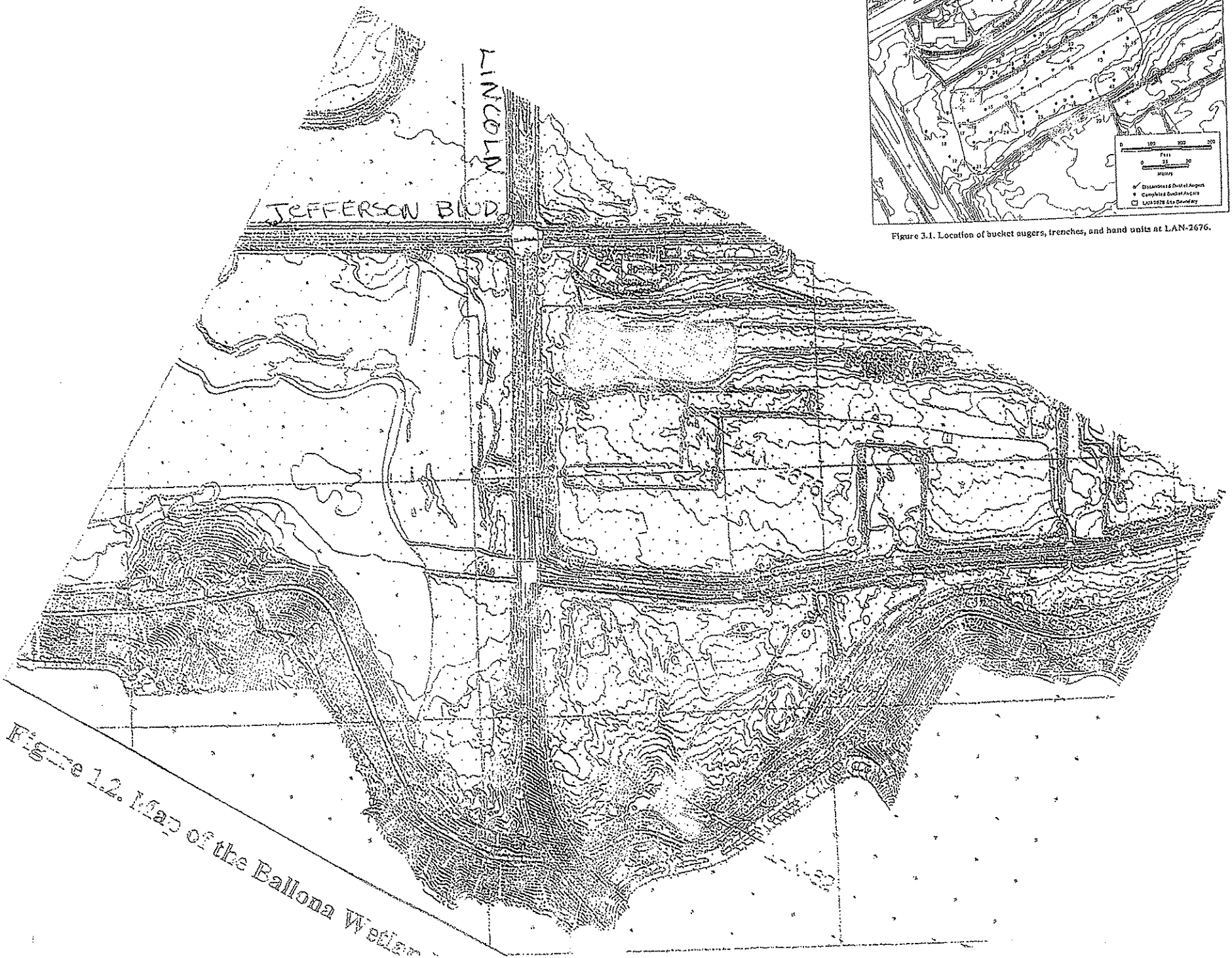


Figure 1.2. Map of the Ballona Wetlan

GABRIELINO

DAILY FIELD

Site PLAYA VISTA Excavator SRI Unit

Date APR 20, 1998 Monitor M. ALCALA Level

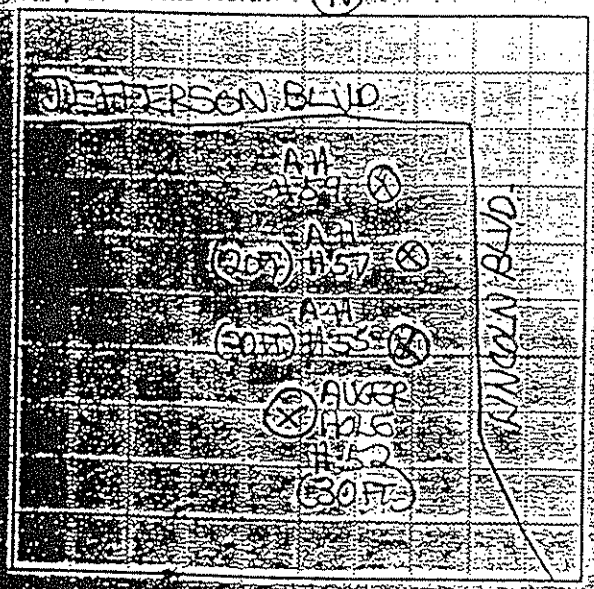
1. Excavation Techniques DRILL RIG

2. Soil Characteristics DARK TO MARINEISH GREY, SANDY

3. Cultural Materials NO SIGNIFICANT FINDS

4. Remarks SAFETY MEETING HELD WITH KEVIN O'BRIAN, AUGER HO... IS DUG TO 25 TO 30 FT. LEVEL. HERE, HIGH LEVELS OF H_2S AND CARBON MONOXIDE ARE DETECTED. SAFETY OFFICER O'B... ADVISES ENTIRE CREW TO LEAVE AREA AND DRILLING IS SU... IN AREA. TEST HOLES #55, 57, AND 59 ARE DUG.

5. Map: Indicate North (N)



Key

Scale: ___ = ___

2823

GABRIELINO

DAILY FIELD

Site PLAYA VISTA Excavator SRI Unit:

Date MAY 4, 1998 Monitor M. ALCALA Level

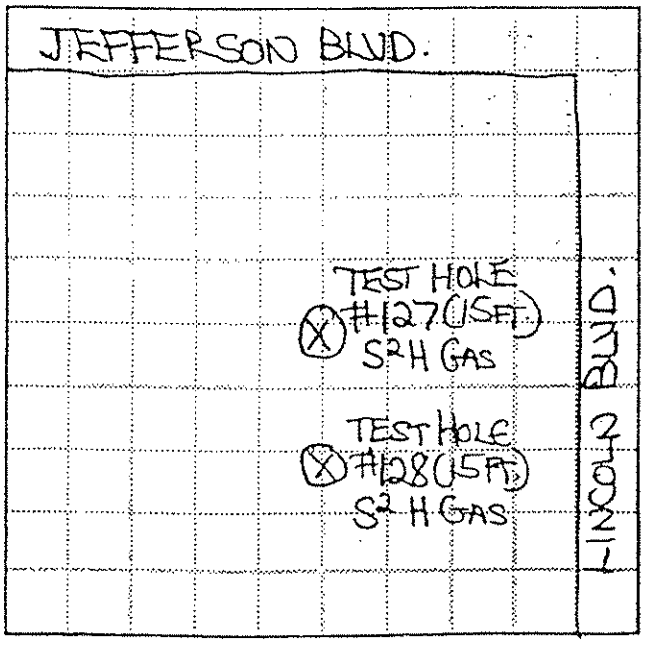
1. Excavation Techniques DRILL RIG

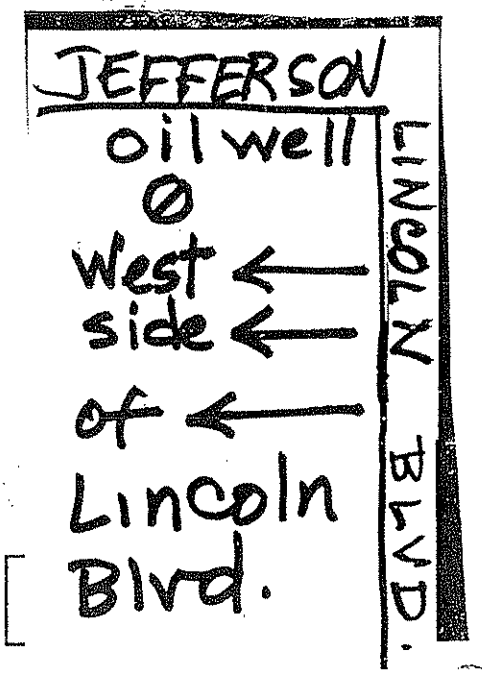
2. Soil Characteristics LIGHT TO DARK BROWN, GREYISH MARINE, SILTS

3. Cultural Materials NO SIGNIFICANT FINDS

4. Remarks CORING RESUMES IN WETLANDS. 1ST TEST HOLE DRY TO DEPTH OF 15 FT. H^2S GAS ENCOUNTERED. SAFETY OFFICER RON M. ORDERS EVERYONE OUT OF AREA. EXCAVATORS OPERATORS HARRY TO LET HOLE VENT FOR 15 MIN. THEN MASK UP AND GROUT HOLE. TEST HOLE #128, SAME THING OCC

5. Map: Indicate North





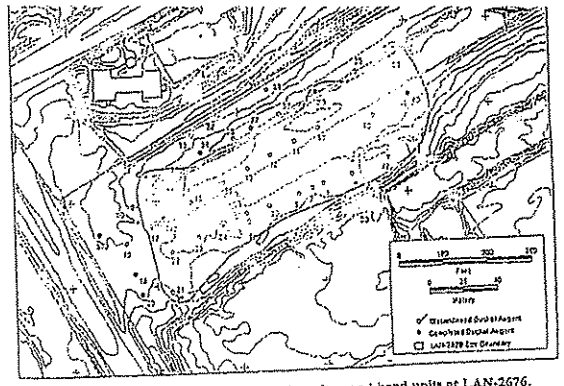


Figure 3.1. Location of bucket augers, trenches, and hand units at LAN-2676.

Figure 12. Map of the Ballona Wetlan

GABRIELINO/TONGVA

DAILY FIELD REPORT

Site PLAYA VISTA Excavator SRI Unit

Date APR. 23, 1998 Monitor M. ALCALA Level

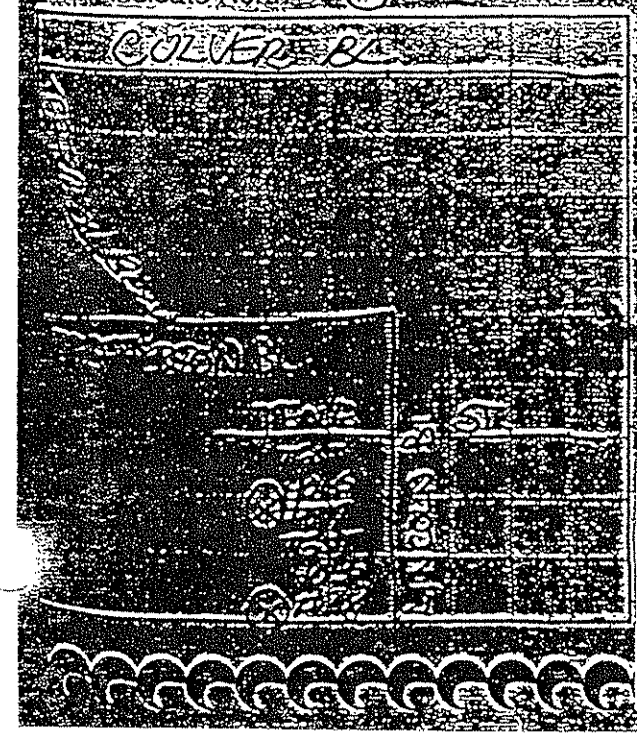
Excavation Techniques DRILL RIG

Soil Characteristics DARK TO MARINESH GREY SANDY

Cultural Materials NO SIGNIFICANT FINDS

Remarks DRILLING CONTINUES IN MARSHLAND AREA. TEST HOLES #77 AND 78 ARE OUG, H2S, METHANE GAS HIT ON HOLE #78 AT 15-20 FT. HOLE SHUT DOWN. DRILL RIG MOVES TO SR10 INLAND AREA NORTH OF JEFFERSON & SOUTH OF CULVER BL. TEST HOLE #79 ENCOUNTERS CONCRETE AT 5-10 FT. PLUS SMALL AMOUNT OF H2S. TEST HOLE #80 ENCOUNTERS ROCK AND CEMENT AT 9 FT. HOLE SHUT DOWN.

Map: Indicate North (N)



Key

West of Lincoln Blvd.

← South of Teale

Memo of Call

Name: Richard Feldman
Firm: LA County FD, Eemrgency Response
Tel. No. 323- 890-4099

Person Taking Call: Razel Trigilio
Date: 4-2-01
Time: 8 am

Subject: COMPLAINT LOG # 3-0301-0297 - AIR EMISSION AT PLAYA DEL REY

Message Left: Richard Feldman responded to the above referenced complaint. He said that everytime they do borings, there was a release of about 50 ppm H2S. As soon as they put pile in the bore, they essentially cork it. Borings were not more than 3 to 4 feet deep. He referred this matter to Mark Estrella, DPW- Building and Safety.

13950 PANAY WAY

from: CALEPA
DTSC

Hydrogen sulfide at Ballona

I am a physician and professor of Medicine at USC School of Medicine. I am very concerned about the risks of the hydrogen sulfide in the Playa Vista Development.

The Los Angeles City Council recently approved a CLA report that says that it is safe to build residences and businesses on Ballona Wetlands and gave Playa Capital Co., more than $150 million in Mello-Roos bonds. There have been many critical analyses of the report. The protection of the Ballona Wetlands and the presence of methane gas have been the main points of contention. However in the rush to judgement in recent days the council has almost entirely overlooked the risks of hydrogen sulfide a toxic gas that everyone agrees is present in the area.

One might ask how is it possible to do this with all the attention of the regulatory agencies. I believe that these agencies and the members of the City Council have been less than diligent because of the state of the science of the toxicology of hydrogen sulfide. The report to the City Council is limited because 1] The methods for detecting and measuring hydrogen sulfide are onerous and the model used is flawed. 2] There is a lack of appreciation of the risks of low levels of hydrogen sulfide that have been documented in the medical literature. These reports are becoming numerous and difficult to ignore and 3] There is a lack of knowledge about the unexpected deadly risks of underground hydrogen sulfide for persons living close to those sites.

At Ballona there have been numerous anecdotal reports of the detection of the odor (the smell of rotten eggs) of hydrogen sulfide by persons living in the area or visiting. I have seen six written reports of hydrogen sulfide causing problems for workers and technicians in or around that site that required them to stop work. Technicians reported detecting the odor of hydrogen sulfide while collecting samples of soil and water for analysis on six occasions. An archeological investigation at one site had to be halted and them limited to 15 feet below ground surface because of toxic levels of hydrogen sulfide. There are verbal reports of measurements of up to 500 parts per million from the Playa Vista Installation Log and So Cal Gas had levels of 2000 parts per million around various adjacent oil wells. On Dec 13th 1998 when a well bore was being placed 3 workers became ill because of the hydrogen sulfide that was emitted. Measurements of 50 ppm of hydrogen sulfide were made at that time and the work was discontinued.

Despite all these records, in a recent report to the City council the City Legislative Analyst concluded that there was no health risk from hydrogen sulfide. I quote 'Potential health risks associated with ---- hydrogen sulfide soil gas emissions at the Playa Vista Development Project site, ---------are below the benchmarks established by EPA, DTSC, OEHHA, and other regulatory agencies to indicate insignificant risk, with no further investigation or remediation warranted'.

It is not clear which benchmarks are being referred to but the benchmark for toxicity of hydrogen sulfide in the air has varied with different agencies. The Cal OSHA standard mentioned in the report is 10 parts per million. This is an exceedingly high level that is not acceptable. Levels of 10 parts per million of hydrogen sulfide have now been shown to be very toxic. Ten parts per million is almost 1000 times higher than levels other authorities have accepted. The California Air Quality Standard for hydrogen sulfide is 30 parts per billion. The OEHHA that is concerned about health hazards also adopted 30 parts per billion. The U.S. EPA has developed a reference concentration of less than 1 part per billion. It is at about 7 parts per billion that hydrogen sulfide becomes a detectable odor and some persons start to smell rotten eggs

The data used in the CLA report excluded the anecdotal information mentioned earlier and used 1199 'soils sampled' in a routine manner from approximately 4 feet below the ground surface. The methods for detecting and measuring hydrogen sulfide are onerous and are open to error if not carried out conscientiously. The methods for measuring the hydrogen sulfide (the instruments and their accuracy and the method of collection of samples) were not disclosed so that it is even more difficult to analyze this report. Although it was stated that 'soils were sampled' to measure the hydrogen sulfide I have been told by a reliable source that a field instrument was used and soils were not analyzed for hydrogen sulfide. In the technical report in 'Health Assessment' it was reported that over half of the soils sampled contained hydrogen sulfide but in the summary report it was stated that less than 1% of the samples contained hydrogen sulfide. I believe that the model used to determine the concentration of hydrogen sulfide in ambient air in a room is flawed. This model, which is on the EPA website, has many assumptions including the assumption that hydrogen sulfide is bound to the soil and diffuses through virgin soil. Under these circumstances the concentration of the gas decreases markedly as it comes to the surface. Hydrogen sulfide below the ground is under pressure and is 'pushed' to the surface under pressure and the concentration of the gas on the surface will be the same as the concentration 4 feet below the surface. When I asked a reliable source about this model they said that it was used because it was the only model available.

My analysis of the Playa Vista Development is that at the very least the residents and their children in the area are going to be living with the smell of rotten eggs intermittently. The more disconcerting evidence indicates that if residents are able to smell hydrogen sulfide they may also finish up with brain and other body damage as a result of inhaling this gas. In the 1990s there were increasing numbers of studies showing that what were once considered to be safe levels have now been shown to be very toxic to humans. Using objective neurological tests in 1999, Dr Kilburn from USC School of medicine, found that persons exposed to 1 ppm of hydrogen sulfide for even very short periods of time may develop neurological changes consistent with brain damage. Dr Legator and his colleagues recently published a study of hydrogen sulfide exposures in Texas and Hawaii. He found that even lower levels of hydrogen sulfide in the range of 10 to 700 pp billion may produce a range of disorders of the central nervous system, the lungs, ear, nose and throat and other body systems.

Equally worrying are reports that underground hydrogen sulfide can collect unexpectedly in buildings and can be lethal under those conditions. This gas can be dangerous wherever it is located, in sewers, waste dumps, and geothermal areas or at the Ballona Wetlands because the gases can seep up in unexpected places. A recent example of this was seen at a tourist resort Rotorua that is a geothermal area in New Zealand. Since the 19th century this resort has attracted visitors with no concerns about the sulfur fumes. Indeed the sulfur has been considered to be 'health giving'. A tragedy at Rotorua is very relevant for the persons who are planning to reside on this property at Ballona. Deaths occurred when underground hydrogen sulfide collected in motel rooms (New Zealand Herald July 2000). The Coroner concluded that Rotorua's sulfur fumes (hydrogen sulfide) caused the death of an Austrian actress who was found on the floor of a motel room in February 2000. She had been overcome by hydrogen sulfide and collapsed while she was talking to a friend on the phone. She was found to have toxic levels of hydrogen sulfide in her blood that constituted severe poisoning by the gas.

Of particular relevance for the local testing of hydrogen sulfide in the Ballona wetlands, the District Council inspector said the room was tested for hydrogen sulfide on six occasions including the day she died. Each test showed that gas levels were normal. (The windows in the room were open and hydrogen sulfide may quickly disperse if the room is ventilated). In 1987 there was a previous report of two persons who died in their sleep while on their honeymoon when hydrogen sulfide seeped through the floor of their motel at Rotorua. These anecdotal cases

describe the problems of hydrogen sulfide collecting unexpectedly in closed spaces that was not detected by testing the ambient air.

For over 200 years we have known that hydrogen sulfide at high concentrations is a very toxic gas and that each year this gas kills more people than any other industrial gas. At lower levels we have been far less concerned. Many of us made hydrogen sulfide in our chemistry labs at College and detected that rotten egg smell. From sewers and in geothermal areas we often smell this gas. In the geothermal areas as noted earlier the sulfur is considered to he healthy for the body.

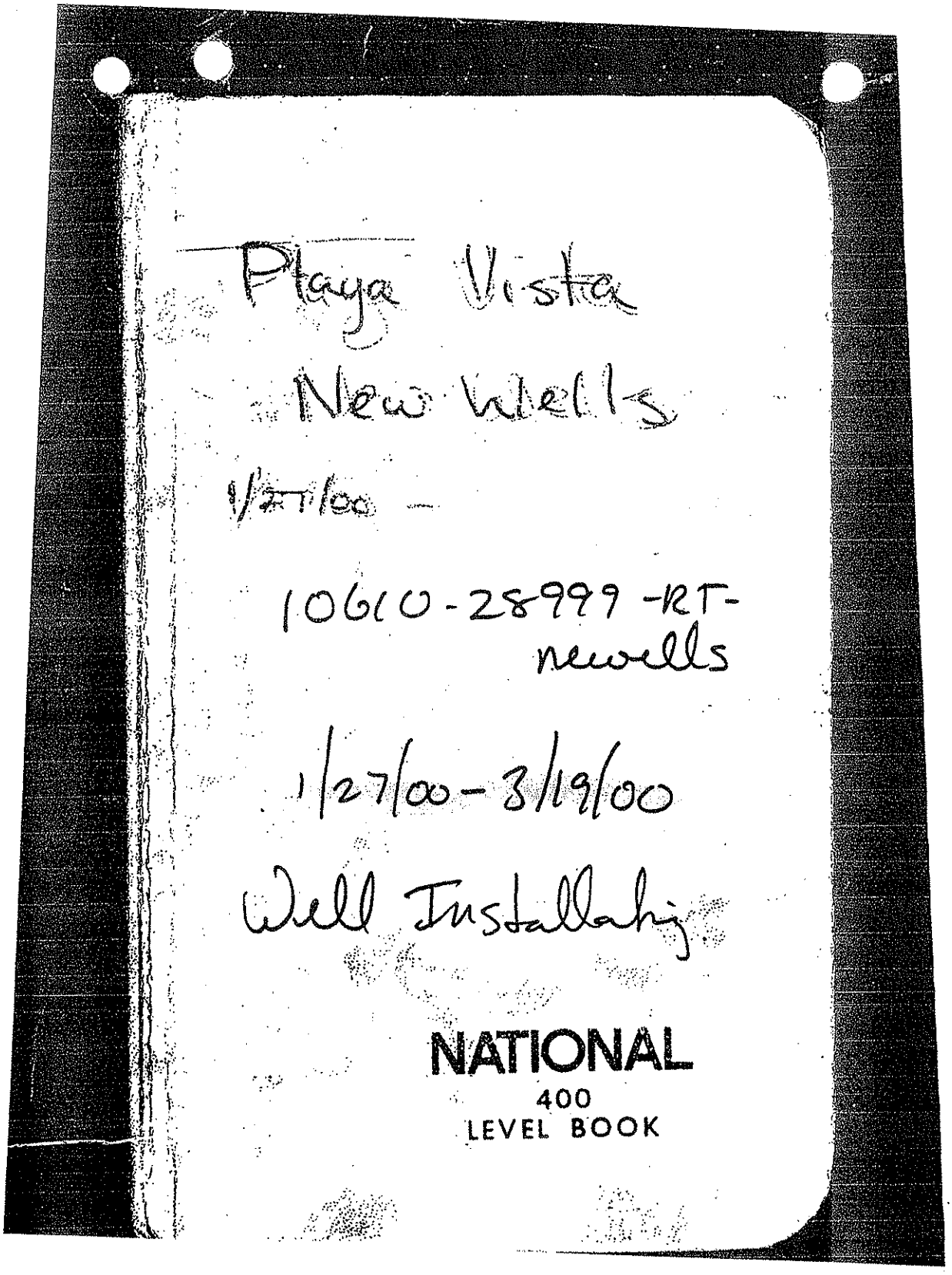
There are also numerous disconcerting stories in the medical literature of groups of people exposed to hydrogen sulfide becoming very distressed and they were often described as hysterical. In recent years we have come to know that their noses were telling them something that may be very important. That message is that wherever and whenever you smell rotten eggs be very concerned about what it may be doing to your brain and the rest of your body.

It is critical that the City Council revisit this issue and reexamine the methodology in their report for measuring hydrogen sulfide, update the accepted toxic levels and review the risks of unexpected collection of hydrogen sulfide and the low level toxicity of hydrogen sulfide. Finally they should examine the mitigation efforts which may be extremely difficult for hydrogen sulfide because the gas is oxidized to sulfuric acid that is extremely corrosive.

John Z Montgomerie MD

Emeritus Professor of Medicine
USC School of Medicine

12231 Lawler St
Los Angeles
CA 90066


Playa Vista
New Wells
1/27/00 -
10610-28999-RT-
newells
1/27/00-3/19/00
Well Installation
NATIONAL
400
LEVEL BOOK

Drilling MMW-735 (Wed)

March 1 2000 RJ

geyser. From 9:13 to 9:40 the gas pressure would force water 1-2' above top of auger

9:40 - 11:00 gas pressure enough to force water out of top of auger @ ± of at least 2 PPM Currently no water flow out of casing however can still here gas bubbly through water.

Stuck my H-gas inside auger 6" report

O^2 @ 8.0 %

LEL off range

500 ppm H_2S

Rob Hulse

RJ

12:20

18:30

12:47

13:03

13:04

Drilling MMW-735 (Wed) 61

March 1 2000

Able to get sporatic reading of 5-10 ppm H_2S 6" above top of Auger Never any thing above 2 ppm in breathing zone Move to hole MMW-735 (s.k #7) Remove one auger from site #5 and move rig off hole. Borehole is still venting

Begin drilling MMW-735 stop @ 35' Waiting for move auger to arrive on site

Off load auger resume drilling

Resume drilling

Rob Hulse

LARWQCB groundwater test data routinely encounters H2S in near surface groundwater within the Ballona and Bellflower Aquifers. (15'-80'CDM Well Logs and Monitoring Well data)

REV. DATE: JAN 1993

WELL DEVELOPMENT LOG	WELL NO.: C-1060	Page 1 of 1
Installation:		Site: Playa Vista
Project No.:	Client/Project: 10610 39410 RI FS	
HAZWRAP Contractor:	Dev. Contractor: Cascade	
Dev. Start: 1-1-02 (11 : 15 — m)	Dev. End: 2-1-02 (13 : 10 — m)	Csg Dia.: 2"
Developed by: Ros/CDM	Curt/Cascade	Dev. Rig (Y/N)

PD = 0.0/0.0
TD = 76.32
Casing Volume = ~~61.29~~ 9.8 gal
5x Casing Vol = 49 gal = ~~175~~ 124 gal
Dev. Method Bail, swab, pump

Equipment 2" Grundfos

Pre-Dev. SWL 15.03 Maximum drawdown during pumping none ft at ____ gpm
Range and Average discharge rate 2 gpm
Total quantity of material bailed 5
Total quantity of water discharged by pumping 130
Disposition of discharge water ____

Time	Volume Removed (gal)	Water Level ft. BTOC	Turbidity	Clarity/ Color	Temp. °C	pH	Conductivity x10	Remarks
1115	Begin swabbing							
1135	End swabbing							
1145	Begin bailing			First bail contains			>10mL	Sand Gray + muddy
1200	End bailing 5 gal.							
1202	Pump 1' off bottom ~~(75 BC)~~						(75' TOC)	
1208	Begin pumping @ 2gpm							
1210	10	15.22	>1100	DARK	21.2	735	75	H2S odor
12:15	20	15:22	87.5	CLEARING	21.5	7.45	75	"
12:20	30	"	56.2	CLEAR	21.5	7.45	75	"
~~12:30~~ 12:25	40	"	42.4	"	21.6	7.42	75	"
~~12:30~~ 12:30	50	"	31.5	"	21.6	7.42	78	"
~~12:35~~ 12:35	60	"	21.9	"	21.4	7.46	78	"
~~12:40~~ 12:40	70	"	12.3	"	21.5	7.44	78	"
~~12:45~~ 12:45	80	"	8.5	"	21.6	7.39	80	"
12:50	90	"	7.1	"	21.2	7.41	80	"
12:55	100	"	6.5	"	21.2	7.46	81	"
13:00	110	"	2.5	"	21.0	7.50	81	"
13:05	120	"	2.2	"	21.1	7.48	82	"
13:10	130	"	2.2	"	21.1	7.49	82	"
1310	End pump							
	DTW = 15.03'							

2-1-02

REV. DATE: JAN 1989

WELL DEVELOPMENT LOG

WELL NO.: C-104 | Page 1 of 1

Installation: Playa Vista 18 well Installation | Site: [illegible]

Project No.: | Client/Project: 10610-31410 - RT - wells

HAZWRAP Contractor: | Dev. Contractor: Cascade

Dev. Start: 2-1-2 (: m) | Dev. End: (: m) | Csg Dia.:

Developed by: Rob Lopez | Gary Cascade | Dev. Rig (Y/N)

1 well volume = 9
TD = 77
x3 = 27
x5 = 45

Dev. Method: swab bail pump

Equipment

Pre-Dev. SWL ______ Maximum drawdown during pumping 2C ft at ? gpm

Range and Average discharge rate ______ gpm — unknown

Total quantity of material bailed: 4 gallons

Total quantity of water discharged by pumping

Disposition of discharge water

Time	Volume Removed (gal)	Water Level ft.BTOC	Turbidity	Clarity/~~Color~~ D.O	Temp. °C	pH	Conductivity	Remarks
	Bailed 4 gallons							
Begin pump 11:23								2.5 min / 5 gal - 2 gal per min
11:25	9.0	22.8	>1000	0.22	21.0	7.75	173 X10	
11:30	15	21.14		0.22	21.1	7.76	175X10	
11:35	26	22.7	854	0.21	21.1	7.76	175X10	Steady Flow ... clearing up
11:40	31	22.65	482	0.21	21.0	7.75	161X10	Steady Flow Fairly Clear
11:45	37	22.65	314	0.21	21.0	7.74	175X10	
11:50	44	—	333	0.20	21.0	7.73	175X10	
11:55	55	—	338	0.20	21.0	7.73	175X10	Same As Above
12:00	55+6	—	174	0.20	21.0	~~7.3~~ 7.73	173 X10	increase flow 145 hz to 165 HZ
12:05	55+17	—	225	0.20	21.0	7.73	173 X10	
12:10	55+27	—	216	0.20	20.9	7.72	172X10	
12:15	55+36	—	104	0.20	21.0	7.72	172X10	
12:25	110	—	212	0.20	21.0	7.73	172X10	
12:30	~~120~~ 120	—	167	0.22	21.0	7.71	175X10	reduce flow 165 to 155 hz
~~12:35~~ 12:35	125							
12:40	130	—	162	0.21	21.1	7.72	175X10	
12:40	pump off							
	136							

2-2-03

REV. DATE: JAN 1992

WELL DEVELOPMENT LOG	WELL NO.: C-103	Page 1 of 1
Installation: Playa Vista		Site:
Project No.:	Client/Project:	
HAZWRAP Contractor:	Dev. Contractor:	
Dev. Start: (: __m)	Dev. End: (: __m)	Csg Dia.:
Developed by:		Dev. Rig (Y/N)

Dev. Method Swab (15 min) Bail (gallons) Pump

Equipment

Pre-Dev. SWL 17.66 Maximum drawdown during pumping ______ ft at ______ gpm

Range and Average discharge rate ______ gpm

Total quantity of material bailed

Total quantity of water discharged by pumping

Disposition of discharge water

Time	Volume Removed (gal)	Water Level ft. BTOC	Turbidity	~~Clarity/Color~~ D.O	Temp. °C	pH	Conductivity	Remarks
	Bailed ≐		gallons					
Begin	pumping	@	10:50					Str. H_2S odor [illegible]
10:52	3	18.15	11.5	0.70	20.0	7.63	148 X10	clear str H_2S odor
10:56	10	18.15	53.4	0.56	20.0	7.64	152 X10	↓
11:00	18	18.15	76.1	0.53	20.0	7.64	158 X10	[illegible] ↓ becoming cloudy
11:05	31	18.13	4.1	0.46	19.9	7.63	158 X10	increase from 102 to 165 hz
11:10	40	18.15	2.8	0.41	19.9	7.62	158 X10	increase flow 165 to 180 hz
11:15	55	18.35	4.6	0.38	19.9	7.63	160 X10	
11:25	55+27	18.25	10.0	0.39	19.9	7.60	162 X10	
11:30	55+40	18.24	40.0	0.40	19.9	7.60	165 X10	becoming cloudy
11:35	55+55	18.24	157	0.63	20.0	7.59	165 X10	decrease flow @ 180 to 150 hz
11:40	110+11	18.08	5.6	0.31	19.9	7.62	165 X10	
11:50	110+26	18.06	17.2	0.35	19.9	7.59	165 X10	
	pump off							
	12:35	Finish	unloading	water				

2-1-02

REV. DATE: JAN 1989

WELL DEVELOPMENT LOG

WELL NO.: C-101	Page 1 of 1
Installation: Playa Vista 18 well Installation	Site: Culvert below Running/Ballona Creek
Project No.:	Client/Project: 10010-34410-RT-WELL
HAZWRAP Contractor:	Dev. Contractor:
Dev. Start: 2-1-02 (8:15 __m)	Dev. End: (: __m)
Csg Dia.:	Dev. Rig (Y/N)
Developed by:	

020102

TD = 30.1' TOC

Dev. Method: Surb (15 mins) + bail 2

Equipment: [illegible] surb tool stainless steel

Pre-Dev. SWL 22.1' TOC Maximum drawdown during pumping = 27 ft at 1.375 gpm

Range and Average discharge rate 1.0-1.75 gpm

Total quantity of material bailed 17 gallons

Total quantity of water discharged by pumping ~~115~~ 98 gallons

Disposition of discharge water

Started w/ 17 gallons already in

Time	Volume Removed (gal)	Water Level ft. BTOC	Turbidity	Clarity/Color DO	Temp. °C	pH	Conductivity	Remarks Cloudy/color
Bailed	24	7 = 17	gallons	- keep bail		dk gray w/		fine sand str. H2S odor
							SWL	= 22.5' - after bailing
Begin pumping		9:31						3min 20sec/5 gal = 1.5 GPM
9:35	30	= 25'	>1000	0.39	21.0	7.73	159 x10	
9:40	35	24.97	721	0.33	21.3	7.76	165 x10	Str. H2S clearing up
9:45	39	25.05	250	0.34	21.3	7.76	171 x10	pulsating clearing up
9:50	47	25.6	429	0.31	21.3	7.74	178 x10	Str. H2S Clearing up...
9:55	53	25.7	291	0.28	21.3	7.73	180 x10	pulsating Fairly clear
10:00	58	25.7	287	0.26	21.4	7.73	180 x10	strong smell
10:05	~~[illegible]~~ 63	25.7	214	0.25	21.4	7.70	182 x10	Str. H2S
10:10	67	25.8	176	0.23	21.4	7.69	185 x10	Str. H2S a little Cloudy
10:15	73	25.8	177	0.22	21.4	7.68	184 x10	Str H2S Cloudy
10:20	77	25.8	180	0.22	21.4	7.67	186 x10	Str H2S Cloudy
10:25	—	26.8	215	0.21	21.4	7.66	183 x10	increased flow slightly
10:30	42+47	—	180	0.23	21.5	7.65	190 x10	
10:35	47+48	—	146	0.22	21.4	7.64	190 x10	
10:40	(47+55)+4	—	139	0.22	21.3	7.65	190 x10	reduce flow
10:45	102+7	—	54.7	0.22	21.4	7.64	190 x10	
10:50	102+12		55.6	0.22	21.5	7.65	190 x10	
10:55	102+16		—	0.22	21.5	7.65	190 x10	
11:00	102+20		53.7	0.22	21.5	7.63	190 x10	
	pump off							

135 Hz
145 Hz
125 Hz

1-30 CZ C-49

lower Bellflower Well

REV. DATE: JAN 1983

WELL DEVELOPMENT LOG	WELL NO.: ~~[illegible]~~	Page ____ of ____
Installation:	Site: Playa Vista	
Project No.: 10010-33490	Client/Project: TSZ 15 well Installation	
HAZWRAP Contractor: ET-well	Dev. Contractor: Cascade Drilling (Newhall)	
Dev. Start: (: __m)	Dev. End: (: __m)	Csg Dia.:
Developed by:		Dev. Rig (Y/N)

Dev. Method Surge (minutes) Bail (gallons) pump

Equipment ____

Pre-Dev. SWL ____ Maximum drawdown during pumping ____ ft at ____ gpm

Range and Average discharge rate ____ gpm

Total quantity of material bailed ____

Total quantity of water discharged by pumping ____

Disposition of discharge water ____

Time	Volume Removed (gal)	Water Level ft.BTOC	Turbidity	~~Clarity/Color~~ D.O	Temp. °C	pH	Conductivity	Remarks
Bailed	10 0							
Begin pump		@ 10:53						
			≈ 14.9'					← Str. H₂S odor
10 37	13.5	—	>1000	0.65↓	19.3	7.47	135x10	v dk grey silty water
10 44	17	13.#↑	>1000	0.52	20.8	7.63	150x10	w/ dropping
10 47	17½	14.2	>1000	0.59	21.3	7.61	152x10	sl. H₂S odor
10 52	22½	—	>1000	0.42	21.4	7.61	152x10	Pump keeps going off 9.5
11 13	33	10.	681	1.00↓	21.5	7.64	150x10	(generator problem)
11 21	47	13.1	359	0.26	21.5	7.56	148x10	
11 35	53	—	234	—	21.4	7.57	143x10	
11.45	55+5	—	224	0.27	21.4	7.54	141x10	pump keeps going off [illegible]
11.50	11	—	152	0.29	21.4	7.54	141x10	sl. H₂S odor still
11 55	16½	—	234	0.57	21.4	7.53	140x10	" "
12.05	19	pump off		[illegible]			generator [illegible]	

1-4-02

C-96 Ballona Well

WELL DEVELOPMENT LOG	WELL NO.:	Page 1 of 1
Installation: Playa Vista		Site: Test Site #2
Project No.:	Client/Project: 10610 –	
HAZWRAP Contractor:		Development Contractor: BC2 (Fullerton
Dev. Start: 1-4-02 (8:20 a m)		Dev. End: 1-4-02 (: m) Casing Dia.: 2"
Developed by: BC2 Rodney & COM Rob 1-4-02		Dev. Rig (Y/N)

Development Method: Bail 2" bailer Surge 2" swab tool Bail Pump 2" Grundfos

Equipment:

Pre-Dev. SWL

Maximum drawdown during pumping N/A ft at N/A gpm

Range and Average discharge rate 2 gallons gpm

Total quantity of material bailed 60 gal

Total quantity of water discharged by pumping

~~Disposition~~ of discharge water

Disposal On site Treatment facility

D.O.

Time	Volume Removed (gal)	~~Water~~ Level ft. ~~BTOC~~	Turbidity	Clarity/ Color	Temp. °C	pH	Conductivity	Remarks
9:24	Begin Pump							2 GPM
			>1200					
9:29	10	0.76	dk grey		20.1	7.36	70X10	grey cleaning up
9:34	20	0.44		grey	20.1	7.34	70X10	sl H2S odor
9:39	30	0.47	650	grey	20.1	7.34	70X10	emptied flow cell
9:44	40	0.44	400	lt grey	20.0	7.38	72X10	clearing up
9:49	50	0.42	140	cloudy	20.1	7.38	72X10	" " sl H2S odor
9:54	60	0.42	75	" "	20.0	7.37	74X10	
9:59	70	0.41	37	sl. cloudy	20.0	7.37	75X10	
10:04	80	0.41	25		20.0	7.37	75X10	
10:09	90	0.41	13	clear	20.1	7.37	75X10	clear
10:14	100	0.40	10	↓	20.1	7.36	75X10	
10:16		Pump off						

1-02-02 (Weds)

C-93

WELL DEVELOPMENT LOG	WELL NO.:		Page 1 of 1
Installation: Playa Vista		Site: Test Site #2	
Project No.:	Client/Project: 10610-		
~~HAZWRAP Contractor:~~ NA		Development Contractor: BC2 (Fullerton)	
Dev. Start: 1-2-02 (815 a.m)		Dev. End: (: m)	Casing Dia.: 2"
Developed by: Rodney (BC2)			Dev. Rig (Y/N)

Pre-dev
TD= 68.6' TOC Screen set 60'-70' bgs

Development Method: Bail (2" stainless); Swab (2" rubber); Bail; Pump (2" Grundfos)

Equipment: Small Dev. Rig

Pre-Dev. SWL 16.82 Maximum drawdown during pumping unknown ft at NA gpm

Range and Average discharge rate ________ gpm

Total quantity of material bailed ________

Total quantity of water discharged by pumping ________

Disposal ~~Disposition~~ of discharge water On Site treatment facility

As-Built
60'-70' bgs 10 slot screen

→ dk grey water abundant silt.

8:25 Begin initial bail Removed total of 3 gallons, 8:38 Begin swabbing

8:48 Finished Bailed another 1.0 gallon Trip in pump

Time	Volume Removed (gal)	Water Level ft. BTOC	Turbidity	Clarity/ ~~Color~~ D.O.	Temp. °C	pH	Conductivity	Remarks
8:50	Begin pumping							Pump @ 1.5 gpm
9:00	6	—	>2000	dk grey	19.6	7.24	65x10	Strong H2S odor
9:05	13.5	—	>2000	0.63	19.7	7.33	65x10	" "
9:10	21	—	303	0.50	19.7	7.37	65x10	Strong H2S odor
9:15	28.5		320	0.45	19.7	7.39	65x10	" "
9:20	36		227	0.41	19.7	7.40	68x10	still has str. H2S odor
9:25	43.5		154	0.37	19.6	7.41	68x10	v. cloudy
9:30	51		128	0.54	19.6	7.40	70x10	" "
9:35	58.5		171	0.31	19.7	7.40	70x10	" "
9:40	66		157	0.30	19.7	7.40	72x10	Reduce flow @ 9:42
9:45	71		229	cloudy	19.7	7.43	75x10	Flow Rate = 1.0 / Emptied Flow Cell
9:50	76		214	0.31	19.7	7.43	83x10	still v. cloudy
9:55	81		105	0.33	19.7	7.43	87x10	clearing up but EC rising
10:00	86		161	0.30	19.7	7.43	98x10	
10:05	91		185	0.28	19.7	7.42	102x10	stays the same still str. H2S odor
10:10	96		192	0.27	19.7	7.43	107x10	
10:15	101		341	0.25	19.8	7.43	110x10	v. cloudy
10:20	106		375	0.25	19.7	7.43	112x10	v. cloudy
10:25	116		289	0.25	19.7	7.44	112x10	
			Stop Pump					
	10:35	SWL =	16.88' TOC					
			TD =	71.2' TOC	(69' bgs)			

As-Built should be 69' bgs = TD

O:forms\sprdshts\welldevelopmentlog

C-91

12/26/01

18 well installation DTW=32.25 TD=45.52 C-91 R-2

WELL DEVELOPMENT LOG	WELL NO.: C-91	Page 1 of 1	
Installation:		Site: Test Site 2 on Pacific Boulevard	
Project No.: 10610	Client/Project: Plaza Vista		
HAZWRAP Contractor: BCC		Development Contractor: ~~BCC~~ COM	
Dev. Start: (: AM)	Dev. End: (: AM)		Casing Dia.: 2 inch
Developed by: ~~BCC~~ Rodney Pool			Dev. Rig (Y)/ N)

Development Method: Bailed, swabbed, Bailed, pump

Equipment: Stainless steel 2 inch bailer, 2" swab tool, groundfos pump (2")

Pre-Dev. SWL 36.05 TOC Maximum drawdown during pumping 0 ft at 1.0 gpm

Range and Average discharge rate 1.0 gpm gpm

Total quantity of material bailed 2 gallons

Total quantity of water discharged by pumping 81 gallons

~~Disposition~~ of discharge water Treated on site at local treatment facility Disp.)

8:56

Time	Volume Removed (gal)	Water Level ft. BTOC	Turbidity	Clarity/ Color	Temp. °C	pH	Conductivity	Remarks
								D.O.
8:58	2		<1000	Grey	17.7	6.94	700	
9:00	4		"	Lt. Brown	18.6	6.92	700	1.26 mg/l
9:02	6		"	"	19.4	6.87	700	1.19
9:04	8		"	"	19.6	6.84	700	1.14
9:06	10		"	"	19.8	6.80	700	1.05
9:08	12		"	Lt. Brown	19.9	6.79	700	0.99
9:10	14		"	Lt. Brown	20.2	6.81	700	0.92
9:12	16		"	"	19.9	6.81	700	0.85
9:14	18		"	"	20.1	6.81	710	0.83
9:16	20		"	"	20.1	6.80	710	0.77
9:18	22		1011	Lt. Brown	20.1	6.81	720	0.62
9:20	24		883	"	20.2	6.91	715	0.56
9:22	26		725	"	20.2	6.81	710	0.50
9:24	28		568	Cloudy	20.1	6.81	710	0.48
9:26	30		455	"	20.2	6.81	710	0.47
9:28	32		415	"	"	"	710	0.44
9:30	34		403	"	"	"	"	0.41
9:32	36		369	"	"	"	"	"
9:37	~~9:37~~	41	270	"	20.2	6.82	720	0.34
9:42	~~9:42~~	46	214	"	"	"	740	0.30
9:47	~~9:47~~	51	135	"	20.1	"	"	0.27
9:52	~~9:52~~	56	77.0	"	20.2	6.82	760	0.24
9:57	~~9:57~~	61	52.5	Clear	"	"	780	0.31
10:07	~~9:07~~	71	21.0	"	20.2	6.82	780	0.29
10:17		81	303	Cloudy	20.3	6.82	780	0.25 → went turbid, To ½ gpm.
:27		86	15.8	Clear	20.2	6.83	800	0.35 Went H2S when last developed.
:37		91	10.13	Clear	"	"	780	0.33

Well No.: PVGWD/C-14 | Site: Playa Vista | Date: 12/6/99

Client: Playa Capital | Project No.: 10610-27122 GW4QTR

Well Casing Diameter: 2" (4") 6" Other: | Well Casing Material: (PVC) SS Other:

Well Headspace: | PID (ppm): No Reading | FID (ppm): 300 ppm

Sampler: Eric Schroeder, Mike Toll

Total Depth of Well (feet): 32.52 | Reference Point: TOC | Datum:

Depth to Water (feet): 21.46

Water Column Height (feet): 11.06 (X) (2" - 0.16, 4" - 0.65, 6" - 1.47) Gal/feet = 7.189 (X) 3 = 21.57 Minimum Purge Volume (Gallons)

PURGE METHOD:

Submersible Pump [X] Bladder Pump [ ] Hand Pump [ ] Peristaltic Pump [ ] Bailer: PVC [ ] Teflon [ ] SS [ ] Disposable [X]

Pump Make/Model: Grundfos | Purge Equipment Decon'd? Y [X] N [ ]

Depth of Pump Intake (feet): 28' | Purge/Decon Water Containerized? Y [X] N [ ] | Container Type/Volume? Tank Tank

Start Time - 09:41 PR - 2.5 Gpm - Slowed @ 947 to 1.5 gpm

Time	Gallons	Temp. (C / F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (ppm)	Eh (mV)	Observations/Comments
0943	25	22.75	3.96	3890	34.6	3.4	-170	Strong Odor H2S
0946	55							DTW 24.1
09:47	7.5	22.89	3.91	4295		8.07	-164	Slowed pump to 1.5
09:49	9.0	22.96	3.86	4234		5.53	-173	
09:51	10.5 (12.0)	22.97	3.80	4497	11.6	4.90	-170	DTW 23
09:53	12.0 (13.5)	22.98	3.75	4423	6.48	4.20	-167	DTW 23
09:55	18	22.99	3.71	4486	4.28	3.30	-165	DTW 23.4
09:57	21	22.99	3.70*	4625	4.18	3.04	-160	DTW 23.4
			* Note	Double checked				
			w/ pH	paper.	pH ≈ 4.1			

SAMPLE COLLECTION METHOD: → 1.5 gpm * Secretes

Pump: [ ] Flow rate: 2.5 gpm

Bailer: [X] Type:

Other: [ ] Desc.:

Sample ID: PV GWD/C-14

Dup. ID (if appl.):

Sample Time: 09 1035

SAMPLE ANALYSES:

Method:	Container Type/Vol.	Preservative
8260	3 VOA	

Comp Dresser & McKee 10/05/94 0:00:40 MWPURGE 3\CAD\ PROJECTS\F

CDM environmental engineers, scientists,

MONITORING WELL PURGE AND SAMPLING FORM

Well No.: C-30	Site: Playa Vista	Date: 12/2/99
Client: Playa Capital	Project No.: 10610-27122 GW4 QTR	
Well Casing Diameter: 2" (4") 6" Other:	Well Casing Material: (PVC) SS Other:	
Well Headspace:	PID (ppm): —	FID (ppm): 70
Sampler: MPall CChan		

Total Depth of Well (feet): ~~95.08~~ 102.18 Reference Point: Top Beam Datum: ____

Depth to Water (feet): (21.96)

Water Column Height (feet): ~~73.12~~ 80.22 (X) (2" - 0.16, (4" - 0.65), 6" - 1.47) Gal/feet = 52.13 (X) 3 = 156 Minimum Purg Volume (Gallons)

PURGE METHOD: ____

Submersible Pump [X] Bladder Pump [ ] Hand Pump [ ] Peristaltic Pump [ ] Bailer: PVC [ ] Teflon [ ] SS [ ] Disposable [X]

Pump Make/Model: Grundfos Purge Equipment Decon'd? Y [X] N [ ]

Depth of Pump Intake (feet): 87' Purge/Decon Water Containerized? Y [X] N [ ] Container Type/ Volume? tanks, to gw treatment sys

Flow rate: 5 gpm

Time	Gallons	Temp. (C) F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO ~~(ppm)~~ mg/L	Eh (mV)	Observations/Comments OTW
1400	0							
1401	5	22.27	7.27	3028		0.36	-327.0	
1404	20	22.47	7.27	2562	0	0.25	-334.2	32.90
1408	40	22.48	7.22	2936.0	0	0.23	-341.2	Rotten Egg Odor 34.10
1412	60	22.48	7.20	3014.0	0	0.21	-344.1	" " " 34.44
1416	80	22.49	7.20	3036.0	0	0.17	-346.4	" " " 34.65
1420	100	22.48	7.20	3036.0	3.08	0.16	-346.8	" " " 34.73
1424	120	22.55	7.19	3045.0	7.86	0.15	-348.6	" " " 34.75
1428	140	22.55	7.19	3061.0	9.33	0.13	-349.9	34.75
1432	160	22.37	7.19	3092.0	31.5	0.14	-351.4	recal. Turb. meter 34.11
1435	pump off							

SAMPLE COLLECTION METHOD:

Pump: [ ] Flow rate: 5.0 gpm
Bailer: [X] Type: disposable
Other: [ ] Desc.: ____

Sample ID: PV-GW-D/C-30
Dup. ID (if appl.): ____
Sample Time: 1440

SAMPLE ANALYSES:

Method:	Container Type/Vol.	Preservative
8260 VOCs	3-40ml VOAs	HCl
Cr+6	1-1L poly	—
Dox Metals	1-1L poly	HNO_3

CDM environmental engineers, scientists,

MONITORING WELL PURGE AND SAMPLING FORM

Well No: C-31 | Site: Playa Vista | Date: 12/2/99

Client: Playa Capital | Project No.: 10610-27122 GW4 QTR

Well Casing Diameter: 2" (4") 6" Other: | Well Casing Material: (PVC) SS Other:

Well Headspace: | PID (ppm): — | FID (ppm): 0

Sampler: M Toll C Chan

Total Depth of Well (feet): 75.10 | Reference Point: TOC | Datum:

Depth to Water (feet): (14.10)

Water Column Height (feet): 61.00 (X) (2" - 0.16, 4" - 0.65, 6" - 1.47) Gal/feet = 39.65 (X) 3 = 119 Minimum Purge Volume (Gallons)

PURGE METHOD:

Submersible Pump [X] Bladder Pump [ ] Hand Pump [ ] Peristaltic Pump [ ] Bailer: PVC [ ] Teflon [ ] SS [ ] Disposable [ ]

Pump Make/Model: Grundfos | Purge Equipment Decon'd? Y [X] N [ ]

Depth of Pump Intake (feet): 63' | Purge/Decon Water Containerized? Y [X] N [ ] | Container Type/Volume? tank, to sw tank, ssp

Flow rate: 3 gpm

Time	Gallons	Temp. (C) / F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (ppm) mg/L	Eh (mV)	Observations/Comments
1142	0							
1143	3	22.72	7.20	2918.0	0.55	2.00	-283.3	DTW 14.98
1148	18	22.90	7.16	3031	0.57	0.62	-340.3	14.91
1153	33	22.91	7.15	3060	0.57	0.59	-349.6	Smells Rotten Eggs 14.90
1158	48	22.92	7.15	3062	0.45	0.53	-354.2	" " " 14.92
1203	~~53~~ 63	22.91	7.14	3073	0.39	0.46	-356.6	" " " 14.93
1208	~~68~~ 78	22.92	7.14	3072	0.41	0.43	-357.7	" " " 14.91
1213	93	22.91	7.14	3071	0.47	0.40	-358.6	" " " 14.90
1218	108	22.92	7.14	3076	—	0.36	-359.6	" " " 14.91
1222	120	22.91	7.14	3076	0.56	0.32	-360.1	" " " 14.91
1223	Stop pump							

SAMPLE COLLECTION METHOD:

Pump: [ ] Flow rate: 3.0 gpm
Bailer: [X] Type: disposable
Other: [ ] Desc.:

Sample ID: PV-GW-D/C-31
Dupe. ID if applic.:
Sample Time: 1230

SAMPLE ANALYSES:

Method:	Container Type/Vol.	Preservative
8260	3 VOAs	HCl
8015M	2 VOAs	HCl
8015M	1-1L amb	—
Cr+6	1-1L poly	—
Dis Metals	1-1L poly	HNO3

CDM environmental engineers, scientists,

MONITORING WELL PURGE AND SAMPLING FORM

MEMORANDUM

County Sanitation Districts of
Los Angeles County

DATE: March 10, 1993

TO: Paul C. Martyn
Head, Industrial Waste Section

FROM: Brent C. Perry
Project Engineer

SUBJECT: Meeting with The Gas Company - Permits 5169 & 12982

On friday, March 5 1993 I met with a representative of The Gas Company at their downtown office to discuss their proposals to:

1) Treat their wastewater collection and treatment system with a continuous discharge of biocide.

2) Discharge routine oilfield liquid wastes (Packer, workover and drilling fluids).

Ann Heil had originally been assigned this project, but handed it over to me upon leaving for maternity leave.

Biocide Addition

The gas company proposes to start treating their gas storage wells, well laterals and water treatment system with biocide to combat a problem of sulfide corrosion. A bacterial study was done for each of their wells and for several points in their wastewater collection system and it was found that they had several "infected" wells at both facilities. Several products were tested in controlling this bacteria and The Gas Company has identified UCARCIDE 142 as most promising. The Gas company requests to discharge this product at concentrations up to 200 ppm in the beginning tapering off to an expected level of 75 ppm. UCARCIDE products are a mixture of glutaraldehyde and a surfactant. The surfactant is N-Alkyl Dimethyl Benzyl Ammonium Chloride a Quaternary amine. The surfactant increases the effectiveness of the biocide by penetrating the protective slime layer and exposing more of the bacteria to the biocide. Concentrations of these products vary with product designation, Namely:

	aldehyde	amine
UCARCIDE 142	42%	6%
UCARCIDE 114	14%	2%

These products are the same with the exception of a factor of three dilution. The Gas company asked that both products be reviewed for approval due to some question of availability.

The Gas Company obtained permission from the Districts to use 50% Glutaraldehyde solution at the Playa Del Ray Facility back in 1989 (see attached letter). At that time a limit was placed on storage quantity and mass discharge of glutaraldehyde. This limit appeared to be based on what the Gas company had proposed to the Districts.

Ludlow Declaration

to withhold CD

DECLARATION OF FREDERICK O. LUDLOW II

of STILL WORKIN ON? which disclose Failure of Pilot Ven Wells and other problem

I, Frederick O. Ludlow II declare:

1. In 2002, I was the Assistant Chief Counsel of the California State Lands Commission ("Commission"), with my office in the Commission's Sacramento headquarters. As such, I have first- hand knowledge of all matters referred to herein and if called upon to testify thereto, could and would do so truthfully.

2. In early 2002 I was asked by Paul Mount, Chief of the Commission's Mineral Resources Management Division, to review a California Public Records Act request from the Grass Roots Coalition ("Coalition"). The Coalition had requested all information in the Commission's possession regarding Playa Vista that the Commission had obtained from Exploration Technologies, Inc. ("ETI"). ETI served as a consultant to the City of Los Angeles for the development of Playa Vista.

3. Upon investigating the Coalition request I learned that in response to a request from the Commission's Minerals Management staff, the City of Los Angeles had authorized ETI to send the Commission Playa Vista information ETI had prepared for the City. This information was sent to the Commission's staff by ETI in January of 2002 on a CD-ROM disk

4. In early May 2002 I spoke by telephone with a representative of the City of Los Angeles Department of Building and Safety who, upon learning of the Coalition's request, objected to the release of the information contained on the disk. I then emailed Dr. Victor Jones, President of ETI, and asked him if in his opinion the information on the disk was the property of his company or of the City. He replied that in his opinion the information contained on the disk was the property of the City. Shortly thereafter I spoke by phone with a Deputy City Attorney whose name I cannot remember. She asked me not to release the Playa Vista information to the Coalition and then followed up with a letter explaining the reasons for the City's objections.

5. In September of 2002, the Commission, pursuant to the Coalition's Public Records Act request, sent a copy of the Playa Vista disk prepared by ETI to the Coalition.

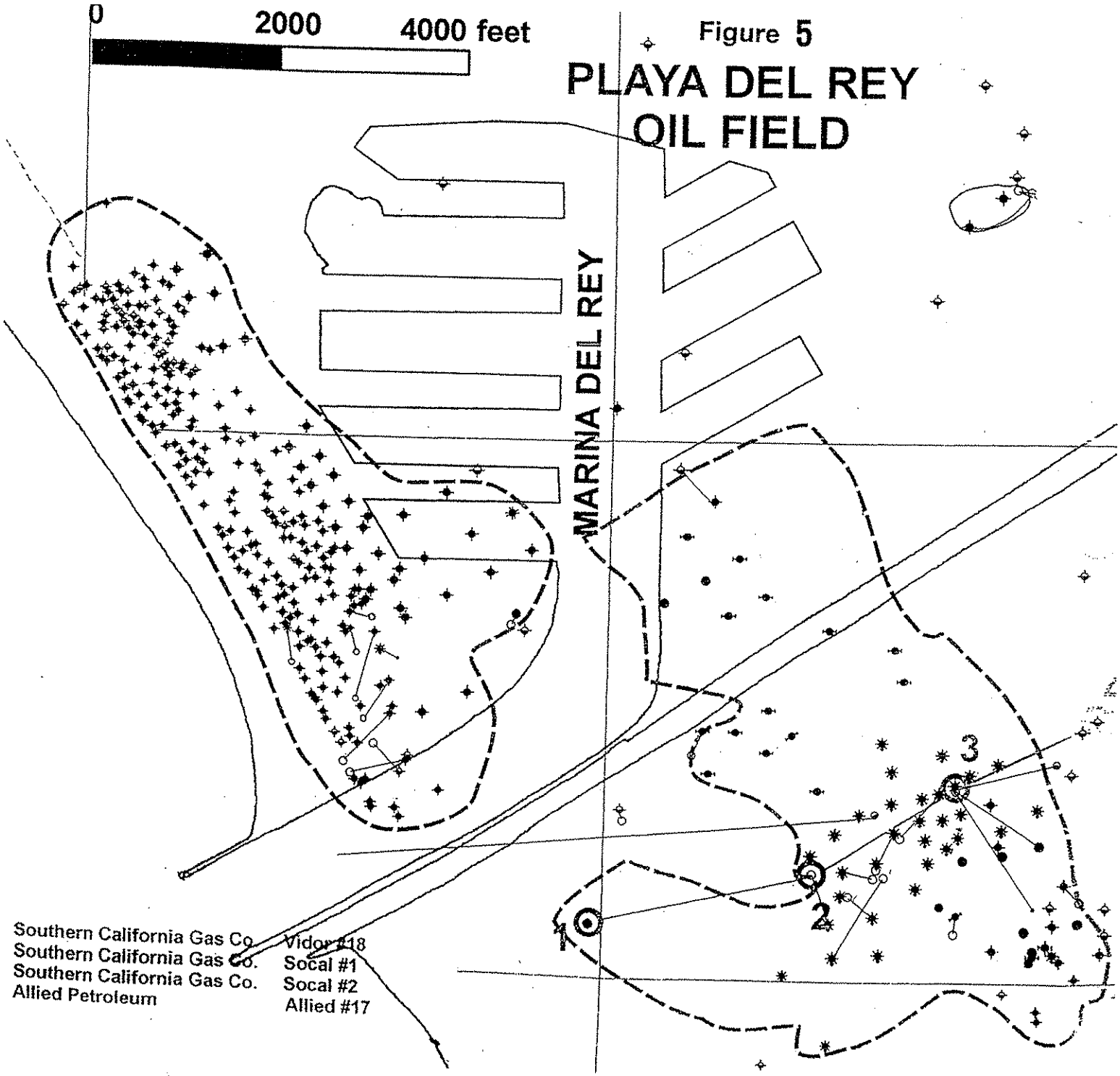
I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration was executed on November 30, 2006 at Elk Grove, California.

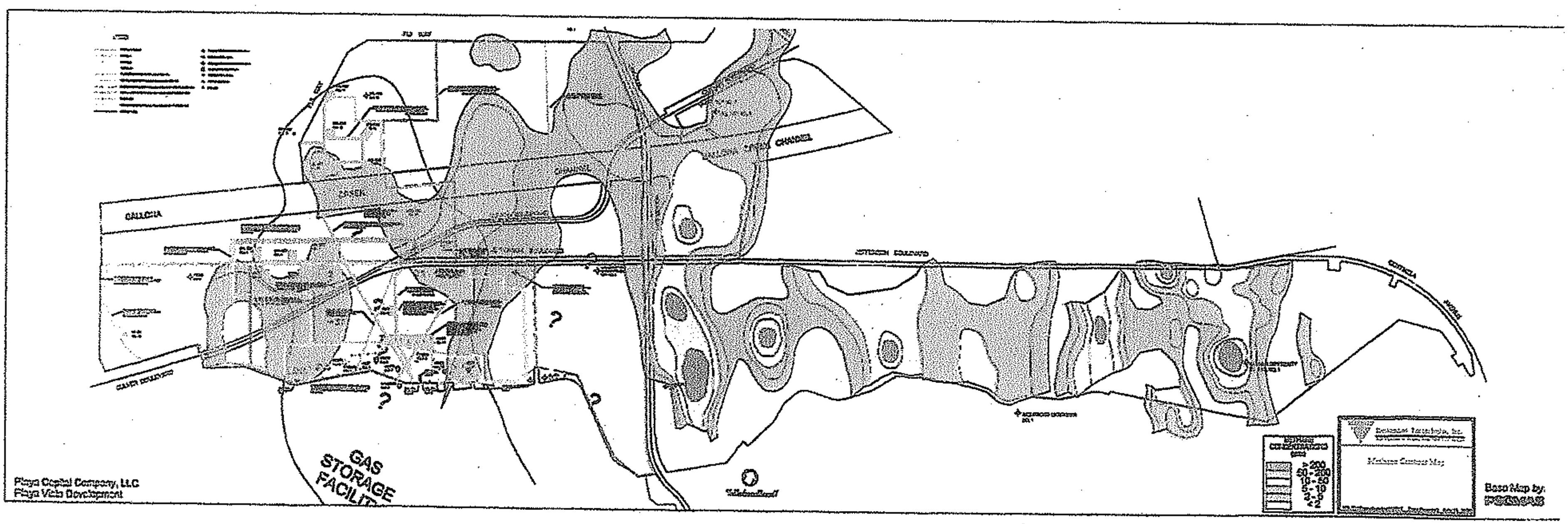
Frederick O. Ludlow

#4

Gas/
Helium

GR 12


0
2000
4000 feet
Figure 5
PLAYA DEL REY
OIL FIELD
MARINA DEL REY
3
2
1
Southern California Gas Co. Vidor #18
Southern California Gas Co. Socal #1
Southern California Gas Co. Socal #2
Allied Petroleum Allied #17


GAS
STORAGE
FACILIT
CHANNEL
Playa Capital Company, LLC
Playa Vista Development
Base Map by:

ANALYSIS REPORT

FAXED 3-29-99

Job #: 1803

Lab #: 20799
Sample Name/Number: DW-2
Company: Sepich Associates Inc.
Date Sampled: 3/25/1999
Container: Tedlar Bag
Field/Site Name: Playa Vista, Area-D
Location:
Formation/Depth:
Sampling Point: 65'-73'
Date Received: 3/27/1999

Fountain Park Gas.

Date Reported: 3/29/1999

Component	Chemical mol. %	Delta C-13 per mil	Delta D per mil	C-14 conc. pMC	Tritium TU
Carbon Monoxide	nd				
Helium	0.0022				
Hydrogen	0.0023				
Argon	0.81				
Oxygen	14.98				
Nitrogen	62.18				
Carbon Dioxide	0.23				
Methane	21.77	-63.95	-202.3		
Ethane	0.021				
Ethylene	nd				
Propane	nd				
Iso-butane	nd				
N-butane	nd				
Iso-pentane	nd				
N-pentane	nd				
Hexanes +	nd				

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 221
Specific gravity, calculated: 0.902

Sepich is the Methane Co. for Playa Vista. (Civil Engineer not oil field expertise)

Helium – a difficult source marker to find GAS WAS found at Sepich's deep probe. – Same helium # as oil well Del Rey 13

nd = not detected. na = not analyzed. Isotopic composition of carbon is relative to VPDB. Isotopic composition of hydrogen is relative to VSMOW. Calcualitions for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100 percent. Mol. % is approximately equal to vol. %

ISOTECH Laboratories, Inc. 1308 Parkland Ct. Champaign, IL 61821 217/398-3490

Zymax FORENSICS

Table 1

SoCal Gas Company Wells - Gas Compositions[1], Including Stable Isotope Ratios

COMPONENT	INJECTION WELLS				OBSERVATION WELLS					
	Mezar	*Vidor 13*	*SoCal5*	*SCP 1*	*Del Rey 16*	*Del Rey 17*	*Harper 1*	*Vidor 1*	*Vidor 2*	*Vidor 14*
Carbon Monoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hydrogen Sulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	0.011	0.012	0.011	0.012	0.0022	0.012	0.0094	0.0082	0.0013	0.034
Hydrogen Sulfide	0.0015	ND	ND	ND	0.071	ND	ND	0.0081	0.0020	0.0085
Argon	0.0037	0.0053	0.0028	0.0066	ND	ND	0.011	ND	ND	0.0049
Oxygen	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen	0.55	0.69	0.50	0.65	28.13	0.43	1.17	0.40	0.17	1.26
Carbon Dioxide	1.17	1.15	1.31	1.25	ND	3.70	7.57	12.75	15.03	0.58
Methane	96.35	95.39	96.03	95.62	57.53	89.21	81.86	78.14	75.40	91.62
Ethane	1.58	2.10	1.61	1.87	6.35	4.17	4.83	4.04	4.50	4.74
Ethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propane	0.23	0.43	0.31	0.34	4.28	1.67	2.54	2.39	2.63	1.12
Isobutane	0.031	0.055	0.042	0.047	0.65	0.16	0.35	0.38	0.35	0.10
N-butane	0.034	0.075	0.058	0.067	1.57	0.31	0.76	0.90	0.82	0.17
Isopentane	0.010	0.020	0.016	0.020	0.49	0.058	0.24	0.31	0.33	0.053
N-pentane	0.0065	0.016	0.014	0.019	0.44	0.050	0.21	0.27	0.31	0.059
Hexanes +	0.026	0.057	0.037	0.095	0.49	0.08	0.45	0.40	0.46	0.25
$\delta^{13}C$ (‰) of Carbon Dioxide	13.26	11.17	12.70	11.26		-2.31	-3.47	-11.32	-10.69	-2.99
$\delta^{13}C$ (‰) of Methane	-42.15	-42.31	-42.09	-42.12	-41.97	-41.25	-44.88	-41.90	-40.51	-42.37
$\delta^{13}C$ (‰) of Ethane	-27.85	-26.43	-28.20	-28.57	-29.40	-29.71	-30.80	-29.99	-29.42	-32.66
δD (‰) of Methane	-204.7	-202.2	-202.5	-202.4	-190.9	-184.0	-197.1	-186.3	-183.7	-174.2

ND: not detected

1. All compositional data are shown as relative percentages, or mol%.

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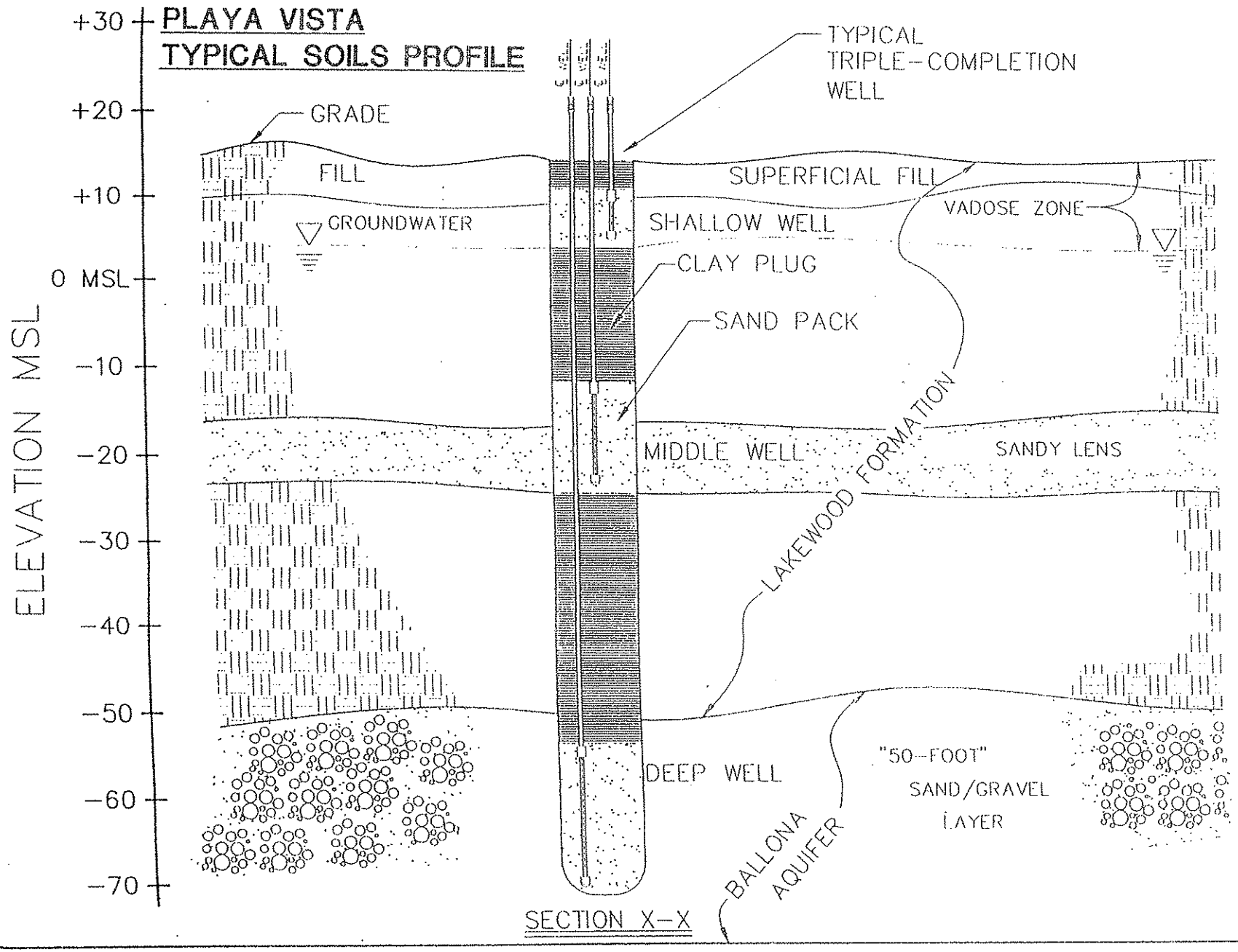
METHANE SPECIALISTS

PLAYA VISTA
TYPICAL SOILS PROFILE



SECTION X--X

Helium hits

ZymaX FORENSICS

Report to
City of Los Angeles
Department of Building and Safety
201 North Figueroa Street
Los Angeles, CA 90012-2827

on

Playa Vista Development
Playa Vista, California

Comparison of Gas Analyses from Southern California Gas Company Injection and Observation Wells with Soil Gas and Groundwater Gas from 50ft Gravel Aquifer

by

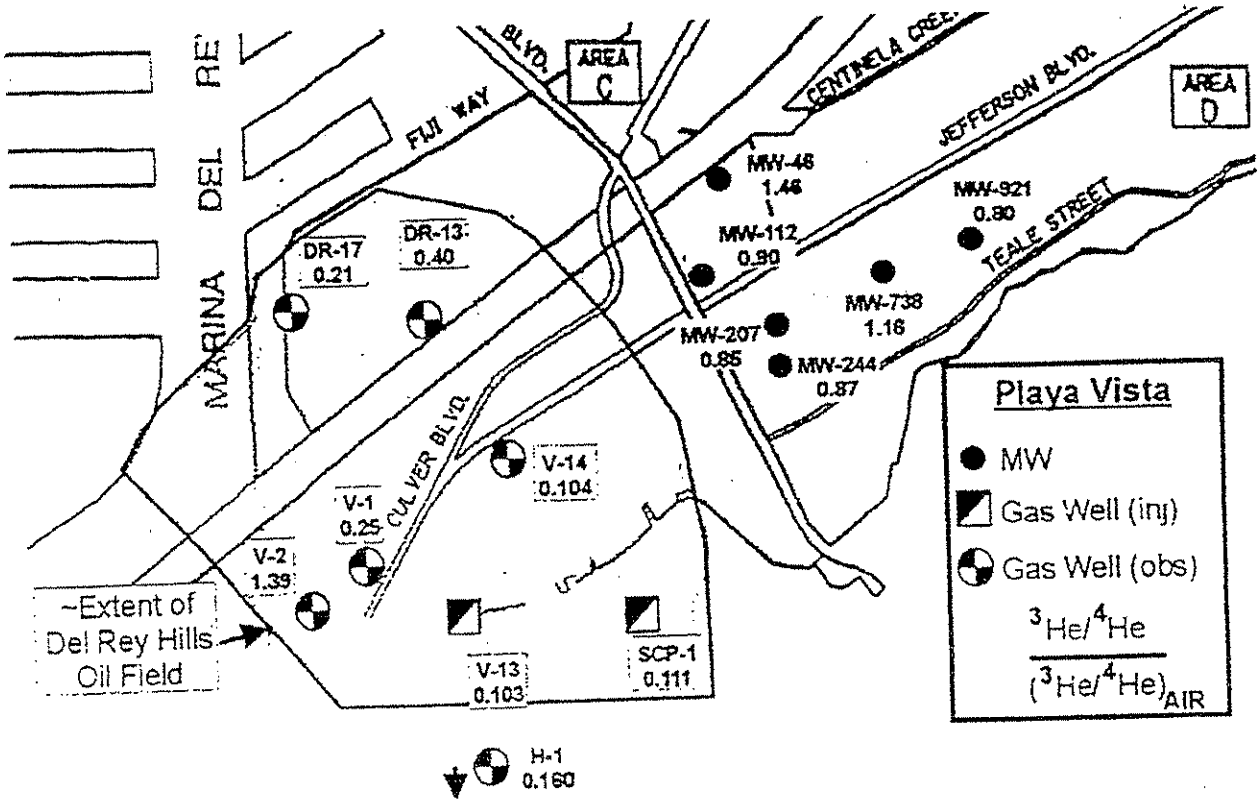
Isaac R. Kaplan
ZymaX forensics, Inc.
16921 Parthenia Street, Suite 201
North Hills, CA 91343

Robert Poreda
Department of Earth and Environmental Sciences
University of Rochester
Rochester, NY 14627

January 29, 2001

Figure 7

A site map of the Playa Vista site showing the locations and helium isotope ratios of the injection (half-filled squares) and observation gas (half-filled circles) wells, and monitoring wells (solid circles).



50' failures

~~Deep well~~ Deep well

PLAYA VISTA

12555 W. JEFFERSON BLVD.
SUITE 300
LOS ANGELES, CALIFORNIA 90066

TEL: 310.822.0074
FAX: 310.821.9429

DATE: MARCH 22, 2001

TO: JOHN SEPICH

COMPANY: SEPICH & ASSOCIATES, INC.

FAX NUMBER: (805) 552-0001

FROM: CHUCK COLTON 310 448 4613

RE: DEEP WELL DESIGN – SUCH AS IT IS

NUMBER OF PAGES INCLUDING COVER SHEET: 7

FACSIMILE

I am attaching for you use:

1. A white paper prepared by CDM and agreed to by the various experts that provides the current consensus with respect to the vent well installation method.

2. "Deep Well Detail" provided by Carlin Environmental Consulting, Inc.

For now these two items are the basis for the deep well portion of the North Crescent Park Apartment plans. Please do not prepare this portion of the plan set yet as we still are working on additional details. You should be prepared to finalize the plans and specifications quickly once I give you the go ahead.

Installation of Vent Wells

Introduction

This document summarizes the design recommendations discussed at a meeting between the City and Playa Vista, and their respective consultants on February 27, 2001. Subsequent discussions were held on February 28, 2001 with Michelle Zyche and Gary Robbins to refine the recommendation.

Permanent gas venting wells will be evaluated as a means for engineered control of gas venting to supplement design measures for methane control in buildings. These vent wells are intended to be active for the life of the project and designed for minimal maintenance. These wells are also intended to effectively drain the maximum potential area of gas pockets. Investigation of each location will be necessary using CPT techniques to verify gas is producible at the location.

Design Related Issues

The design considerations for the permanent wells include the following issues.

Wells should be located in high production potential zones

Wells need to be installed with the minimum practical damage to the gas production zone

Well facilities need to be able to maintain pressure throughout the construction process and during operations to optimize gas production and minimize water invasion of the gas zone near the well

The wells should be designed to minimize need for maintenance and consider the need for periodic re-development

Well locations need to fit with development plans, with aesthetically acceptable above ground facilities

Wells need to be designed to minimize fines production that can lead to filling of the well

The well should be designed an operated to minimize potential for development of water blockage in the gas production zone

Well diameter should be sufficient to minimize potential for continuous gas-lift production of water during operation

Well design should include provisions for initiating gas flow

Site Drilling Experience

A series of 8 VW series wells was installed commencing in late December 2000. A number of different techniques were utilized for installation of these wells. Initially, well VW-1 was advanced to near the gravel aquifer using the CPT. This drive point produced gas at rates greater than 8 liters/minute for three days in an attempt to decrease gas volumes near the well. The rate remained constant during this venting period. Schedule constraints required well completion, so an attempt was made to install permanent casing using hollow-stem techniques. The hollow-stem auger was advanced into the sand and gravel aquifer, and additional venting was initiated through the hollow-stem using a packer assembly. This venting was continued for a day, with no decrease in the rate of about 60 liters/min. An attempt was made to install casing through the hollow-stem while the boring was still venting gas. During installation of the casing and gravel pack, the formation sands liquified due to gas release, resulting in movement into the annulus between the casing and screen assembly, locking the two strings. A replacement well was successfully installed by drilling with an organic polymer rotary system. A

M. J. Smith
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temporary 10 foot surface casing was set and the boring advanced into the gravel about 8 feet. A 4-inch PVC completion string was installed and gravel packed above the screen. Bentonite was placed above the gravel pack and the remainder of the annulus grouted to land surface. The temporary surface casing was removed. Seven other vent wells were installed using this technique. These wells have been relatively successful in production of gas, especially VW-1, VW-2, VW-3 and VW-4. Little silting of the well screens has taken place, with a maximum of about 0.5 feet of fines accumulating in well VW-___. Several of the wells exhibit low pressures, suggesting that leakage may be taking place through the annulus or into the formation.

Design Alternatives Considered

Multiple options for well construction and completion were considered during discussions. Consensus was reached regarding the use of a pressure cemented conductor casing through the upper portion of the hole to provide a positive seal. Several alternatives were discussed for drilling the production portion of the well below the conductor casing. The drilling methods considered included hollow-stem augers and rotary drilling methods. A sub-alternative included driving of a screen into the upper portion of the aquifer/gas zone from the boring that would be advanced below the conductor casing. The drive point would be considered a temporary measure for degassing the pocket. After this degassing, standard hollow-stem techniques could be used to complete the well with the production string. In this concept, when gas production decreased to low levels, which would take an unknown time period, the boring would be advanced, if possible, with hollow-stem auger techniques. This has the risk of running into heaving problems if gas remains, as was encountered at VW-1 when this was attempted. This also has the disadvantage of allowing major water invasion of the gas zone near the well that would affect future productivity when the gas pocket recharges. An alternative considered was the use of rotary drilling with the organic polymer fluid to complete the drilling in the lower section.

Well screen designs were also discussed. The design alternatives include standard water well screen with a gravel pack, pre-packed screens, and porous polypropylene. The porous polypropylene design was eliminated due to difficulties in mechanical development. The standard screen relies on effective placement of the properly graded filter pack of adequate thickness around the screen. If the formation is unstable and collapsing during installation, finer formation materials can end up in contact with the screen, leading to entry of fines into the well. A pre-pack screen avoids this problem by including a layer of properly graded sand surrounding the entire inner screen.

The materials and size of the production screen were also discussed. A diameter of 4 inches was selected to allow easier access for maintenance and to minimize water production potential by keeping up-hole gas velocity low. The preferred material for completion is steel, due to the long lifetime required for the facilities. The type of steel necessary need to consider the corrosive potential of the water. PVC may be used in the short term due to availability. One of the concerns is the integrity of the joints in maintaining pressure. This is more difficult in environmental PVC casing, though with the low pressure, this is a minor issue.

After considering the experience with VW-1, we recommend that the degassing of the pocket with a temporary completion string not be done, but rather the permanent string be installed below the conductor casing using rotary drilling with organic polymer fluid.

Recommended Design

The design recommendation for the long term venting wells is summarized in this section. Drilling methods will use fluid rotary methods to advance the boring. The well will be installed in two stages, the first being the conductor casing and the second stage the production string. The specifics of the recommended design are described in following sections.

The initial stage of construction will involve exploration of the selected location using a CPT to verify gas presence, ability to produce and site specific stratigraphy. More than one location may be required to verify a suitable location. These CPT boring will be maintained as temporary monitoring locations for the long term vent well testing. A boring for installation of conductor casing will be advanced using fluid rotary techniques to a depth of about 5 feet above the gravel contact. Either a bentonite or organic polymer based fluid may be used for this stage of construction. A nominal 8-inch casing will be installed to the total depth to serve as a conductor casing. This casing shall be of sufficient strength to allow cementing of the annulus with a portland cement with 5 percent added bentonite and a sand mix, including consideration of elevated temperatures during setting of the amended cement grout. The 8-inch casing shall have a 1 foot thick neat cement grout plug on the bottom end to avoid filling of the casing with cement during placement of the annular seal. Centralizers shall be installed within 5 feet of the bottom of the casing, and at the center point of the conductor casing. Casing joints shall be joined with a gas-tight connection suitable for a methane containing environment. Conductor casing shall be place in the borehole while filled with the drilling fluid, thinned sufficiently for cementing. A cement grout consisting of portland cement, 5 percent bentonite and sand shall be placed by pumping through a tremmie pipe that extends to 5 feet above the base of the casing. The tremmie shall remain at this height until the grout returns to the surface. The tremmie may then be removed from the annulus, maintaining the pipe full of cement. The conductor casing shall remain stabilized and centered in the borehole for the setting period. No disturbance of the casing shall be permitted for 24 hours after completion of the cementing. After a 24 hour setting period, a pressure acceptance test shall be run by pressuring the casing to 20 psi and monitoring the pressure to verify integrity. Figure 1 shows this stage of construction.

After acceptance of the conductor casing, the production boring shall be advanced through the conductor casing to a depth of 8 feet into the gravel using fluid rotary drilling with a organic polymer fluid. The boring shall be filled with the drilling fluid at all times during drilling and completion to maintain positive hydrostatic pressure to avoid gas blowout. Care shall be taken during placement or removal of drilling tools or completion materials to avoid initiation of gas flow. After drilling to the target depth, the production casing and screen shall be assembled and placed to the target depth, maintaining the string in tension by supporting from the surface at all times until final completion. The screen shall be a pre-pack wire wrap screen assembly constructed of metal that is compatible with the aquifer water. The screen slots shall consist of 0.010 inch slot openings. A plate shall be present at the bottom of the screen assembly. The production casing shall consist of steel compatible with the screen materials and formation water. All joints shall consist of gas tight threaded couplings, with appropriate thread lubricant

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March 29, 2001

Maguire & Partners
355 South Grand Avenue, Suite 4500
Los Angeles California 90071
Attn: Tim Walker, tel (213) 613-4596, fax (213) 687-0202

Maguire & Partners
9 Village Circle, Suite #500
Wearlake, Texas 76262
Attn: Rex Whitton, tel (817) 430-0303, fax (817) 430-8750

Waters Edge at Playa Vista

SOIL GAS INVESTIGATION FOR 5457 AND 5571 S. BRISA ST.

The City has asked Maguire Partners to report on soil gas at the subject site. Included herein are summaries of previous soil gas investigations, and presentation of new data. The data enables a safe methane mitigation design for the project, particularly with respect to location of long-term methane vent wells, and design of future contingency blowers to reduce methane levels in the building subslab vent system. Considerable work was previously done by ETI and CDM; and additional work has been performed by Methane Specialists. Sampling and testing utilizes the protocols, methodology and procedures defined by ETI insofar as they are known.

1. project. The Waters Edge site is shown on the enclosed sketch (see EXHIBIT 1). The entire project is split between Phase 1 (the westerly half) and Phase 2 (the easterly half). This report has been prepared for the Phase 1 portion of the site, which shall be known as the "subject project." The upper soils are recent alluvium including silty-sandy-clayey deposits to approximately 50 feet below existing grade; below that lies a granular layer referred to as the "fifty-foot gravel aquifer" because of its presence below much of the Playa Vista site at an elevation of approximately minus 50 feet MSL (mean sea level).

Various studies by Camp Dresser & McKee and ETI have identified methane soil gas on the larger Playa Vista site.

Figure 1 - Initial Conductor casing

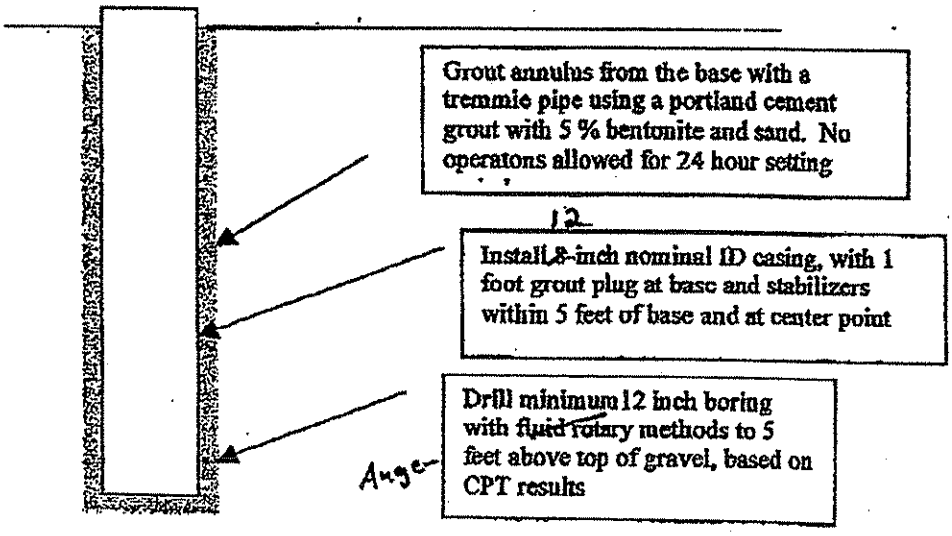
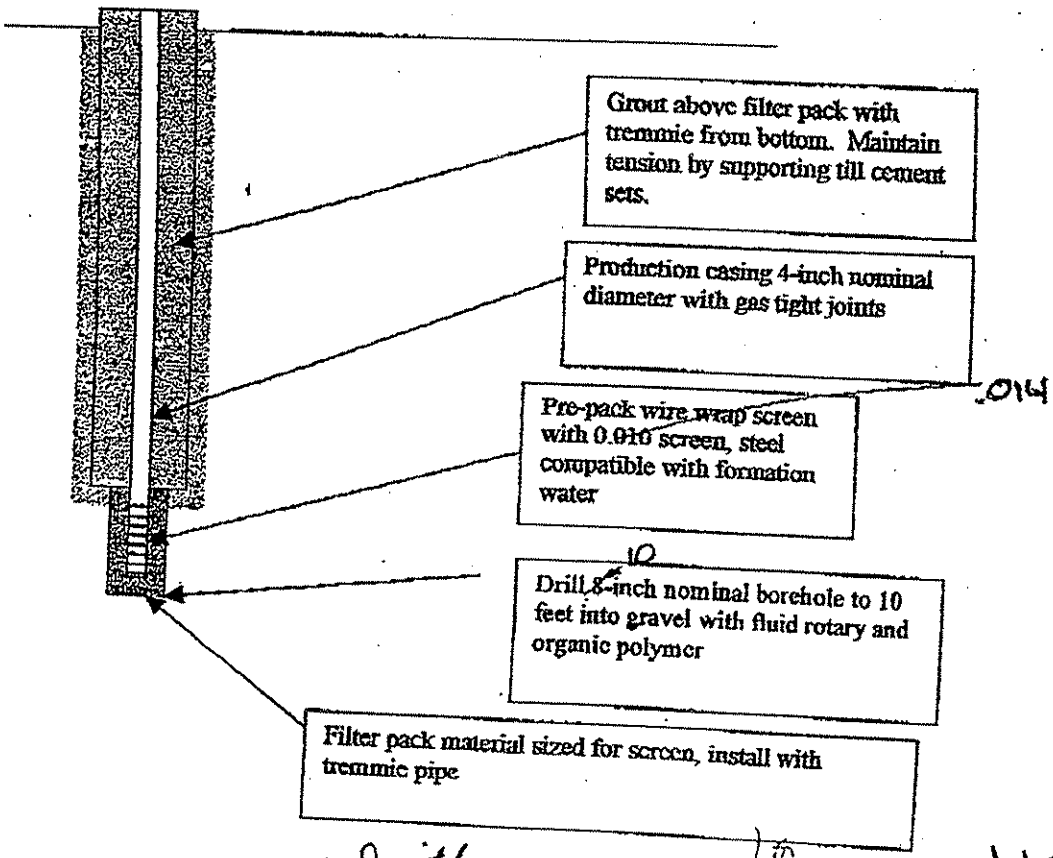


Figure 2 – Production Casing and Screen Installation



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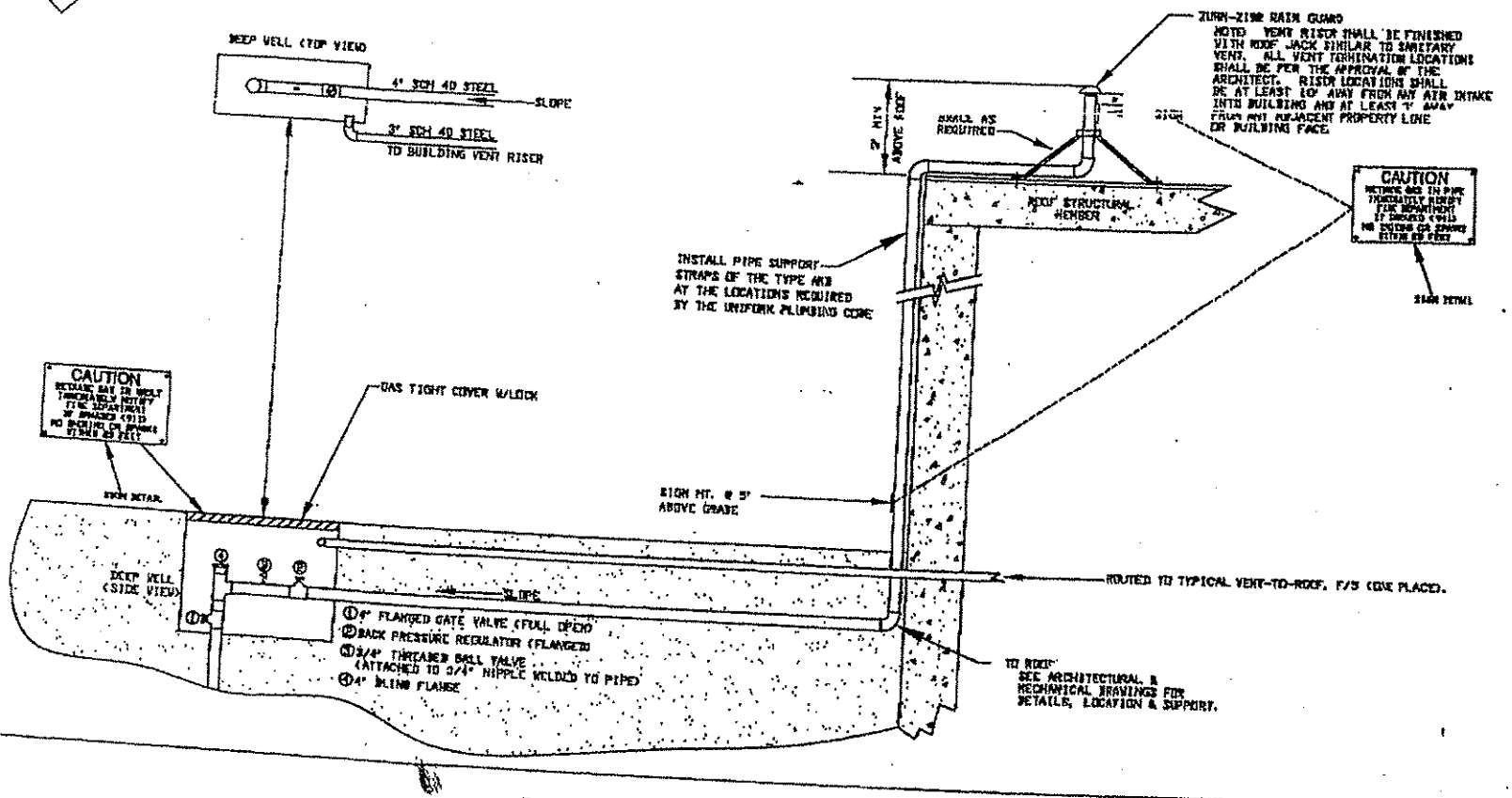
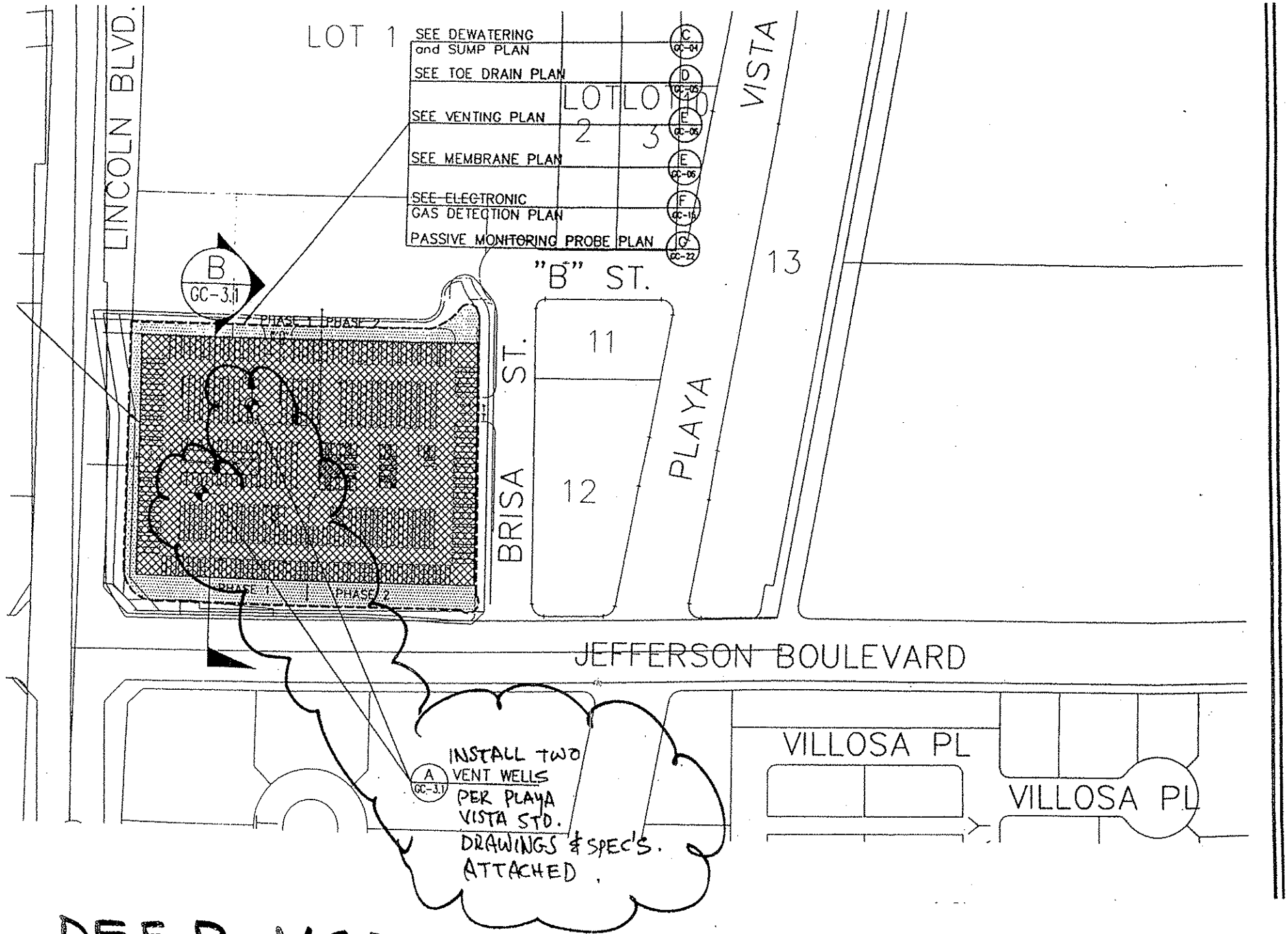
W.R. MEADOWS



DEEP WELL DETAIL



DEEP VENT WELL DESIGN

EXHIBIT 11

recommended vent well designs

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LAW OFFICE OF SABRINA VENSKUS
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EMAIL:VENSKUS@LAWSV.COM

June 10, 2005

Court of Appeal, State of California
Second Appellate District
Third Division
300 South Spring Street
Los Angeles, CA 90013

ATTN: Joseph A. Lane, Clerk
Masumi Gavinski, Deputy Clerk

RE: ***Environmentalism Through Inspiration and Non-Violent Action v. City of Los Angeles (Playa Capital Company, LLC)***
2d Civ. No. B174856
(Super.Ct. No. BS073182)

Dear Honorable Justices,

Please find the following responsive supplemental letter brief as requested by this Court in its letter dated May 26, 2005 in the above referenced case.

1) Do the methane mitigation measures approved by the city require long-term dewatering at both the subslab level (below the basement of each building) for level 1 mitigation and the level of the so-called 50-foot aquifer for level III mitigation (where level III mitigation is required)?

Yes. The methane mitigation measures approved by the city require long-term dewatering at both the subslab level and the 50-foot aquifer level. The record contains evidence in this regard.

With regard to the need to dewater the gas intake pipes at the subslab level, the following evidence is contained in the record: (AR 30:7814, [1/18/01 Sepich letter "...the building shall have a permanent subslab groundwater dewatering system...]; 31:7916, ["permanent subslab groundwater dewatering system and well venting of fifty-foot

aquifer"]; 31:7919, [same]; AR 32:8334, ["The building shall have a permanent subslab groundwater dewatering system..."].)

With regard to the need to dewater the 50 foot vent wells, a letter from Ray Chan of the City Department of Building and Safety to Gerry Miller, Assistant CLA, dated June 15, 2000, stated in part, "The summary clearly outlines the necessary assessments for the purpose of addressing some major concerns regarding the Playa Vista Project, as reiterated below: Structural Safety Assessments... Pump-and-Treat mitigation system for the 50-foot gravel aquifer." (29:7556; see also 29:7474) Pumping refers to pumping of groundwater.

The methane mitigation measures referenced above must be dewatered or they will not work. (See discussion at 2(a) below). Because the groundwater is close to the surface, dewatering is a central and permanent part of these methane mitigation measures. The record contains evidence that the site has a very high groundwater table. (AR 1:43 [ETI diagram showing high water table of Ballona Creek, Ballona aquifer, and Silverado aquifer]; AR 29:7659 [7/25/00 report prepared for Playa Vista stating, "The surface of the site is nearly level and only a few feet above sea-level"]; AR 27:7218 [12/10/98 Archeology Report stating: "Within 30 minutes of excavation, all but the top 3 feet of the trench had filled with water... the excavations had to be abandoned about 1 m below the surface due to water infiltration."]; EIR 13:8164; 8:4164-5 [confirming that shallow water levels exist throughout the Project area].)

2) Please describe in greater detail the purpose of dewatering and the design and operation of the dewatering systems. Does the administrative record contain sufficient information in this regard?

Dewatering, removing water from the gravel blanket beneath new buildings is essential in order for the gas collection system to function properly. The gravel blanket is a critical

component of the proposed methane mitigation system. This highly porous and permeable layer allows upwardly migrating gas (methane, H_2S, and other associated gases) to easily move laterally toward and into perforated horizontal collection pipes buried within the gravel blanket. Once gases enter the perforated collection pipes, they are vented away from buildings.

Conversely, if the gravel blanket and the residing intake pipes were to be invaded by water, the pipes will clog with water, silt, debris, mineral deposits and bacterial growth, rendering the system ineffectual. If shallow groundwater collects in the gravel blanket, it blocks pore spaces and permeable pathways, thus inhibiting lateral gas movement. The upwardly mobile gases accumulate under pressure below the foundation, increasing in concentration, creating the potential for an explosion hazard. Any toxics carried with the methane seeping into a building can also cause health problems. The same common sense principles govern the 50 foot vertical gas intake pipes (vent wells).

An inoperable gas collection system represents a hazard to buildings and occupants.

The administrative record contains some information with regard to the purpose of dewatering. For example, John Sepich, Playa's expert, explained that dewatering is important to ensure the effective operation of the methane mitigation systems, "permanent groundwater dewatering measures are also critical to insuring the proper operation of the methane mitigation systems." (27:7257). "The Playa Vista underground area is supposed to remain free of water in order to keep the gas intake pipes from clogging." (15:4178 [Petitioners Grassroots Coalition, Spirit, ETINA written comments to City Council entitled, "Response to CLA Report, June 5, 2001 Prepared for the LA City Council Committees Reviewing the CLA Report RE: Playa Vista."].).

With regard to the subslab dewatering, Sepich explained, "Vent systems under basements can effectively vent soil gas from a substantial radius around the structure, particularly where a basement permanent dewatering system is in place" (27:7261), and permanent groundwater dewatering measures are designed to keep the subslab methane vent piping clear."(28:7330).

According to ETI and the City, however, vent systems under basements is not enough to ensure that the methane will be mitigated to a level that reduces health, safety and environmental hazards. Venting gas from the 50 foot aquifer is also required or the site is too dangerous to build. (AR 30:7835; 30;7837).

The administrative record does not appear to contain sufficient information on the design of the 50 foot vent wells. For example, a report dated 6/5/00 from LADBS to the City Council Budget & Finance Committee states, "one of the issues that LADBS identified that must be addressed is 'What are the specifications and design requirements for the "Pump and Treat Program" to mitigate and monitor methane gas at Playa Vista?'" and "Additional water well sampling/testing, pump testing and analysis (as recommended by the ETI report) are needed to provide data to create design specifications and requirements… Report shall include actual design specifications and detailed plans." (17:4531)

As another example, an April 25, 2001 letter from LADBS to Playa stated, "The reports are ambiguous with regard to the recommendations for permanent vent wells. Provide clear recommendations regarding the wells and provide recommendations for the design of the wells, as necessary." (32:8372). There does not appear to be any other information in the record regard to actual design specifications.

But the 50 foot vent wells, which are required "if development of the area [can proceed]," must be functional. (AR 25:6734; 29:7536 [ETI to LADBS stating, "If the pump and treat or equivalent methane mitigation system is not effective or if Playa Capital does not install an appropriate mitigation system in the 50-foot gravel, ETI believes that the development of the area should not proceed."].)

There is no evidence in the administrative record that the vent wells are functioning.[1] Mitigation measures must be feasible if the City is to rely on them for a finding that a project will have no significant impact. CEQA § 21081 prohibits an agency from approving or carrying out a project where there is the potential for a significant impact unless "changes or alterations have been required in, or incorporated into, the project which mitigates or avoids the significant effects on the environment." (See *also* Guidelines § 15091.)

In this case, the City's implied finding that implementation of the new methane mitigation measures would reduce potentially significant impacts to less-than-significant levels is not supported by substantial evidence because the record does not contain an evaluation of the feasibility of the methane mitigation measures proposed. Most significantly, there is no evidence that effective operation of the 50 foot vent wells is feasible.

Where a mitigation measure serves as "an independent basis for finding no significant impact, the failure to evaluate whether the [mitigation measure] was feasible... was fatal to a meaningful evaluation by the city council and the public [of the EIR]." (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 728.)).

[1] Data that supports the infeasibility of the 50 foot vent wells is in the Joint Appendix at 10:2698, para. 3 (temporary vent wells failed due to clogging), but the trial court did not allow Petitioners to augment the administrative record with this document because it is dated after the June 12, 2001 decision. However, the information contained in the letter is from the time frame of this record.

This failure poses a grave problem for two reasons:

(1) the City documents the fact that building is dependent upon the effective operation of the 50 foot vent wells. (25:6734; 30:7837, [LADBS concurring]; 29:7536).

(2) the City's determination that no significant impact would result from the project was based on mitigation measures being feasible.

But evidence is non-existent that the most important mitigation measure is feasible. The City admitted that it didn't know that the 50 foot vent well system was feasible when they set forth in writing that the system was still in a "progressive research and design stage" at the time of approval on June 12, 2001. (AR 4:1075; 5:1201, [letter stating, "mitigation is new territory" contained in CLA Report as Appendix D]) Thus, the City failed to proceed in a manner required by law and therefore abused its discretion. (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 25-26).

Many times Petitioner Grassroots Coalition raised concerns about the high water table and the resulting question of the mitigation measures' feasibility, only to be ignored. For example, Grassroots Coalition queried, "There is also no drainage system under the Visitor Center. How does the City ensure that the high water table of the Playa Vista site, which is at ground level or above during the rainy season, will not invade and render the gas intake pipes useless under the Visitor Center? Moisture can also render gas detection devices useless, how does the City ensure that the gas detection system will detect the failures of the units and or detect the failure of gas intake pipes to function due to clogging?" (15:4179 [letter to PLUM Committee for June 5, 2001 hearing on CLA Report]). It also asked, "Why has the City withheld information on the testing of the experimental aquifer

vent wells? When 50% of the vent wells have clogged with silt, rendering them useless; why does the CLA Report state otherwise?" (15:4179)

(b) A diagram at page 7279 of the administrative record appears to depict a venting pipe and a dewatering pipe both horizontal in the soil. Is this interpretation correct?

Yes, Petitioners agree that this interpretation is correct. The dewatering pipe is located below the venting pipe.

3) If the administrative record contains insufficient information concerning the purpose of dewatering and the design and operation of the dewatering systems

(a) Is there substantial evidence in the administrative record to support a determination by the city that no significant environmental effects will result from dewatering?

No. As explained in Petitioners' Opening Brief at pages 28-29 and Petitioners' Reply Brief at pages 12-13 and 17-18, substantial evidence to support a determination by the city that no significant environmental effects will result from dewatering is wholly lacking.

The failure of the City to consider and analyze such potential significant impacts is especially unforgivable given that the City did consider such impacts resulting from temporary, construction-related dewatering with regard to the installation of Project's sewer line in the 1993/95 EIR. Clearly, the City was aware of the potential implications of dewatering and the need to consider and analyze such impacts, but avoided the issues when it approved the new methane mitigation measures on June 12, 2001.

For those issues where the substantial evidence test applies, an agency must do more than rely upon favorable text plucked from the administrative record. The evidence alleged to support the agency's findings must have "solid value" in light of the entire record, including contrary evidence. (*Bank of America v. State Water Resources Board* (1974) 42 Cal.App.3d 198, 213- 14; Guidelines § 15384 (a).) CEQA states:

> Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly inaccurate or erroneous . . . is not substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.

(Pub. Resources Code § 21082.2, sub. (c); Guidelines § 15384.)

With regard to the question of subsidence resulting from the new mitigation measures' permanent dewatering, the City apparently asked the question, but their answer is not supported by any evidence, and certainly not substantial evidence. (AR 986, [Question No. 3 in CLA Report – "...will future mitigation measures cause subsidence issues which may undermine the structural integrity of the future development?"]; Id., [conclusory answer with no supporting evidence, "There is no evidence that proposed methane mitigation measures would result in increased potential for subsidence in the area."].) As the Second District Court of Appeal has stated,

> A fundamental purpose of an EIR is to provide decision makers with information they can use in deciding *whether* to approve a proposed project, not to inform them of the environmental effects of projects that they have already approved. If post-approval environmental review were allowed, EIR's would likely become nothing more than *post hoc* rationalizations to support the action already taken. We have expressly condemned this use of EIRs.

(*Natural Resources Defense Council v. Los Angeles* (2002) 103 Cal.App.4th 268, 284-85.)

(b) Have Petitioners substantiated their claim that dewatering may have a significant environmental impact?

Yes. Petitioners have substantiated their claim that dewatering may have a significant environmental impact by relying upon evidence in the administrative record. In Petitioners Opening Brief at pages 27-28 and Petitioners Reply Brief at pages 15-17, Petitioners explain with relevant case law authority and citations to the record that

substantial evidence supports a conclusion that dewatering may have a significant environmental impact.

Additionally, a June 12, 2000 study done for Playa Vista called "Subsidence Evaluation Review" states that "sinking is due to either lowering of groundwater or to the extraction of oil, water, gas.." "This suggests that subsidence may have been the result of sediment compaction due to ground water withdrawal." (29:7597). Ground water withdrawal is achieved by dewatering the ground.

Even the City's own CLA Report substantiated the claim that dewatering may have a significant environmental impact. (4:1080 ["...Removal of fluids from underground reservoirs or aquifers can create voids that may result in eventual ground surface subsidence...Ground subsidence can result in differential settlement and cause damage to engineered structures."].)

As Petitioners pointed out in their Opening and Reply briefs, the 1993 EIR expressly cautioned against conducting any long-term dewatering at the project site (and in fact, no long-term dewatering was contemplated by the Project at that time) *precisely because* long-term dewatering would have a significant impact on the environment in the form of increasing the risk of subsidence and toxic groundwater plume expansion. (AR 24:6507).

4) Petitioners contend the methane mitigation measures will require long-term dewatering which may cause soil subsidence and expansion of an existing plume of groundwater contamination, so an SEIR is required to address those potentially significant environmental impacts.

(a) Was this ground for noncompliance with the CEQA timely presented to the city council before the close of the public hearing on June 12, 2001.

Yes, the grounds for noncompliance with CEQA was timely presented to the City Council before the close of the public hearing on June 12, 2001.[2]

As noted below, CEQA § 21177 does not apply to this case. However, even if this section were applicable, Petitioners have satisfied the requirement of exhaustion of administrative remedies in that they, and others, had clearly communicated, on an ongoing basis, their concerns about the City's noncompliance with CEQA prior to the close of the public hearing on June 12, 2001.

Petitioners presented their concerns about the environmental impact of the project to the City both orally and in writing numerous times once the new information was discovered. In fact, it was due to the Petitioners' discovery of a soil gas study on file with the Regional Water Quality Control Board that the LADBS began investigating the nature of the methane problems on the Playa Vista development site. (AOB 4).

In a February 8, 2000 letter to the LA City Council, Petitioner Grassroots Coalition raised the issue of the dewatering and its impact on the environment in the form of subsidence and toxic groundwater plume expansion. (7:1966; 1969, ["Ballona, like Belmont is a [sic] entirely unique situation with complex circumstances with which need to be dealt with in concert. SUBSIDENCE, DEWATERING, CORROSION, TOXIC PLUME, TOXIC GAS, TAR SANDS... New information of ground water withdrawal raises serious, unaddressed concerns for subsidence occurrence."].)

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[2] It is worth pointing out that many members of the public who attempted to participate in the public hearings were not allowed to speak. For example, at the June 5, 2001 Planning and Land Use Management Committee hearing, 36 citizens opposing the project signed speaker cards, but only 11 were allowed to speak, and only for an average of 1 minute each (AR 4:869-922; 16:4356; 21:5712; 21:5726; 21:5767). At the June 12, 2001 City Council hearing, 25 citizens opposing the project signed speaker cards, but only 12 were allowed to speak. (AR 4:930-980; 23:6300; 23:6309; 23:6318-9; 23:6330-31).

Bernard Endres, Ph.D., an oil and gas consultant, submitted a presentation in writing to the City Council Budget and Finance Committee on June 7, 2000 which raised the issue of the toxic plume under Playa Vista, and requested that the City look into the interaction of toxic plume, gas mitigation systems, and subsidence. (19:5241).

The following comments were made with regard to the CLA Report during the July 18, 2000 public "Scoping Hearing":

- George Bizetti, Chairman of the Association for Accountability and Equal Education, explained that the Playa Vista area has water that is 98% soaked with methane and "a high water table which is really hard to mitigate." (29:7617-8)
- Michelle Cypert, with the Sierra Club, remarked that the city should look at the cost of Level III mitigation, "given that there is a gravel aquifer that needs to be mitigated if any construction takes place, water that is going to have to be pumped and you will have to have permanent, perpetual monitoring..." (29:7620-21)

At the June 5, 2001 Planning and Land Use Management Committee hearing, a letter was submitted into the record from Sandra Genis, Planning Resources, on behalf of Environment Now, stating that mitigation of the methane "is complicated by the high water table existing on the site... If methane laden water is pumped for treatment, seawater intrusion into the aquifer could result, which is also a significant impact. This matter should... be subject to the full range of discussion and public participation provided under CEQA. Issues to be resolved include the extent to which the [methane] hazard can be mitigated and potential impacts of any mitigation program adopted." (16:4236).

Prior to the City Council's June 12, 2001 decision, Petitioner Grassroots Coalition presented to the City the concern about the inoperability of the 50 foot vent wells. (See e.g., 3:734 [Diagram submitted on June 12, 2001 to City Council]).

At the City Council meeting on June 12, 2001, Petitioners again raised concerns that a subsequent or supplemental EIR was necessary to address the additional environmental impacts resulting from the planned mitigation measures. Kathy Knight presented a letter at the hearing which stated,

> "We incorporate all of our comments, and those of Spirit of the Sage Council, and Grassroots Coalition and Earthways Foundation regarding the Playa Vista gas problem given to the different departments of Los Angeles . . . . We have spent many thousands of dollars copying and supplying all these documents to multiple departments of the City, only to have them be totally ignored."

(AR 4:446).

It is of no import that some of these speakers are not members of the Petitioner organizations. "As codified in CEQA, the exhaustion doctrine does not require that the petitioner personally presented the issue to the agency as long as somebody else did so and the petitioner timely objected to the project on another ground. (*Federation of Hillside and Canyon Associations v. City of Los Angeles*, (2004) 126 Cal. App. 4th 1180, 1263). In addition, Petitioners need not have stated the precise terms that they raise in later litigation. "A petitioner need not have articulated every basis for objecting to the project, but must have participated in the administrative process. Thus, a petitioner who has taken part in the administrative process may assert any issues raised by other parties during the administrative proceedings." (*Galante Vineyards v. Monterey Peninsula Water Management*, (1997) 60 Cal. App. 4th 1109, 1119).

The sum of oral and written comments supported by documentation and submitted by Petitioners to City agencies over the course of years demonstrate that they "actively participated in the administrative review process" and thus, exhausted administrative remedies. *See Bakersfield Citizens for Local Control v. City of Bakersfield*, 124 Cal. App. 4th 1184, 1201 (2004).

All of these aforementioned instances of public comment served the purpose for which section 21177 was designed. "'The essence of the exhaustion doctrine is the public agency's opportunity to receive and respond to articulated factual issues and legal theories before its actions are subjected to judicial review.'" (*Azusa Land Reclamation Company v. Main San Gabriel Basin Watermaster*, (1997) 52 Cal. App. 4th 1165, 1215, *quoting Ultramar, Inc. v. South Coast Air Quality Management Dist.*, (1993) 17 Cal. App. 4th 689.) The City was well aware of factual issues and legal theories that raised the question of whether a subsequent or supplemental EIR should be prepared.

(b) If not, is there any basis to excuse the failure to timely present the issue? In particular, did the notice of the city council meeting or the content of the discussion at the meeting fairly apprise Petitioners that the measures under consideration included long-term dewatering?

1. CEQA § 21177 does not apply to this case because there was no public comment period or public hearing under CEQA and the City did not issue a Notice of Determination

CEQA § 21177, subd. (a) states,

> "No action or proceeding may be brought pursuant to Section 21167 unless the alleged grounds for noncompliance with this division were presented to the public agency orally or in writing by any person during the public comment period provided by this division or prior to the close of the public hearing on the project *before the issuance of the notice of determination.*" (emphasis added).

The court in *Azusa Land Reclamation Company* held that the exhaustion requirement under CEQA § 21177 applies where CEQA provides a public comment period or there is a public hearing before a notice of determination is issued. However, when "there was no 'public comment period provided by [CEQA]' and there was no 'public hearing . . . before the issuance of the notice of determination'. . . *Public Resources Code section 21177* has no application. . . ." (*Azuza Land Reclamation, supra*, 52 Cal. App. 4th 1165, 1210). "[W]here an agency approves a project and simultaneously decides that the project is exempt from CEQA, there is no 'public hearing . . . before the issuance of the notice of determination.'" (*Id).*

The City Council's action of deciding an SEIR was not required in the case at bar is tantamount to the lead agency's action in *Azuza* of deciding the project was exempt from CEQA. Accordingly, exhaustion of administrative remedies was not required. "The *only* prerequisite to an action challenging an exemption determination is that it be brought within 180 days [or 35 days, if a notice of exemption is filed] of the date of the final decision of the agency." (*Id.* at 1210) (emphasis in original). Here, no notice of determination was filed and therefore the only prerequisite to an action challenging a failure to prepare an SEIR was that it be brought within 180 days.

2. CEQA § 21177 does not apply to this case because the City failed to give notice required by law.

CEQA § 21177, subd. (e) states, "this section does not apply to any alleged grounds for noncompliance with [CEQA] ... if the public agency failed to give notice required by law."

"[E]xhaustion of administrative remedies has not been required of CEQA petitioners who did not receive proper notice of administrative hearings." (*McQueen v. Board of Directors of the Mid-Peninsula Regional Open Space District*, (1988) 202 Cal. App. 3d 1136, 1150).

Here, Petitioners did not receive proper notice of the City Council's June 12, 2001 meeting, in that there was no information in the City's notice that dewatering was required of the methane mitigation measures. (AR 26:7069-70) There was no discussion of mitigation measures' long-term dewatering at the hearing. (AR 23:6299-6349). The CLA Report where Methane System Requirements are outlined in table 2-1, do not show dewatering is required by the methane mitigation system. (24:6707) "[P]etitioner's situation [is] tantamount to a lack of notice due to the incomplete and misleading project description employed by the district." (*McQueen*, 202 Cal. App. 3d at 1150). Further, "[if] an agency provides a public hearing on its decision to carry out or approve a project, the agency should include environmental review as one of the subjects for the hearing." *Id.* (internal quotations omitted). Here, the agency did not.

5) Does the administrative record support the conclusion that the city council, in connection with its decision on June 12, 2001

(a) considered the contention that the methane mitigation measures will require long-term dewatering which may cause soil subsidence and expansion of an existing plume of groundwater contamination, and

Yes, with regard to the issue of subsidence. (AR 24:6710-12; 4:1062-3; 5:1184). No, with regard to the issue of toxic groundwater plume expansion.

(b) determined that those potentially significant environmental effects either will not occur or will be insignificant?

Yes, with regard to subsidence. (AR 4:1062-3; 5:1184). No, with regard to toxic groundwater plume expansion.

Dated: June 10, 2005

Respectfully Submitted,

LAW OFFICE OF SABRINA VENSKUS

By: _____

Sabrina D. Venskus
Attorney for Petitioners and Appellants

PROOF OF SERVICE

I, Sabrina Venskus, hereby declare under penalty of perjury that I am over the age of eighteen (18) and am not a party to the instant case. On June 10, 2005, I served the attached document:

SUPPLEMENTAL BRIEF LETTER

by placing a copy thereof, enclosed in a separate sealed container, with the postage thereon fully prepaid, in the United States mail, first class, in the County of Los Angeles, State of California, each of which envelopes was addressed as indicated further below, and that my business address is 171 Pier Avenue, Suite 204, Santa Monica, California, 90405.

Jack Brown
Assistant City Attorney
700 City Hall East
200 North Main Street
Los Angeles, CA 90012

Robert D. Crockett
Kathleen O'Prey Truman
Damon Mamalakis
Latham and Watkins
633 W. Fifth Street, Suite 4000
Los Angeles, CA 90071

Clerk, Superior Court
Department 33
111 N. Hill Street
Los Angeles, CA 90012

Clerk, Supreme Court (five copies)
300 South Spring Street
Los Angeles, CA 90013

EXECUTED THIS 10th day of June, 2005, in the County of Los Angeles, State of California.

SABRINA VENSKUS

Subsidence

INTER-DEPARTMENTAL CORRESPONDENCE

February 20, 2001

To: Vitaly B. Troyan, P.E.
City Engineer

From: David T. Hsu, Chief of Grading Section
Department of Building and Safety

Subject: REGIONAL GROUND SUBSIDENCE AT PLAYA VISTA, PLAYA DEL REY AND THE MARINA PENINSULA, AND RELATED GAS MIGRATION PROBLEMS, dated February 15, 2001, prepared by Bernard Endres, Ph.D.

REFERENCE: Inter-Departmental Correspondence, dated October 24, 2000, City Engineer

The Department of Building and Safety has received a report concerning subsidence for the Playa Vista area that may affect your conclusions regarding this issue. Please evaluate the attached data with regard to the conclusions of the above referenced letter and inform me of any revisions to your conclusions. Please be aware that an appeal concerning the issue of subsidence at the Playa Vista development has been filed with the Board of Building and Safety Commissioners. Therefore, time is very important with regard to your conclusions.

If you have any questions regarding this information please contact myself at (213)977-6317 or Dana Prevost at (213)97706326.

Attachments: 1) Report dated February 15, 2001, by Bernard Endres Ph.D.

G:/grdocs/grletters/playavista/subsidenceendres

NO RESPONSE

LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

Date: May 3, 2000

To: Dana Prevost, David Hsu, Grading Engineering Section
Los Angeles Dept. of Building and Safety

From: Art Kurimoto, Survey Supervisor, Survey Division, Bureau of Engineering
Los Angeles Dept. of Public Works

Subject: **Playa Vista Project Grading Report and Improper Misquotes Regarding Area Subsidence**

It has come to my attention that a report inquiring about methane gas migration leading to ground subsidence in the area of the Playa Vista Development Project has used statements made by me (in a five minute telephone conversation on May 19, 1999) as expert testimony refuting any such ground subsidence during the period of 1975 to 1985. I am alarmed at this, as any statements made by me have been taken out of context.

In my conversation with Mr Steve Kolthoff of Group Delta Consultants, I explained that the City of Los Angeles conducted precise leveling operations citywide on a five year cycle. I explained that I knew of no subsidence studies in the area. However, there are streets such as Jefferson Blvd, Lincoln Blvd and Culver Blvd that have a history of benchmarks that have been remeasured every five years on average since the 1950's as part of a vertical control maintenance program.

In 1985, this citywide leveling program was ended due to lack of funding. This had nothing to do with any subsidence study. I stated that a simple comparison of existing benchmarks along these streets over the years would show vertical ground movement variations in five year increments. I also stated that these records were public information and could be purchased at our Engineering counter for a small reprographics fee.

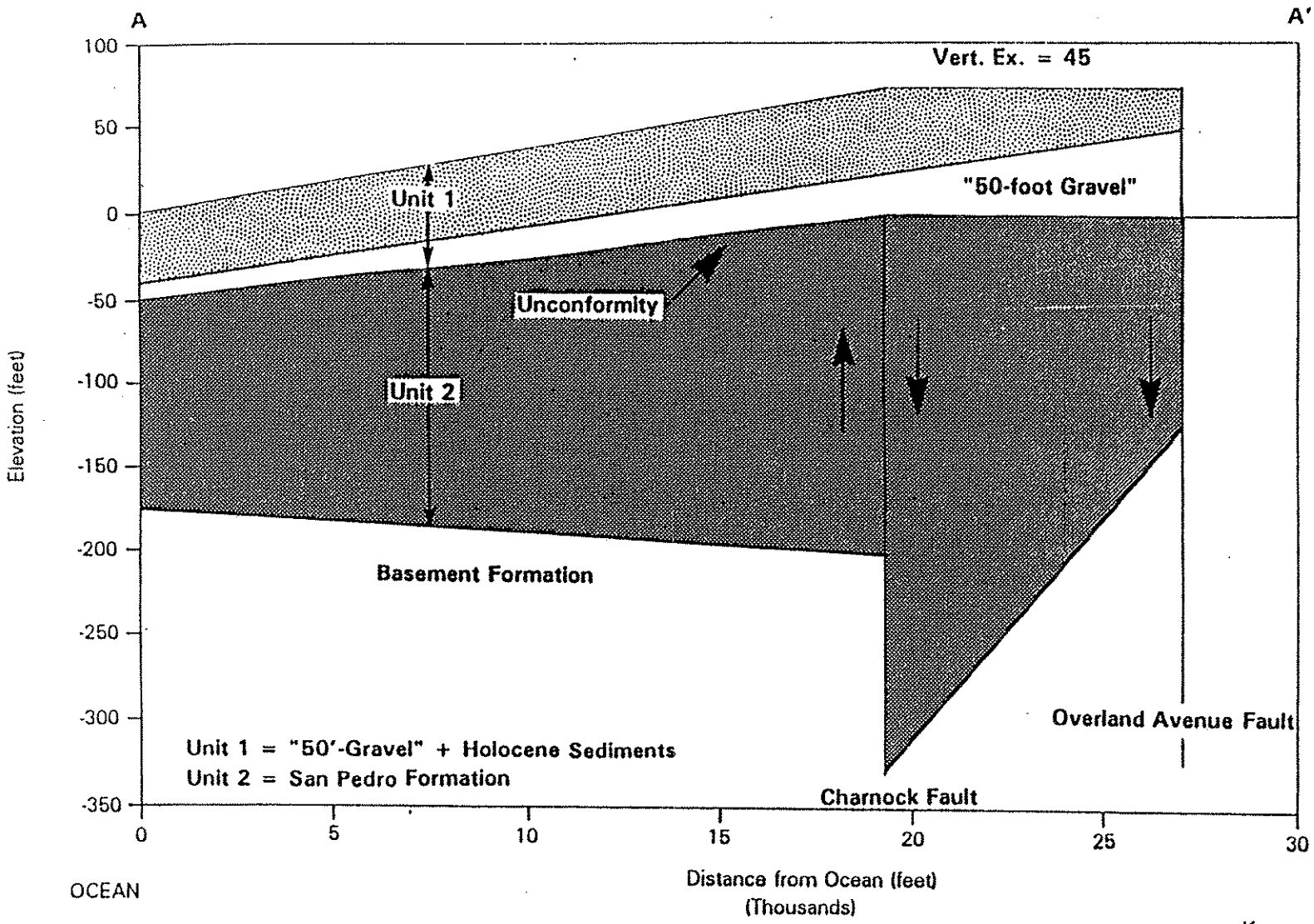
I stated that it was my opinion that there was little or no appreciable ground movement over these recorded benchmarks (which are on the roadway, not in the marshland) and any real comparison would have to be done by Mr. Kolthoff himself.

I do not have any expertise in any matter involving methane gas migration. I do not have any information on any ground subsidence in the project area of the Playa Vista Development. I refute any reference to me as having given expert testimony on any matter regarding ground subsidence at all. Clearly, I have been misquoted during my short conversation with Mr. Kolthoff, and had I known that I would be used as an advisor in a published report, I would have ended the conversation immediately.

Should you have any further questions in this regard, I am available at my office each day.

Phone 310-575-8493
Fax 310-575-8866
E-mail wlasurvey@eng.ci.la.ca.us

Art Kurimoto



Kennedy/Jenks Consultants

Santa Monica Groundwater Management Plan

Idealized Geologic Cross-Section A-A'

K/J 910012
June 1992

Figure 2.3

BERNARD ENDRES, PH.D.
3045 TUNA CANYON ROAD
TOPANGA, CA 90290

TELEPHONE (310) 455-0023 * FACSIMILE (310) 455-3618

3

15 February 2001

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING & SAFETY
201 N. Figueroa, 3rd Floor
Los Angeles, CA 90012

ATTENTION: DANA PREVOST

Re: REGIONAL GROUND SUBSIDENCE AT PLAYA VISTA, PLAYA DEL REY AND THE MARINA PENINSULA, AND RELATED GAS MIGRATION PROBLEMS

Dear Mr. Prevost:

Pursuant to your recent request, I have prepared this letter as a review of issues regarding regional ground subsidence and the related gas migration issues in Playa Vista, Playa del Rey and the Marina Peninsula areas.

1. SUBSIDENCE IS CAUSED BY FLUID WITHDRAWAL:

Fluid withdrawal from a petroleum reservoir or aquifer leads to the inevitable result of causing land subsidence at the surface, and compaction of sands at the reservoir level. The compaction is due to a pressure decrease in the reservoir or aquifer, and causes the overlying formations and the land surface to sink. This deformation leads to fracturing of the geological formations in the surrounding areas, causes movement along existing fault structures, and damages the oil and gas well casings and seals. This gives rise to the upward migration of gas from the petroleum reservoir. The interaction between subsidence and gas migration is illustrated in Exhibit 1.

The geological deformation is greatest at the reservoir level and propagates to the surface as a bowl shaped configuration, as illustrated in Exhibit 2. The maximum subsidence is at the center of the bowl. For a petroleum reservoir, the extent of the subsidence bowl at the surface is approximately twice the areal extent of the reservoir. The cross-sectional distribution of compressive and tensile stresses within the subsiding formation is also illustrated in Exhibit 2.

As a general rule, the amount of subsidence experienced at the surface correlates directly with the volume of fluid production within the reservoir. A convenient representation is to plot cumulative subsidence versus time, and cumulative fluid production versus time in order to characterize this correlation. The survey data and fluid production history of the referenced area supports this correlation.

2. FLUID WITHDRAWAL HAS CAUSED SIGNIFICANT SUBSIDENCE AT PLAYA VISTA, PLAYA DEL REY AND THE MARINA PENINSULA AREAS:

Fluid production of oil and brine water from the Playa del Rey and Venice oil fields caused nearly two feet of surface subsidence between 1927 and 1970. The California Division of Oil and Gas (DOG) documented this in their Sixtieth Annual Report published in 1974. Exhibit 3 presents the iso-contours of subsidence from that report, showing the vertical movement in feet during 1937 to 1970 (viz., Figure 3 from the DOG report). This figure also illustrates the productive limits of the "Del Rey Hills Area," the "Venice Area" and the "Kidson Area."

Exhibit 4 presents the cumulative subsidence in feet for the time period 1927 to 1970 for selected bench marks, along with cumulative oil field production (viz., Figure 4 from the DOG report). These data support the following conclusions:

1. Surface subsidence directly correlates with the fluid production from the oil fields.

2. Surface subsidence directly correlates with the productive limits of the oil fields.

3. The areal extent of the subsidence extends well beyond the productive limits of the oil fields.

4. Subsidence was continuing unabated at the end of the measurement data in 1970.

Although fluid production from these areas has continued to the present time, subsidence monitoring has been ignored. Southern California Gas Company (SOCALGAS) has operated an extensive oil field dewatering program within the "Del Rey Hills Area" and the "Venice Area" for many years. This has been necessary since the gas storage operations requires continuous pumping of brine water from these areas to prevent invasion of the water into the primary storage zone reservoir.

The average daily production from their dewatering wells is approximately 2,500 barrels of brine water per day. This would equate to over 90,000 barrels per year, or over 27 million barrels of fluid production between 1970 and the present. It is inevitable that this has contributed to the subsidence problem, additional geological fracturing, and additional damage to the oil and gas well casings and seals.

3. CITY OF LOS ANGELES SURVEY DATA HAS CONFIRMED THE EXISTENCE OF A SERIOUS SUBSIDENCE PROBLEM:

I utilized survey data generated by the City of Los Angeles to evaluate the extent of the subsidence problem in the Playa Vista Area (near Jefferson Blvd. and Lincoln Blvd.) in the vicinity of the Playa del Rey oil field. The data utilized is presented in Exhibit 5.

The elevation data for a bench mark at Jefferson and Lincoln was as follows ("STD SUR MON, VEN I-4, ON CENTER LINE INTER OF JEFFERSON BLVD AND LINCOLN BLVD. ** GONE 1972 **"):

YEAR	ELEVATION (FEET)
1956	7.057
1960	7.006
1963	6.945
1968	6.828
1970	6.790
TOTAL ELEVATION CHANGE:	-.267 FEET (1956 to 1970).

This was compared to a bench mark in the Marina Peninsula Area, located near the intersection of Pacific Street and Lighthouse, that had a history of being a subsidence prone area. For example, observe the subsidence contours presented in Exhibit 3 for this area.

The elevation data for a bench mark in the vicinity of Pacific Street and Lighthouse was as follows ("USC & GS DISK MARKED P-767-1945 SET IN S CURB OF BRIDGE 26.7 FT E OF CENTER LINE ROADWAY OF PACIFIC ST. * 3.5 FT E OF W END OF BRIDGE ** GONE 1986 **").

YEAR	ELEVATION (FEET)
1955	14.947
1956	14.877
1960	14.827
1963	14.789
1970	14.682
TOTAL ELEVATION CHANGE:	-.265 FEET (1955 to 1970).

In summary, these data establish that the Jefferson/Lincoln area subsided .267 feet over a 14-year interval from 1956 to 1970. The Pacific/Lighthouse area, a well known subsidence prone area, subsided .265 feet over a 15-year interval from 1955 to 1970. Accordingly, these data confirm that the subsidence problems caused by oil field production are widespread, and extend to the areas that are under development at Playa Vista. No systematic monitoring of these problems has been undertaken since 1970.

4. THE SUBSIDENCE PROBLEMS IMPACT THE INTEGRITY OF THE OIL AND GAS WELLS THROUGHOUT THE AREA:

Fracturing of the geological formation and damage to the well casings from subsidence will cause upward migration of gas to the surface, exacerbating the near surface soil gas conditions. In the referenced area, over 200 oil wells were drilled and completed prior to the onset of the significant subsidence discussed in this document. Accordingly, subsidence must be recognized as a major contributor to the gas migration problems that have been documented at Playa Vista.

Exhibit 6 sets forth the location of the oil and gas wells within the Playa del Rey and Venice oil field areas. These areas are all interconnected with a highly permeable gravel zone that was formed by the old Los Angeles Riverbed. This provides a ready conduit for the migration of gas as it leaks up the old and corroded well casings. These wells were drilled prior to the time that significant subsidence had occurred in the oil fields. Accordingly, this subsidence has aggravated the well leakage problems.

SOCALGAS owns all of the mineral rights in this area, and has been the oil field operator for many years. As a consequence, they have the primary responsibility for monitoring for oil field subsidence, but have not done so. Furthermore, they have failed to adequately investigate the integrity of the many old wells in the area, and have failed to perform adequate soil gas studies.

It is apparent that the gas migration problems at Playa Vista are strongly interrelated with the movement of leaking gas easterly within these gravel zones as a result of being "swept" by the tidal forces and wave energy within these permeable zones.

5. SURFACE DEFORMATION:

Deformation due to compression and extension at and near the land surface causes fissures in the soil and damages buildings, pipelines, and other structures. In the subject areas, these problems are complicated by the 100% liquefaction prone region that has been identified in the Seismic Hazards Map published by the Division of Mines and Geology, and by the near surface water table.

Regional water tables will remain at nearly the same elevation after local subsidence lowers the land surface. The effect is to decrease the depth to the water level. If the water table rises (relative to the land surface), higher than the bottom slab of a building, the uplift pressure on the structure will be noticeably increased. This could cause the slab to eventually rupture.

Likewise, the below-slab installation of a gas membrane barrier for gas control purposes could be adversely impacted by these same uplift pressure conditions. Since the gas membrane must perform without failure over the lifetime of the structure (viz., exceeding 70 years), the long-term consequences of the subsidence must be evaluated. As a minimum, this would require ongoing monitoring of the subsidence problem using dedicated bench marks and appropriate surveying techniques.

These survey techniques have been implemented successfully in many oil fields throughout the world. For example, the city of Long Beach requires continuous monitoring for subsidence in the Wilmington Field, and has an elaborate water injection program to mitigate the consequences of surface sinking and water incursion in this coastal area.

The city of Beverly Hills has imposed a contractual obligation upon all oil field operators within the city to monitor for subsidence. This has been ongoing for at least the past 50 years, when it was first imposed upon the Occidental Petroleum operations within the city.

The city of Redondo Beach failed to impose such a requirement on oil field operations conducted under the King Harbor Boat Marina. Approximately two feet of subsidence, which occurred over a period of 20 years of oil production, caused the breakwater rubble barrier, constructed by the U.S. Army Corps of Engineers, to sink. A winter storm in 1988 destroyed the rubble barrier, and the city of Redondo Beach and the U.S. Army Corps of Engineers were held liable for the millions of dollars of damage that resulted to the shoreline structures. They were found to have been negligent for failing to monitor for the subsidence and for their failure to take protective measures to minimize the risk of injury.

It is significant to point out that the level of subsidence measured in the Playa del Rey and Venice coastal areas through 1970 is similar to the subsidence that caused the destruction of the King Harbor at Redondo Beach. However, it is alarming that this profound example of destruction has largely gone ignored as it relates to the Playa Vista development.

The conduct of SOCALGAS in failing to monitor for subsidence over the past 30 years falls well below the standard of care for oil field operators. In addition, their refusal to perform appropriate soil gas surveys in the area has endangered public health and safety.

6. LESSONS LEARNED REGARDING SUBSIDENCE PROBLEMS THAT CAUSED THE COLLAPSE OF THE BALDWIN HILLS DAM:

Another example of oil field related subsidence that deserves careful review is the failure of the Baldwin Hills Dam on December 14, 1963. This facility was designed, constructed and operated by the Department of Water and Power. It was an earthen dam that was constructed over the Inglewood oil field, and used a spray-on membrane barrier similar to the "liquid boot" product. The basic design was flawed because it failed to account for the moving and unstable soil conditions created by the subsiding oil field operated by Chevron.

The reservoir failed so abruptly that there was not enough time to evacuate all of the people located in the area. The foundation of the dam and the membrane barrier lining ruptured and within hours the reservoir was empty. Five persons drowned, 41 homes were destroyed and another 986 homes were severely damaged. The dam purportedly had a monitoring system capable of detecting leakage of water into the area below the membrane barrier.

An investigation conducted after the dam collapse revealed that land subsidence and soil movement had created tears in the membrane barrier, allowing some water to escape and undermine the integrity of the dam's earthen foundation. These studies also revealed that the subsidence was not uniform, and caused differential settling across the diagonal face of the dam. None of this movement was monitored or accounted for in the design of the dam.

These lessons learned are especially significant as they relate to the gas membrane barrier installed at the Fountain Park apartment complex. There has been no showing that this membrane barrier will have the capability to withstand the geological and hydrostatic forces that can be anticipated to exist over the lifetime of the structure.

The problems can be viewed as the reverse of what caused the Baldwin Hills Dam disaster. Gas cannot be allowed to leak upward through the membrane barrier. However, the membrane barrier must survive the forces caused by a combination of movements from earthquake liquefaction, oil field subsidence, multiple piling penetrations, and the upward pressures from a shallow water table.

The pilings and stone columns have already been demonstrated to exacerbate the gas migration problem, placing even greater importance on this problem area.

7. MONITORING REQUIREMENTS:

The following conditions require monitoring and evaluation of their interrelations:

1. Surface vertical and horizontal deformations performed by leveling surveys, to be conducted on an ongoing basis.

2. An evaluation of fluid production being carried out by SOCALGAS, with an identification of well locations and production zones.

3. An evaluation of gas seepage from well locations utilizing soil gas monitoring techniques.

4. An evaluation of the hydrology conditions existing within the gravel aquifers within the vicinity of the oil and gas wells.

5. An evaluation of the dynamic conditions of the water table and other piezometric surfaces, including the influences of tidal action and seasonal variations.

6. An evaluation of the mechanical condition and well leakage information for all of the oil and gas wells located in the Playa del Rey and Venice oil fields.

7. Development of a gas mitigation and earthquake risk assessment plan consistent with the problems identified by this investigation.

The cost burden for these studies should be the responsibity of SOCALGAS. They have responsibility for the safe operation of the Playa del Rey and Venice oil fields by virtue of being the successor in interest to the operations of these fields that first began in the late 1920's. Also, SOCALGAS has derived, and continues to derive, significant economic benefit by the continued operation of these fields as part of their gas storage operations.

It is critical that SOCALGAS be required to disclose all well record information that is within their possession. This is necessary to protect public health and safety, and to facilitate an independent review of the risks posed by their operations. For example, there is overwhelming evidence that SOCALGAS failed to disclose to the DOG, and to the public, important information regarding well leakage problems. Also, they have falsely represented to the city of Los Angeles that there is no vertical gas migration at Playa del Rey.

8. THERE IS A HUGE INCOMPATIBILITY BETWEEN SOCALGAS OPERATIONS AND RESIDENTIAL DEVELOPMENT:

SOCALGAS currently has an application pending before the State of California Public Utilities Commission (PUC) seeking authorization to sell certain residential lots within the Playa del Rey and Marina Peninsula areas. Previously they had sold many residential lots in these areas without obtaining approval from the PUC. The validity of these sales, and possible violations of PUC regulations is currently under review by the PUC.

In many instances, these lot sales have resulted in homes being built directly over old oil and gas wells. SOCALGAS has taken the position that the city of Los Angeles is solely responsible for the permitting and approval procedures regarding this residential development. On the other hand, SOCALGAS has failed to disclose the serious leakage problems they have experienced with these wells. Most of the wells that were proclaimed to have been abandoned to the current standards of the DOG have developed leaks.

There has been a failure to evaluate the long-term consequences of subsidence, well leakage problems and earthquake hazards on these real estate developments. This responsibility has been delegated to the city of Los Angeles by SOCALGAS without adequate disclosure of the public health and safety risks posed by their operations. As a consequence, virtually no mitigation measures have been imposed by the city, and no monitoring procedures have been required.

The SOCALGAS underground gas storage operation in the city of Montebello had to be shut down because of well leakage problems into homes. Some homes had to be torn down to provide access to the leaking wells. In addition, homes built over the wells prevented appropriate monitoring of the gas migration hazards.

Before additional housing construction is allowed in the Playa Vista, Playa del Rey and Marina Peninsula areas a thorough investigation of the hazards to public health and safety must be performed. This is dictated by the City of Los Angeles Building Code which is primarily intended to protect the residents in these areas who have little or no knowledge of the extreme dangers posed by these oil field operations.

9. CONCLUSIONS:

Fluid withdrawal from the Playa del Rey and Venice oil fields has created regional ground subsidence that has impacted, and will continue to impact, real estate developments at Playa Vista, Playa del Rey and the Marina Peninsula areas. Nearly two feet of subsidence occurred between 1927 and 1970. However, there has been no systematic monitoring for subsidence since 1970.

This is an ongoing problem since SOCALGAS continues to produce large volumes of brine water from many wells in the area as part of their underground gas storage operations.

The subsidence has caused fracturing of the geological formation and damage to the well casings causing upward migration of gas to the surface, thereby exacerbating the near surface soil gas problems.

The long-term consequences of the surface deformation will impact the integrity of the gas membrane barriers necessary to protect structures from the migrating gas.

A systems engineering approach is necessary in evaluating the interactive consequences of subsidence, gas migration and movement of gas through the near surface aquifers from the locations of the leaking wells. This requires a detailed evaluation of the hydrology and the tidal actions that are responsible for moving the gases easterly within the aquifers and under the Playa Vista development.

There is an urgent need for SOCALGAS to disclose all of the well record information within their possession in order to facilitate an independent investigation of the public health and safety risks posed by the oil field and gas storage operations.

A monitoring program needs to be initiated that would systematically evaluate the subsidence and gas migration problems on a regional basis in order to properly assess the hazardous conditions.

Sincerely yours,

Bernard Endres

Bernard Endres, Ph.D.

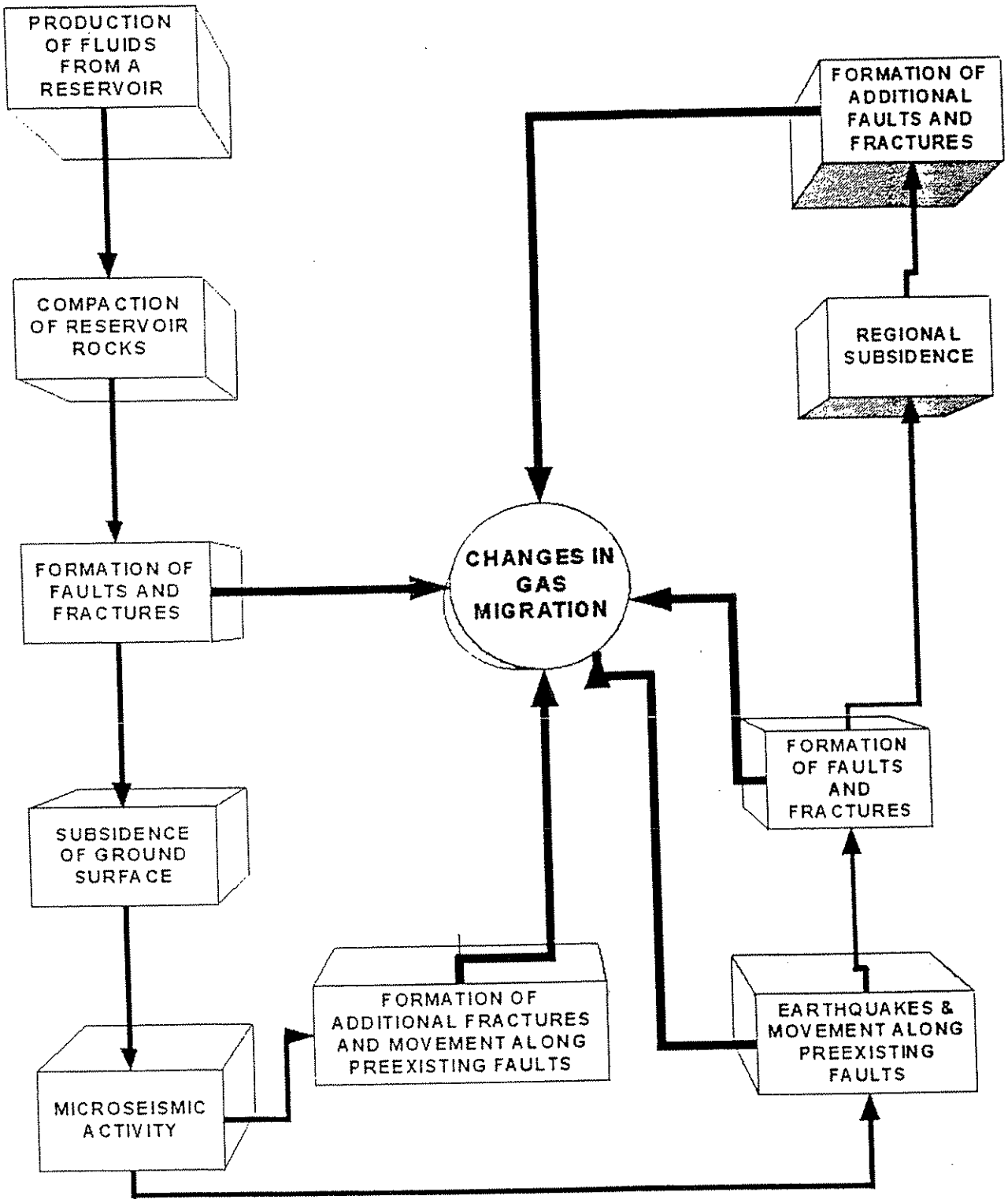
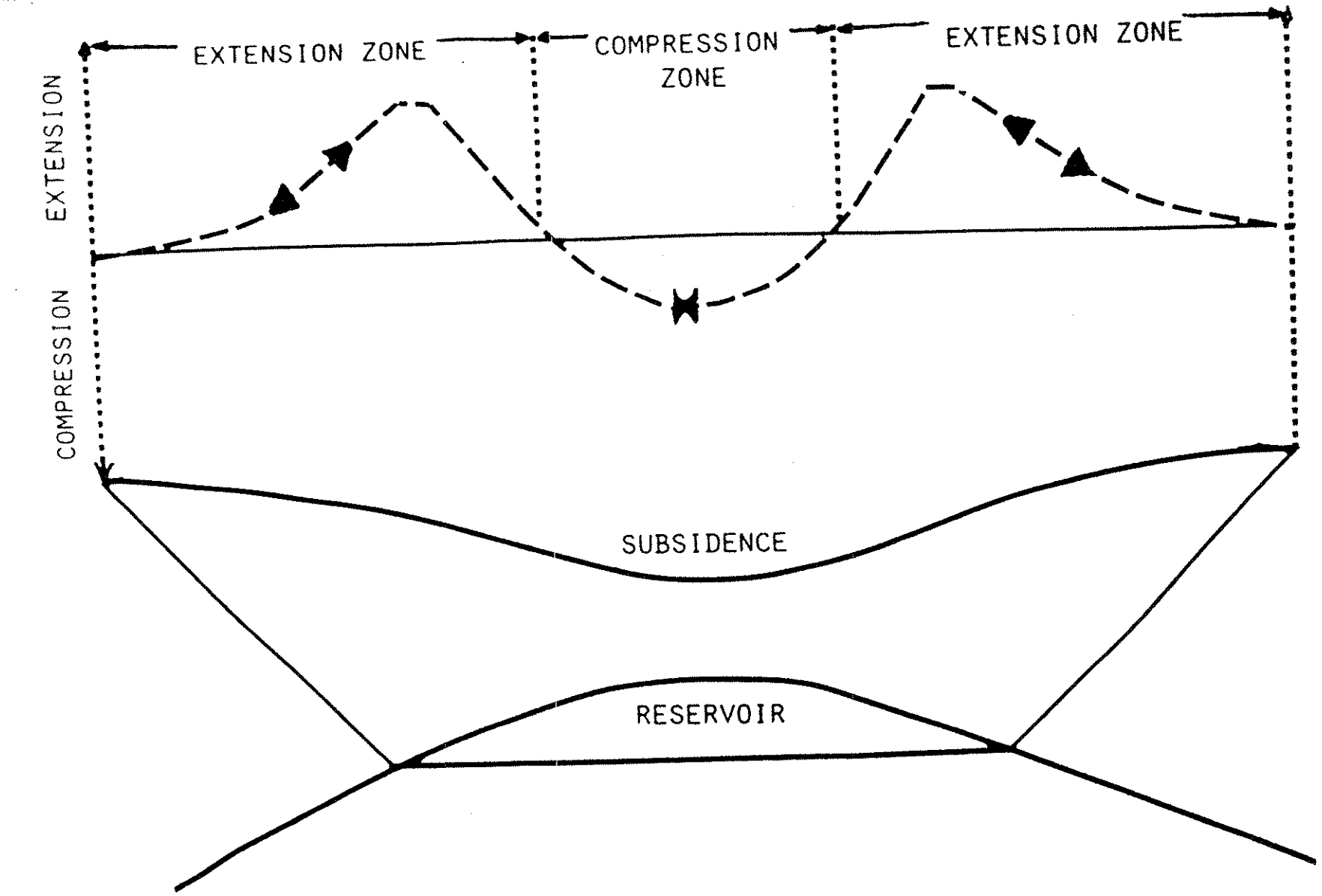
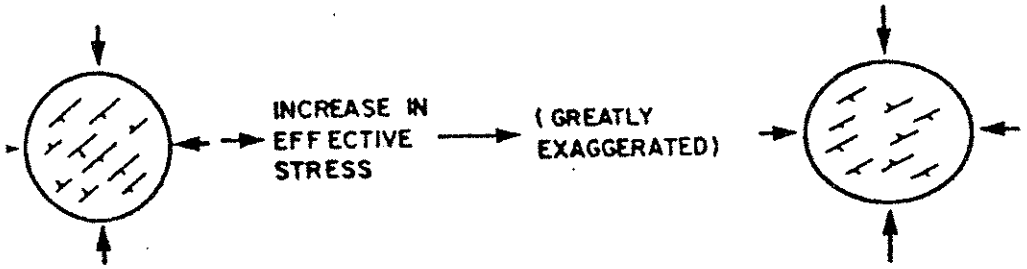


Figure 21-1. Schematic diagram of system relationships among the production of fluids, compaction, subsidence, and seismic activity. (*Modified after Chilingarian et al., 1995, fig. 1, p. 41.*)

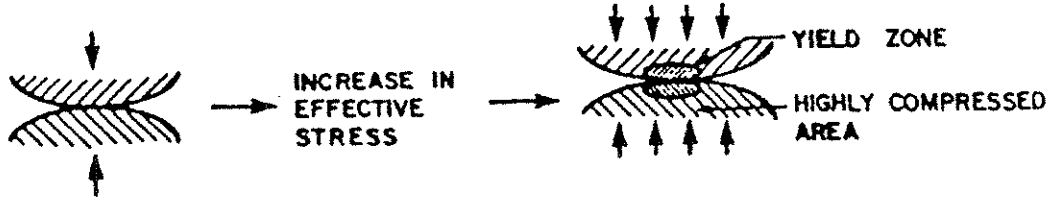


compressive and tensile stress distribution in subsiding formations.

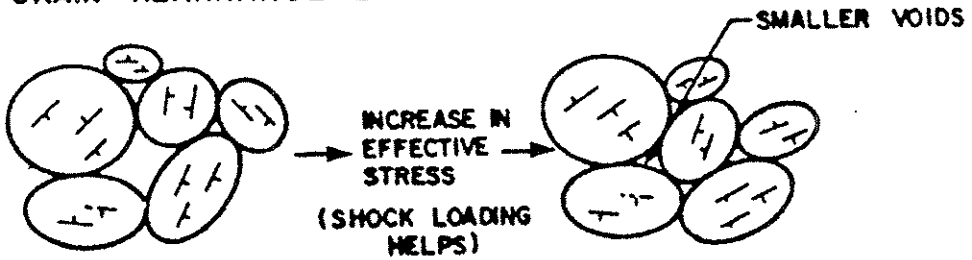
ELASTIC DISTORTION AND COMPRESSION



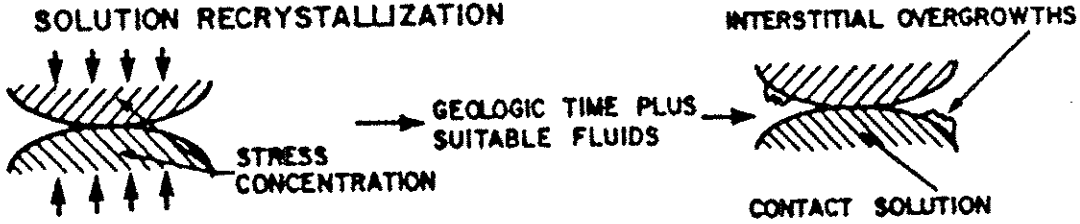
CONTACT POINT COMPRESSION AND YIELD



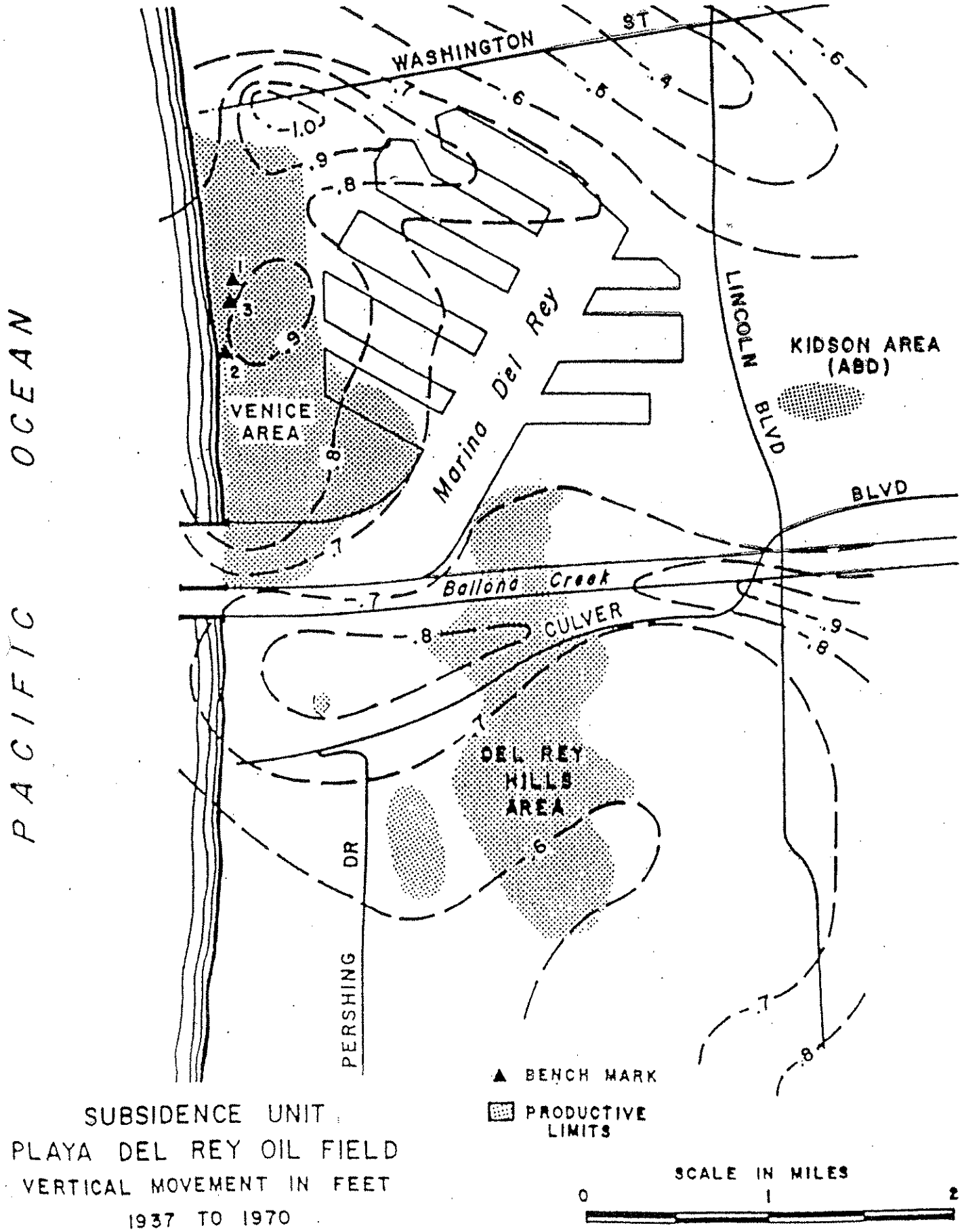
GRAIN REARRANGEMENT



SOLUTION RECRYSTALLIZATION



Mechanisms of volume decrease



SUBSIDENCE UNIT
PLAYA DEL REY OIL FIELD
VERTICAL MOVEMENT IN FEET
1937 TO 1970

Figure 3

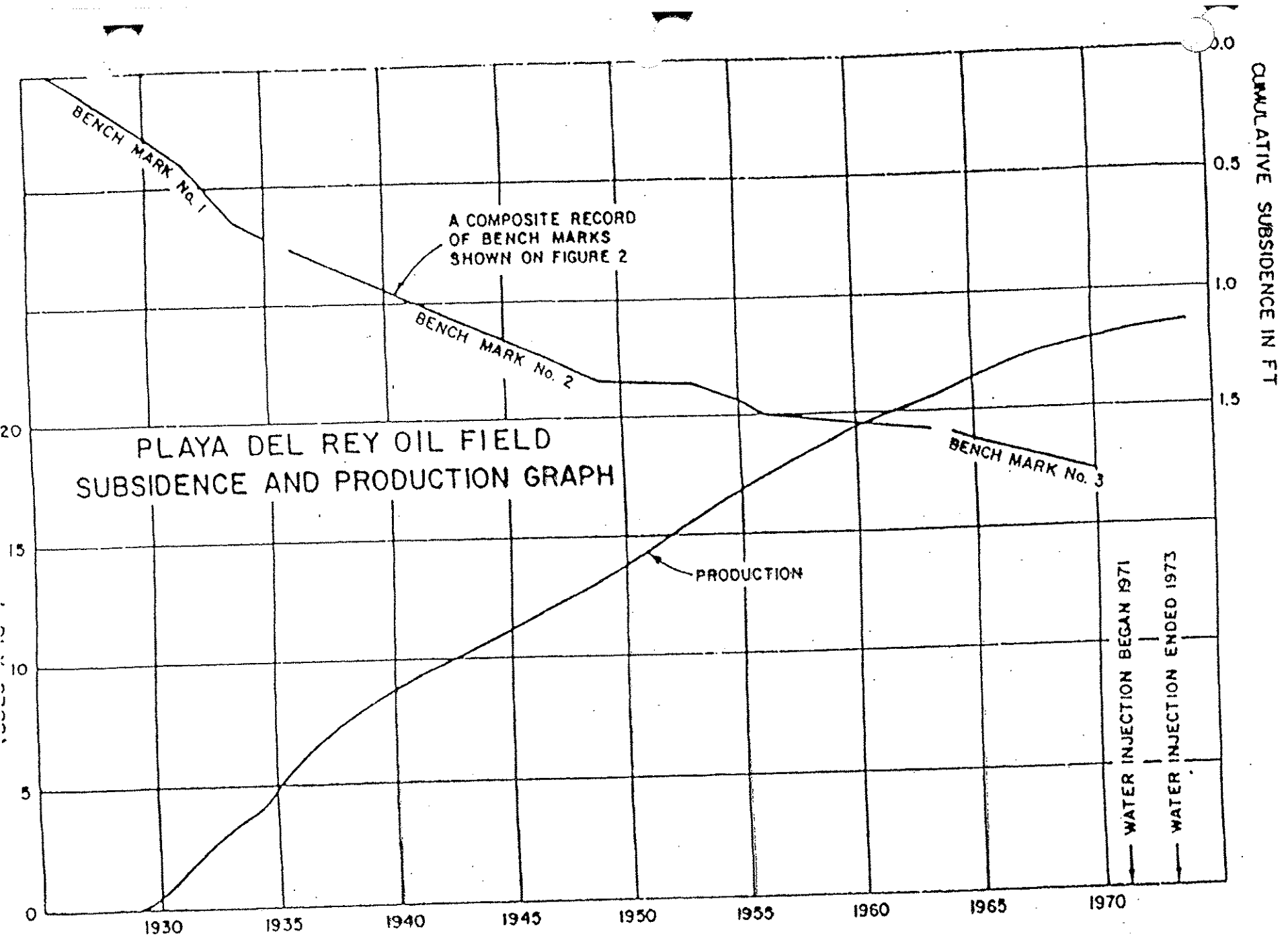

PLAYA DEL REY OIL FIELD
SUBSIDENCE AND PRODUCTION GRAPH
BENCH MARK No. 1
A COMPOSITE RECORD OF BENCH MARKS SHOWN ON FIGURE 2
BENCH MARK No. 2
BENCH MARK No. 3
PRODUCTION
WATER INJECTION BEGAN 1971
WATER INJECTION ENDED 1973
CUMULATIVE SUBSIDENCE IN FT
0.0
0.5
1.0
1.5
20
15
10
5
0
1930
1935
1940
1945
1950
1955
1960
1965
1970

Figure 4

S[illegible] R MON, SAW J-12, ON CENTER LINE INTERSECTION OF MCLAUGHLIN AVE & WASHINGTON PL	366 70 (18.400)	60.414 68P (18.414)	60.526 63S (18.448)			17-108
SPK N CURB MCLAUGHLIN AVE,3FT W/O BCR WASHINGTON PL	61.932 85 (18.877)	61.850 80 (18.852)				17-108
WIRE SPK IN SE CURB HERBERT ST, 6FT NE OF BC CURB RETURN NE OF MCLAUGHLIN AVE	54.101 85 (16.490)	53.989 80 (16.456)	54.140 70 (16.502)	54.187 68P (16.516)	54.299 63S (16.550)	17-108
STD SUR MON, SAW J-12A, ON CENTER LINE MCLAUGHLIN AVENUE, 48.30FT NORTHWEST OF CENTER LINE WASHINGTON BLVD.	44.012 85 (13.415)	43.914 80 (13.385)	44.050 70 (13.426)	44.097 68P (13.441)	44.212 63S (13.476)	17-108
WIRE SPK IN E CURB OF W RDWY CULVER BLVD, 4.8FT S OF N CURB LINE PRODUCED, OF MCLAUGHLIN AV, N END CB	38.966 80 (11.877)	39.097 70 (11.917)	39.143 68P (11.931)	39.257 63S (11.966)		17-109
SPK 2FT E/O E CURB OF WEST BDWY CULVER BLVD, 12FT N/O C/L PROD MCLAUGHLIN AVE, N END CB	39.058 85 (11.905)					17-109
STD SUR MON, VEN K-1, ON CENTERLINE INTER OF CULVER BLVD EAST ROADWAY AND SLAUSON AVENUE,FROM THE EAST.	37.006 70 (11.279)	37.051 68P (11.293)	37.166 63S (11.328)			17-109
LACO FC DISK *STMPD 116-20300,1971* 2FT W/O WEST CURB CULVER BLVD, 9.5FT N/O NORTH ABUT OF FLOOD CONTROL CHANNEL, N END GUARD RAIL, APPROX 150FT S/O SLAUSON AVE EAST	39.278 85 (11.972)	39.180 80 (11.942)				17-109
WIRE SPK IN E CURB CULVER BLVD, 1.6FT S OF BC CURB RETURN S OF STONER AVE	36.037 85 (10.984)	35.938 80 (10.954)	36.072 70 (10.995)	36.116 68P (11.008)	36.232 63S (11.044)	17-109
SPK N CURB INGLEWOOD BLVD, 10FT E/O BCR CULVER BLVD, EAST RDWY	35.026 85 (10.676)	34.924 80 (10.645)				17-109
STD SUR MON, VEN J-1B, ON CENTER LINE INTERSECTION CULVER BLVD E RDWY & INGLEWOOD BLVD	35.090 70 (10.695)	35.134 68P (10.709)	35.247 63S (10.743)			17-109
WIRE SPK IN E CURB CULVER BLVD, 0.6FT S OF BC CURB RETURN S OF FARIAS AVE	30.197 85 (9.204)	30.108 80 (9.177)	30.247 70 (9.219)	30.290 68P (9.232)	30.405 63S (9.267)	17-109
WIRE SPK IN W CURB CULVER BLVD W RDWY, 11.8FT N OF BC CURB RETURN N OF WESTLAWN AVE, S END CB	22.871 85 (6.971)	22.772 80 (6.941)	22.898 70S (6.979)			17-110

	ELEV	TK	ELEV	TK	ELEV	TK	ELEV	TK		17-1102
SPK IN CURB CULVER BLVD, WEST RDWY, 24FT N/O MASCAGNI STREET N END CB	1[illegible].445 85 (5.927)		19.347 80 (5.897)							
STD SUR MON, VEN J-2A, ON CENTER LINE CULVER BLVD EAST ROADWAY, 49FT SOUTH OF CENTER LINE PRODUCED OF MASCAGNI STREET.	18.527 70 (5.647)		18.568 68P (5.660)		18.692 63S (5.697)					17-1103
WIRE SPK IN E CURB CULVER BLVD E RDWY, 38.3FT N OF BC CURB RETURN N OF BRADDOCK DR, N END CB ** GONE 1976 **	17.044 70S (5.195)									17-1104
SSM ON C/L INTER CULVER BLVD ELY RDWY & BRADDOCK DR	15.200 70 (4.633)		15.241 68P (4.645)		15.365 63S (4.683)					17-1105
WIRE SPK IN N CURB MCCONNELL AVE, 2.6FT W OF BC CURB RETURN W OF CULVER BLVD, W RDWY	15.043 85 (4.585)		14.947 80 (4.556)		15.072 70S (4.594)					17-1106
STD SUR MON, VEN I-2, ON THE INTER OF CENTER LINE CULVER BLVD AND CENTER LINE PRODUCED OF BEETHOVEN STREET, 4FT SOUTH OF MOST SOUTHERLY CURB LINE PRODUCED OF SEARS SERVICE CENTER LOCATED AT #12870 CULVER BLVD.	12.363 70 (3.768)		12.404 68P (3.781)		12.517 63S (3.815)					17-1107
WIRE SPK IN E CURB CULVER BLVD, 7FT N OF SLY DRIVE-WAY TO BLDG #12870, 0.15MI SLY FROM MCCONNELL AVE	13.173 85 (4.015)		13.077 80 (3.986)		13.208 70S (4.026)					17-1108
WIRE SPK N CURB CULVER BLVD., 1 FT E OF BC CURB RETURN E OF OFF RAMP HWY 90 GOING EAST EAST BOUND ON RAMP	12.615 85 (3.845)		12.526 80 (3.818)		12.655 70S (3.857)					17-1109
BOLT IN ELY CORNER OF CONC BASE OF CROSSING SIGNAL AT NW SIDE OF CULVER BLVD ABOUT 135FT SW OF ALLA RD 13FT N OF P.E. RR TRACKS, 27FT SE OF S.P. RR TRACKS ** GONE 1973 **	12.874 63S (3.924)									17-1110
STD SUR MON, VEN I-3A, ON CENTER LINE CULVER BLVD, 0.12MI WESTERLY FROM FREEWAY 90, 55FT NORTH OF POWER POLE #32912M.	8.606 70 (2.623)		8.647 68P (2.636)		8.764 63S (2.671)					17-1111
BOLT IN W CURB LINCOLN BLVD, 52FT S OF BC CURB RETURN S OF FIJI WAY	8.940 85 (2.725)		8.848 80 (2.697)		9.030 75 (2.752)		8.918 74S (2.718)		8.948 74P (2.727)	17-1150

	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	E[illegible]	YR	BM N
BRA DISC *STMPD L.A.CO ENGINEER R.E. 7078* IN CONC MON, UNDER COVER, ON APPARENT CTR LINE INTERS OF FIJI WAY & ADMIRALTY WAY, IN THE MARINA COMPLEX	[illegible].440	80	15.622	75	15.518	74S	15.554	74P	15.562	70R	17-115
	(4.706)		(4.762)		(4.730)		(4.741)		(4.743)		
BOAT SPK IN THE INTER OF FIJI WY & ADMIRALTY WY, 0.7FT E OF BOAT SPK ON C/L EC, STA 17 PLUS 15.00, OF FIRST CURVE IN FIJI WY W OF LINCOLN BLVD ** GONE 1969 **	16.438	63									17-115
	(5.010)										
BRASS NAIL IN LEAD N CURB FIJI WAY, 1FT W/O BCR W/O ADMIRALTY WAT ** NOTE MILEAGE **	16.440	85									17-115
	(5.011)										
BRASS DISC *STMPD L.A.CO ENGINEER R.E. 7078* IN CONC MON,UNDER COVER, ON APPARENT CTR LINE 0.19MI W OF ADMIRALTY WAY, OPPOSITE DRVWY ENTRANCE TO FISHERMANS VILLAGE PARKING LOT	13.392	80	13.580	75	13.511	74P	13.519	70R			17-115
	(4.082)		(4.139)		(4.118)		(4.121)				
SPK 1FT N/O N CURB FIJI WAY, 6FT E/O DRIVE TO FISHERMANS VILLAGE, W END CB 0.14MI W/O ADMIRALTY WAY	14.137	85									17-115
	(4.309)										
USC&GS BM DISC *STMPD TIDAL NO. 4 1968* IN FIJI WAY 0.7FT N OF NLY CURB LINE, 138FT W OF WLY CURB LINE OF ENTRANCE TO FISHERMANS VILLAGE, W END CB 0.50MI WLY FROM ADMIRALTY WAY 0.64MI W/O ADMIRALTY WAY	12.713	85	12.615	80	12.790	75	12.681	74S	12.710	74P	17-116
	(3.875)		(3.845)		(3.898)		(3.865)		(3.874)		
USC&GS BM DISC *STMPD TIDAL NO. 3 1967* IN FIJI WAY IN CTR OF CURB RETURN AT S END OF MEDIAN; 53FT S OF CTR LINE DRVWY FOR PIECES OF EIGHT RESTAURANT 42.7FT E OF W CURB FIJI WAY	14.774	85	14.695	80	14.869	75	14.764	74S	14.798	74P	17-116
	(4.503)		(4.479)		(4.532)		(4.500)		(4.510)		
USC&GS BM DISC *STMPD TIDAL NO. 2 1967* IN FIJI WAY IN CTR OF CURB RETURN N END OF MEDIAN, 28FT S OF CTR LINE OF N DRVWY ENTRANCE TO ADMINISTRATION PARKING LOT, 0.69MI W/O ADMIRALTY WAY	15.226	85	15.131	80	15.310	75	15.198	74S	15.232	74P	17-117
	(4.641)		(4.612)		(4.666)		(4.632)		(4.643)		
USC&GS DISC * STMPD TIDAL NO. 1 1967 * IN NORTHEAST CORNER OF COAST GUARD BUILDING IN CONCRETE FOUNDATION, 29.5FT WEST OF CENTER FIJI WAY, 17FT SOUTH OF CENTER LINE OF DRIVE WAY NORTH OF COAST GUARD BUILDING.	14.728	85	14.593	80	14.759	75	14.641	74S	14.657	74P	17-117
	(4.489)		(4.448)		(4.499)		(4.463)		(4.467)		

	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	B
L A CO F C DISK IN TOP OF SW PIER TO OIL DERRICK, 67.5FT W OF CENTER LINE SPEEDWAY AND 37.5FT N OF CENTER LINE PROD 46TH AVE ** GONE 1963 **	16.459 (5.017)	60	16.502 (5.030)	56	16.569 (5.050)	55					17-
SPK W CURB PACIFIC AV 5FT N/O BCR N/O LIGHTHOUSE ST	13.199 (4.023)	85									17-
USC & GS DISK MARKED P-767-1945 SET IN S CURB OF BRIDGE 26.7FT E OF CENTER LINE ROADWAY OF PACIFIC AVE, 8FT S OF CENTER LINE PRODUCED, OF LIGHTHOUSE ST, *3.5FT E OF W END OF BRIDGE* ** GONE 1986 **	14.682 (4.475)	70	14.789 (4.508)	63	14.827 (4.519)	60	14.877 (4.535)	56	14.947 (4.556)	55	17-
STD SUR MON, VEN E-4, AT CENTER LINE INTER OF PACIFIC AVENUE AND LIGHTHOUSE STREET.	12.249 (3.733)	70R	12.247 (3.733)	70	12.554 (3.765)	63	12.391 (3.777)	60	12.440 (3.792)	56	17-
L.A.CFCD STEEL PIN IN LEAD, IN N CURB CULVER BLVD, 20.5FT E OF W BUILDING LINE OF APARTMENT COMPLEX AT #405, 0.09MI WLY FROM NICHOLSON STREET	4.042 (1.232)	85	3.947 (1.203)	80	4.110 (1.253)	75	4.022 (1.226)	74S	4.043 (1.232)	74P	17-
BOLT 1FT S/O S CURB CULVER BLVD, 49FT W/O BCR NICHOLSON ST, W END CB	3.973 (1.211)	85	3.868 (1.179)	80							17-
WIRE SPIKE IN SOUTH CURB CULVER BLVD, 54FT WEST OF CENTER LINE NICHOLSON STREET. ** GONE 1972 **	4.038 (1.231)	70	4.077 (1.243)	68P	4.169 (1.271)	63	4.222 (1.287)	60	4.270 (1.301)	56	17-
STD SUR MON, VEN G-5A, IN CULVER BLVD, 14FT SOUTH OF CENTER STRIPE, ON CENTER LINE P.I., OPPOSITE PP #1277854E, 512.7FT EAST OF CENTER LINE NICHOLSON STREET, 0.37MI WEST OF JEFFERSON BLVD.	3.236 (0.986)	75	3.145 (0.959)	74S	3.162 (0.964)	74P	3.154 (0.961)	70R	3.171 (0.967)	70	17-
STD SUR MON, VEN H-4, AT CENTER LINE INTER OF CULVER BLVD AND JEFFERSON BLVD.	4.690 (1.430)	75	4.579 (1.396)	74S	4.604 (1.403)	74P	4.595 (1.401)	70R	4.608 (1.405)	70	17-
PBM DISC STAMPED * 17-02311, 1979 * CTR HEADWALL, 7FT S/O S EDGE PAVEMENT JEFFERSON BLVD, 12FT ELY C/L INTERSECTION CULVER BLVD	5.548 (1.691)	85	5.482 (1.671)	80							17

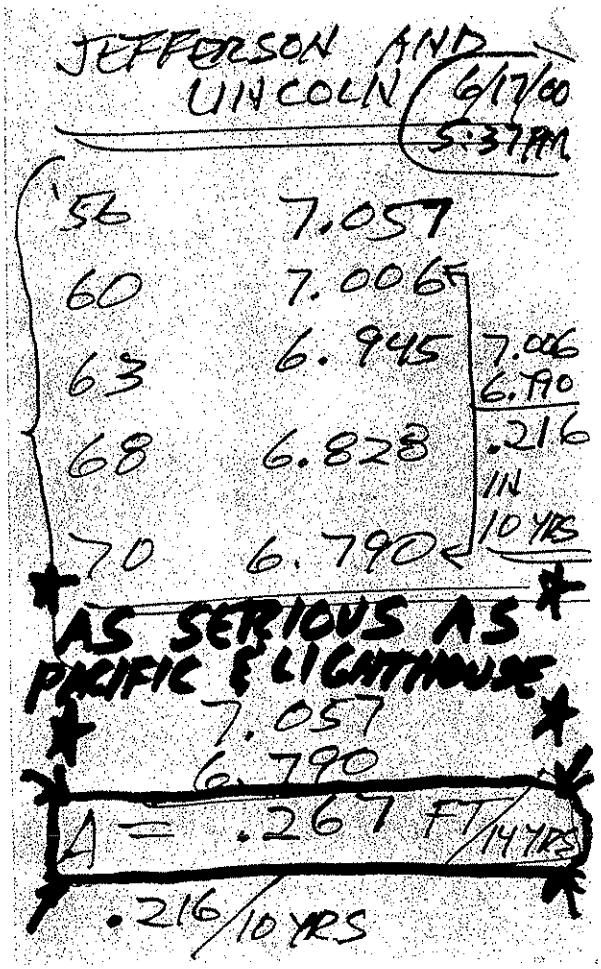
(SAT.) JUNE 17, 2000; 5:15 P.M.

PACIFIC AVE
AND LIGHTHOUSE

YR.	ELEVATION
'55	14.947
'56	14.877
'60	14.827
'63	14.789
'70	14.682

14.947
14.682
Δ = .265 FT
(15 YRS.)

	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	B
STD SUR MON, VEN J-5C, AT CENTER LINE INTER OF LINCOLN BLVD AND 83RD STREET.	131.653 (40.128)	75	131.587 (40.108)	74P	131.585 (40.107)	70R	131.605 (40.113)	70	131.642 (40.124)	68P	17-
SPK 1FT W/O W CURB LINCOLN BLVD, 10FT N/O C/L EC, 400FT N/O 83RD ST, N END CB	94.787 (28.891)	85									17-
STD SUR MON, VEN J-5B, IN CONC MON ON CENTER LINE P.I. OF LINCOLN BLVD FROM THE SOUTH, 0.22MI NORTH OF CENTER LINE 83RD STREET, 62.3FT NORTH OF A L&T IN EAST CURB ON CENTER LINE TANGENT SOUTH, 65.4FT SOUTHEAST OF L&T IN NORTHEAST CURB * BAR DAMAGED *	80.981 (24.683)	80	81.166 (24.739)	75	81.102 (24.720)	74P	81.093 (24.717)	70R	81.113 (24.723)	70	17-
SQ SPIKE IN W CURB LINCOLN BLVD 14.8FT S OF BC TO RDWY NEAR L A CITY LINE 0.55 MILES S OF JEFFERSON BLVD ** GONE 1969 **	51.086 (15.571)	63	51.154 (15.592)	60	51.196 (15.605)	56	51.250 (15.621)	55	51.293 (15.634)	53	17-
SSM ON CTR LINE LINCOLN BL., 27FT N OF N CURB LINE PROD OF N.O.S SERVICE ROAD TO THE EAST	46.381 (14.137)	85	46.316 (14.117)	80	46.502 (14.174)	75	46.432 (14.152)	74P	46.422 (14.149)	70R	17-
SQUARE SPK IN CULVERT HEADWALL, 50FT PLUS OR MINUS W OF C/L LINCOLN BL, 53FT S OF C/L PROD OF ROAD TO HUGHES AIRCRAFT. 0.28MI S OF JEFFERSON BLVD	6.988 (2.130)	85	6.913 (2.107)	80	7.094 (2.162)	75	7.017 (2.139)	74P	7.003 (2.135)	70R	17-
STD SUR MON, VEN I-4, ON CENTER LINE INTER OF JEFFERSON BLVD AND LINCOLN BLVD. ** GONE 1972 **	6.790 (2.070)	70	6.828 (2.081)	68P	6.945 (2.117)	63	7.006 (2.135)	60	7.057 (2.151)	56	17-
CITY OF L.A. SURV PBM *STMPD 17-02492 1973* 2FT E OF E CURB LINE OF LINCOLN BLVD, 19.4FT N OF BC CURB RETURN N OF JEFFERSON BLVD, N END CB	11.841 (3.609)	85	11.811 (3.600)	80	12.008 (3.660)	75	11.908 (3.630)	74S	11.949 (3.642)	74P	17-
WIRE SPK IN CULVERT HEADWALL, 49.5FT E/O C/L LINCOLN BLVD 45FT S OF CENTER LINE JEFFERSON BLVD ** GONE 1968 **	6.752 (2.058)	63	6.814 (2.077)	60	6.864 (2.092)	56	6.921 (2.110)	55	6.964 (2.123)	53	17-
LA CO FC DISC MARKED BM-115-228 SET IN HAND RAIL BASE AND ON E SIDE OF HAND RAIL 0.7FT N OF N ABUTMENT OF LINCOLN BLVD BRIDGE OVER BALLONA CREEK 0.26MI NLY FROM JEFFERSON BLVD *CDH BRIDGE #53 118*	19.610 (5.977)	85	19.521 (5.950)	80	19.589 (5.971)	74S	19.624 (5.981)	74P	19.618 (5.980)	70R	17-
CITY OF L.A. DISC IN W FACE OF MOST NLY COLUMN OF ABANDONED RR BRIDGE OVER LINCOLN BLVD. 4.5FT E OF E CURB, 0.33MI N OF JEFFERSON BLVD *STMPD T 977*	12.864 (3.921)	80	13.054 (3.979)	75	12.939 (3.944)	74S	12.972 (3.954)	74P	12.967 (3.952)	70R	17-


JEFFERSON AND LINCOLN
6/17/00
5:37AM
'56 7.057
60 7.006
63 6.945
68 6.828
70 6.790
7.006
6.790
.216
IN
10 YRS
AS SERIOUS AS PACIFIC & LIGHTHOUSE
7.057
6.790
Δ = .267 FT/14 YRS
.216/10 YRS

	[redacted]EV	YR	ELEV	YR	ELEV	YR	ELEV	YR	EL[redacted]	YR	BM NI
STD TRAV MON * STMPD VEN H-3 1951 * IN LINCOLN BLVD OF W EDGE CONC PVMT, 25FT N OF C/L OF DRVWY TO PIER 1 IMPORTS. 256FT N/N CURB FIJI WAY.VEN H3 1951	6.570	75 (2.003)	6.457	74S (1.968)	6.486	74P (1.977)	6.506	70 (1.983)	6.545	68P (1.995)	17-025
SPK S CURB MINDANAO WAY, 0.4FT E/O BCR LINCOLN BL, W END CB	8.553	85 (2.607)	8.455	80 (2.577)							17-025
STD TRAV MON * STMPD VEN H-3A 1951 * IN LINCOLN BLVD, 1.5FT EAST OF WEST EDGE CONCRETE PAVEMENT, 4FT NORTH OF PP #110719M, 4FT NORTH OF PP #1277914E 0.10MI NORTH OF MINDANAO WAY.	8.644	75 (2.635)	8.527	74S (2.599)	8.556	74P (2.608)	8.573	70 (2.613)	8.613	68P (2.625)	17-025
CUT SPK IN CULVERT HEADWALL 49FT W OF CENTER LINE LINCOLN BLVD 22FT S OF CENTER LINE PE RY TRACK 1FT S OF N END OF HEADWALL, 0.09MI N OF BALI WAY ** GONE 1975 **	13.119	74P (3.999)	13.138	70 (4.004)	13.178	68P (4.017)	13.271	63 (4.045)	13.324	60 (4.061)	17-025
USC&GS BM DISC *STMPD N 1217 1971* IN W HEADWALL, 1.5FT S OF N END, OF CONCRETE CULVERT, 6.7FT W OF W CURB LINE LINCOLN BLVD, 0.26MI NLY FROM MINDANAO WAY, 33FT N OF NLY RAIL OF OLD S.P. TRAN. CO. TRACK	14.022	85 (4.274)	13.921	80 (4.243)	14.104	75 (4.299)	13.994	74S (4.265)			17-025
STD TRAV MON * STMPD VEN G-2B 1951 * IN LINCOLN BLVD. 1.5FT WEST OF EAST EDGE CONCRETE PAVEMENT, IN FRONT OF BRICK BUILDING #4305 12FT NORTH OF POWER P #110709M, 0.12MI NORTH OF P.E RR RIGHT OF WAY.	14.639	74P (4.462)	14.650	70 (4.465)	14.691	68P (4.478)	14.784	63 (4.506)	14.826	60 (4.519)	17-026
SPK W CURB LINCOLN BLVD, 2FT S/O BCR E/O MAXELLA AVE	16.329	85 (4.977)									17-026
STD SUR MON, VEN G-2C, IN LINCOLN BLVD 5FT WEST OF CENTER LINE, 25.5FT NORTH OF SOUTH PROP LINE PRODUCED OF MAXELLA AVENUE, TO THE WEST.	15.184	80 (4.628)	15.373	75 (4.686)	15.260	74S (4.651)	15.291	74P (4.661)	15.301	70 (4.664)	17-026
USC&GS BM DISC *STMPD V 977 1964* W CURB LINCOLN BLVD, 4.8FT N OF N LINE BLDG #4111, S END OF MOST SLY OF TWO CULVERTS, 0.37MI N OF P.E. RR R/W ** GONE 1973 **	13.969	70 (4.258)	14.010	68P (4.270)							17-026
WIRE SPIKE IN W CURB LINCOLN BLVD 0.2 MILES S OF WASHINGTON BLVD N END CULVERT & 47FT N/O POLE #240834M ** GONE 1973 **	13.990	70 (4.264)	14.031	68P (4.277)	14.120	63 (4.304)	14.157	60 (4.315)	14.210	56 (4.331)	17-026

SPK [redacted] E END CB ON N'LY SIDE NOS SERVICE ROAD 0.64[redacted] W/O BM #27-18400, 244 PLUS 50	[redacted]81 85 (1[redacted]240)					17-18470
SSM ON C/L P.I. N.O.S AT THE INTERS OF SERVICE RD AND ROAD TO RADAR TOWER ON THE HILL, 146FT E OF E END OF CB, 10.5FT S OF N FLOW LINE OF RD 0.76MI W OF BM 17-18400, STA 234 PLUS 49.33	51.749 80 (15.773)	51.966 75 (15.839)	51.882 74P (15.814)	51.894 70R (15.817)	51.917 70 (15.824)	17-18500
SPK IN E END CB ON N'LY SIDE NOS SERVICE ROAD 0.82MI W/O BM #17-18400, 234 PLUS 40	53.320 85 (16.252)					17-1850[redacted]
SPK IN E END CB ON N'LY SIDE NOS SERVICE ROAD 0.93MI W/O BM #17-18400, 229 PLUS 00	53.100 85 (16.185)					17-1852[redacted]
SPK IN E END CB ON N'LY SIDE SERVICE ROAD 1.02MI W/O BM #17-18400, 224 PLUS 25	51.306 85 (15.638)					17-1854[redacted]
COPPER WIRE IN D.H. IN E RIM OF MH IN CTR OF SERVICE RD, 1.09MI W OF BM #17-18400 263FT N OF C/L TANGENT N.O.S. STA 219 PLUS 63.76 * RESET 1975 *	52.372 80 (15.963)	52.476 74P (15.995)	52.478 70R (15.995)	52.495 70 (16.000)		17-1855
SPK IN E END CB ON N'LY SIDE NOS SERVICE ROAD 1.13MI W/O BM #17-18400, 217 PLUS 30	50.541 85 (15.405)					17-1856
SSM IN CTR OF SERVICE RD, 115.1FT W OF SPK IN E END OF CB, 1.19MI W OF BM #17-18400 STA 213 PLUS 71.46	48.756 80 (14.861)	48.944 75 (14.918)	48.865 74P (14.894)	48.863 70R (14.893)	48.882 70 (14.899)	17-1860
2.5IN DISC IN N SIDE AT THE CENTER OF CONC STRUCTURE, INSIDE 5FT WIRE FENCE ENCLOSURE, 350FT S OF SSM OF 1ST ANGLE PT IN CENTINELA AVE, W OF SEPULVEDA BLVD *C/L N.O.S. 313 PLUS 33.30* **FROM THIS POINT PEG UP A WIDE DIRT RD TO THE TOP OF HILL, THEN LEFT TO END OF SPUR**	55.951 75 (17.054)	55.882 74P (17.033)	55.874 70R (17.030)	55.844 70 (17.021)		17-1875
SSM ON C/L N.O.S. @ STA 308 PLUS 88.32, ABOUT 750FT SLY OF FIRST C/L ANGLE PT IN CENTINELA AVE WEST OF SEPULVEDA BLVD, 270FT N OF W END OF 20FT CB AT THE INTERSECTION OF RIGGS PL & KENTWOOD AVE, ON WLY PRODUCTION OF CTR LINE OF CONCRETE WALK AT N SIDE OF ARIZONA CIRCLE, 4FT SW OF SHOULDER OF SLOPE * ABANDONED 1976 *	123.464 74P (37.632)	123.451 70R (37.628)	123.430 70 (37.621)			17-1877

	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	
SQ SPK, 2FT W OF W CURB LINE PRODUCED, OF KENTWOOD AVE, 50FT N OF CTR LINE RIGGS PL, IN W END 20FT CB	120.340 75 (36.680)		120.277 74P (36.660)		120.261 70R (36.656)		120.247 70 (36.651)				17-
WIRE SPK IN E END OF CB, N SIDE OF N.O.S. SERVICE ROAD, ABOUT 800FT WLY OF LINCOLN BLVD	52.234 85 (15.921)		52.159 80 (15.898)		52.344 75 (15.954)		52.270 74P (15.932)		52.264 70R (15.930)		17-
SSM ON C/L TANG. N.O.S. 0.32MI W OF LINCOLN BLVD 4FT N OF N FLOW LINE OF SERVICE RD & 53.3FT W OF 4IN PIPE GATE POST STA 182 PLUS 09.54	51.693 80 (15.756)		51.876 75 (15.812)		51.809 74P (15.791)		51.800 70R (15.789)		51.827 70 (15.797)		17-
SPK IN E END CB ON N'LY SIDE NOS SERVICE ROAD 0.34MI W/O LINCOLN BLVD, 182 PLUS 70	52.195 85 (15.909)										17-
SPK E END OF CB N SIDE OF SERVICE RD, 0.58MI W OF LINCOLN BLVD	52.956 85 (16.141)		52.877 80 (16.117)		53.057 75 (16.172)		52.994 74P (16.153)		52.974 70R (16.146)		17-
SPK IN E END CB ON N'LY SIDE NOS SERVICE ROAD 0.78MI W/O LINCOLN BLVD, 160 PLUS 40	51.266 85 (15.626)										17-
SPK IN E END CB ON N'LY SIDE NOS SERVICE ROAD 0.83MI W/O LINCOLN BLVD, 157 PLUS 00	51.703 85 (15.759)										17-
CHISEL CROSS WLY SIDE INNER RIM N.O.S. MH, NEAR C/L N.O.S. AT APPROX STA 159 PLUS 25, AT CTR OF R&O SERVICE RD, ABOUT 1000FT ELY OF INTER OF CABORA DR & FALMOUTH AVE, ABOUT 600FT WLY OF 8FT GAS CO CHAIN LINK FENCE ACROSS N.O.S. SERVICE ROAD	51.503 80 (15.698)		51.676 75 (15.751)		51.638 74P (15.739)		51.582 70R (15.722)		51.607 70 (15.730)		17-
SPK 1FT W/O W CURB SINALOA RD, 26FT S/O C/L PROD CABORA DRIVE, FRONT OF ELECTROLIER	56.138 85 (17.111)										17-
COPPER WIRE IN D.H., IN NLY RIM OF N.O.S. MH, ON APPROX C/L N.O.S. ABOUT STA 142 PLUS 00, 9FT NLY OF SLY CURB LINE PROD OF CABORA DR, 15FT WLY OF WLY CURB LINE OF SINALOA RD	16.204 80 (4.939)		16.365 75 (4.988)		16.284 74S (4.963)		16.283 74P (4.963)		16.289 70R (4.965)		17-
2.5IN BRONZE DISC STAMPED *VEN. L.A. CITY SURVEY, N.C.O.S. 32 PLUS 27.00, 1961*, ON C/L N.C.O.S., IN S SIDE OF 5FT DIAMETER CONC MH STRUCTURE, 1250FT N OF IMPERIAL HWY ALONG DIRT RD PASSING E OF CALIF. SAND CO. BLDG, 50FT W OF SAID RD, 215FT E OF P POLE #883845E, THE MOST ELY OF THE SIXTH SET OF POLES COUNTED NLY FROM THE CALIFORNIA SAND COMPANY PLANT ** GONE 1976 **	74.495 74P (22.706)		74.529 70 (22.716)								17

(METRIC IN PARENTHESES)

CABORCA & SINALOA

NEAR BILLOW VISTA

70	16.289
74P	16.283
74S	16.284
75	16.365
80	16.204

	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR
CITY OF L.A. SURV PBM *STMPD 17-05781 1973* 2FT N OF N CURB LINE JEFFERSON BLVD, 4.8FT E OF BC CURB RETURN E OF GROSVENOR BLVD, W END OF CB	13.415 (4.089)	85	13.323 (4.061)	80	13.514 (4.119)	75	13.433 (4.094)	74S	13.444 (4.098)	74P17-
CITY OF L.A. SURV PBM *STMPD 17-05785 1973* 1FT N OF N CURB LINE JEFFERSON BLVD, 8.3FT W OF BC CURB RETURN W OF WESTLAWN AVE, W END OF CB	14.183 (4.323)	85	14.111 (4.301)	80	14.326 (4.367)	75	14.249 (4.343)	74S	14.265 (4.348)	74P17-
STD SUR MON, VEN K-3, ON CENTER LINE JEFFERSON BLVD, 58.5FT W OF CENTER LINE PE RY TRACK, 0.37 MILES W OF CENTINELLA BLVD ** GONE 1973 **	14.425 (4.397)	70	14.461 (4.408)	68P	14.609 (4.453)	63	14.689 (4.477)	60	14.711 (4.484)	56 17-
CITY OF L.A. SURV PBM *STMPD 17-05800 1973* 3.9 FT N OF N CURB LINE JEFFERSON BLVD, 20FT E OF E END OF CONCRETE APRON FOR ELY DRIVEWAY TO COLLINS FOODS INTERNATIONAL AT #12731, IN NW CORNER OF CB	13.727 (4.184)	85	13.648 (4.160)	80	13.826 (4.214)	75	13.747 (4.190)	74S	13.769 (4.197)	74P17-
CUT SPK IN CULVERT HEADWALL, 1FT E/O W END, 23FT S OF JEFFERSON BLVD, 165FT W/O C/L INTER P.E.RY & JEFFERSON BLVD, W/O CENTINELLA BLVD ** GONE 1972 **	14.048 (4.282)	70	14.085 (4.293)	68P	14.232 (4.338)	63	14.315 (4.363)	60	14.337 (4.370)	56 17-
CITY OF L.A. SURV PBM *STMPD 17-05820 1973* 2FT N OF N CURB LINE JEFFERSON BLVD, 5FT E OF BC CURB RETURN E OF MC CONNELL AVE, W END CB	12.385 (3.775)	85	12.310 (3.752)	80	12.506 (3.812)	75	12.423 (3.787)	74S	12.453 (3.796)	74P17-
CITY OF L.A. SURV PBM *STMPD 17-05826 1973* 2.8FT S OF S CURB LINE JEFFERSON BLVD, 27.3FT E OF E CURB LINE PRODUCED, OF BEETHOVEN ST, IN NE CORNER OF CONCRETE FOOTING FOR TRAFFIC SIGNAL CONTROL BOX	13.963 (4.256)	85	13.967 (4.257)	80	14.154 (4.314)	75	14.072 (4.289)	74S	14.096 (4.296)	74P17-
CUT SPK IN CULVERT HEADWALL, 1FT E OF W END, 25.5FT S OF CTR LINE JEFFERSON BLVD, ABOUT 400FT W OF BEETHOVEN ST, 30FT E OF DRIVEWAY TO POWER STATION, 0.22MI W OF MCCONNELL AVE, 0.5MI E OF LINCOLN BLVD ** GONE 1972 **	9.180 (2.798)	70	9.217 (2.809)	68P	9.393 (2.863)	63	9.467 (2.886)	60	9.508 (2.898)	56 17-
CITY OF L.A. SURV PBM *STMPD 17-05845 1973* 4FT W OF W CURB LINE OF ALLA RD, 10.2FT N OF BC CURB RETURN N OF JEFFERSON BLVD, N END CB	12.287 (3.745)	85	12.208 (3.721)	80	12.388 (3.776)	75	12.290 (3.746)	74S	12.317 (3.754)	74P17-

	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR
STD SUR MON, VEN I-4B, ON CENTER LINE JEFFERSON BLVD, 1.05MI WESTERLY FROM CENTINELA AVENUE, 68FT EAST OF PP #310227M. ** GONE 1973 **	7.898 (2.407)	70	7.935 (2.419)	68P	8.081 (2.463)	63	8.146 (2.483)	60	8.191 (2.497)	56 17
CITY OF L.A. SURV PBM *STMPD 17-05865 1973* 2FT E OF E CURB LINE OF BAY ST, 10.8FT N OF BC CURB RETURN N OF JEFFERSON BLVD, N END CB	12.746 (3.885)	85	12.694 (3.869)	80	12.883 (3.927)	75	12.783 (3.896)	74S	12.823 (3.908)	74P17-
WIRE SPIKE 25.5FT S OF JEFFERSON BLVD 234.5FT E OF CENTER LINE LINCOLN BLVD, 0.5FT E OF W END OF CULVERT HEADWALL ** GONE 1972 **	7.930 (2.417)	70	7.968 (2.429)	68P	8.086 (2.465)	63	8.151 (2.484)	60	8.203 (2.500)	56 17-
WIRE SPIKE IN W CURB CENTINELA AVE 0.8FT N OF BC CURB RET N OF MATTESON AVE ** GONE 1963 **	56.736 (17.293)	60	56.768 (17.303)	56	56.820 (17.319)	55	56.848 (17.327)	53		17-
WIRE SPIKE IN W CURB CENTINELA AVE 1.2FT S OF BC CURB RET S OF MATTESON AVE	55.905 (17.040)	85	55.823 (17.015)	80	56.036 (17.080)	75	55.974 (17.061)	70	56.021 (17.075)	68P17-
WIRE SPIKE IN W CURB CENTINELA AVE .5FT N OF BC CURB RETURN NORTH OF BARBARA AVENUE.	54.685 (16.668)	80	54.889 (16.730)	75	54.829 (16.712)	70	54.876 (16.726)	68P	54.987 (16.760)	63 17-
WIRE SPK IN W CURB CENTINELA AVE, 0.5FT N/O BC RET N/O CASWELL AVE	52.664 (16.052)	85	52.592 (16.030)	80	52.796 (16.092)	75	52.738 (16.075)	70	52.785 (16.089)	68P17-
WIRE SPIKE IN W CURB CENTINELA AVE 0.7FT N OF BC CURB RET N OF MITCHELL AVE	50.650 (15.438)	80	50.844 (15.497)	75	50.817 (15.489)	70	50.864 (15.503)	68P	50.967 (15.535)	63 17-
STD SUR MON, SAW I-12B, ON CENTER LINE INTER OF CENTINELA AVENUE AND MITCHELL AVENUE, FROM THE WEST ** GONE 1960 **	50.717 (15.459)	56	50.764 (15.473)	55						17-
WIRE SPIKE IN W CURB CENTINELA AVE 0.8FT S OF BC CURB RETURN NORTH OF WASHINGTON PLACE.	49.109 (14.968)	75	49.062 (14.954)	70	49.108 (14.968)	68P	49.269 (15.017)	60	49.318 (15.032)	56 17-
STD SUR MON, VEN I-1A, CENTER LINE CENTINELA AVENUE 13.2FT SOUTH OF CENTER LINE WASHINGTON PLACE. EAST * RESET 1969 *	47.796 (14.568)	56	47.846 (14.583)	55	47.886 (14.596)	53				17-
WIRE SPK IN S CURB WASHINGTON PL, 21.5FT E OF BC CURB RET E OF CENTINELA AVE, E END CB	48.468 (14.773)	85	48.386 (14.748)	80	48.585 (14.809)	75	48.530 (14.792)	70	48.576 (14.806)	68P17

oil fields / gas storage

GR16

CANADIAN INTERNATIONAL
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ENVIRONMENTAL HAZARDS AND MITIGATION MEASURES FOR OIL AND GAS FIELD OPERATIONS LOCATED IN URBAN SETTINGS

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ABSTRACT

This paper presents a methodology for evaluating the environmental hazards posed by gas migration from oil and gas reservoirs, or underground natural gas storage facilities, and into the near-surface environment. Geological faults and improperly completed or abandoned well bores (e.g., due to poor cementing practices) are described as the primary pathways by which the gas can reach the surface. Furthermore, the gas migration problem can be exacerbated by such factors as subsidence, earthquake activity and well corrosion.

Soil gas monitoring, geochemical gas fingerprinting and geological profiling are used in order to identify the magnitude and location of the environmental risks. Shallow and deep soil probes are used in order to characterize the near-surface hydrology, and to identify possible collector zones where gas concentrations can build to dangerous levels.

These techniques have proven to be important in the planning for and design of mitigation systems necessary to protect residential and commercial properties from the migrating gases. For example, some jurisdictions have imposed regulatory controls and design requirements regarding the installation of gas mitigation systems. Also, these methods are important in establishing safe procedures for the operation of oil and gas fields, or underground natural gas storage facilities.

A number of case histories are discussed that have been used by the authors to validate the methodology, and to illustrate the seriousness of the problem. A clear case is made for the need to perform ongoing monitoring for these conditions, especially in an urban setting.

INTRODUCTION

The major paths for vertical migration of gas are formed by natural faults and fractures in the rock formations that overlie the reservoir. Natural lithification processes and tectonic activities formed these breaks or channels. These are illustrated in Figure 1 as subtending zones I, II, and III. However, in many geological settings, these fault zones can be discontinuous, but still allow the gas to literally hopscotch from one fault to another, or to act in conjunction with leaking wellbores in the same manner.

Wellbores of operational, idle or abandoned wells often result in literally pipeline flow of large volumes of gas to the surface. This is an especially serious problem where the well, usually in the annular space between the drill hole and the casing, was not properly sealed with cement. Also, the wellbore may have been hydraulically fractured during the cementing phase of well completion. Vertical fractures may extend for tens of feet from the wellbore depending upon the characteristics of the formation and the injection pressures used for placement of the cement. The cement will fill some of the larger fractures surrounding the casing, but the cement particles cannot enter the smaller fractures away from the wellbore.

SOURCES OF GAS FOR MIGRATION

During the course of oilfield production, fluid is produced from the reservoir causing a drop in pressure. This liberates the gas held in solution, and allows the gas to migrate. The free gas can migrate upward due to differences in the specific weight between the gas and the surrounding fluids (viz., upward buoyancy forces). Figure 1 illustrates the migration of gas from the reservoir to secondary collector zones, and eventually to the surface.

Initially, the gas is trapped below the caprock within the reservoir, forming a free gas zone. However, this free gas can escape through the caprock due to natural fractures in the caprock or man-induced fractures. Man-induced fractures include: wellbores penetrating the caprock during drilling, fracturing pressures occurring during oilfield operations, or by subsidence resulting from production of fluids from the reservoir.

Well completion practices rely upon squeezing cement slurry into the annular space between the drillhole and the steel casing. However, the inevitable movement of the rock formation resulting from the subsidence can destroy the intended sealing joint at the caprock interface. Once through the caprock, the gas can follow faults and fractures, as illustrated by Zone III, in Figure 1. In Zone III, secondary gas traps can often be found where layers of shale or other impervious layers slow down the upward migration of gas and permit it to gather in pockets. Figure 2 is presented to illustrate the interaction between subsidence and gas migration.

In secondary and tertiary recovery operations, water is often injected under high pressure into the reservoir to increase the production of oil. This water displaces the free gas in the reservoir, forcing the gas to migrate under this pressure influence. This free gas is then able to migrate along the paths described above, toward the surface.

The 1985 Fairfax Explosion and Fires

The phenomenon of natural gas migrating to the earth's surface from oil and gas field reservoirs via geological faults, fractures and well bores is a serious environmental problem. An explosion hazard is created if the gas collects in a confined space and reaches a five percent (5%) mixture ratio

with air (viz., the lower explosive limit for natural gas). The Ross Department Store in the Fairfax area of Los Angeles, California exploded on March 24, 1985, seriously injuring 23 people. Fires burned for days through cracks in the sidewalks and parking lots until a vent well was drilled to relieve the pressure build-up. Extensive investigations, including gas fingerprinting, confirmed that the gas had migrated to the surface along faults and poorly maintained well bores. Shallow soil gas probe holes were installed to monitor any future build-up of gas. In 1989 these gas monitoring wells indicated that large volumes of gas were again building up under the site. Fortunately, the area was evacuated immediately. It was discovered that the single vent well, that had been installed to vent the gas, had become plugged with silt at the slotted interval depth of 80 feet.

Other serious gas seeps have occurred in this area over many years. It is also the location of the famous La Brea Tar Pits where gas and oil continually migrate to the surface along the 6th Street Fault. This site has been used by the authors as a large "natural laboratory" to study and research the phenomenon of gas migration discussed in this paper. Over the past 15 years, this research has been expanded to address similar gas migration problems located in many parts of the world. This paper will provide an overview of these findings. References 1 through 5 provide a detailed treatment of these topics, including an analytical formulation of the gas migration mechanisms.

THE 2001 HUTCHINSON, KANSAS EXPLOSION AND FIRES

Research on these topics is continuing at the University of Southern California, including at the graduate student level. This is expected to contribute important new information to the understanding of the geological, geochemistry and hydrogeology principles that control gas migration. The most recent incident that is under investigation is the natural gas explosion that destroyed the downtown area of Hutchinson, Kansas on January 17, 2001. The next day, natural gas exploded under a mobile home park outside of the city, killing two people. Gas and water geysers reached heights of 30 feet. The gas leaks were traced to an underground natural gas storage field located nearly seven miles from the explosion sites. The gas had migrated through geological faults and permeable formations from leaking well bores at the storage site. Investigation has revealed that virtually no monitoring was in place in order to prevent this disaster. Worse yet, the emergency

response teams had no clue as to the cause of the disaster. For example, the fire department was unable to extinguish the flames, illustrating the lack of preparedness for such an event. In the case of the 1985 Fairfax explosion, the fire department had been called, and had responded to gas odors in the area 30 minutes before the explosion. Because of their lack of preparedness, they mistakenly believed it was sewer gas, and returned to the fire station. Shortly thereafter, the alarm was sounded to respond to the explosion and fire that devastated the area that they had just returned from.

ENVIRONMENTAL HEALTH HAZARDS OF CERTAIN OIL FIELD CHEMICALS

Additional concerns regarding the environmental hazards of oil and gas migration in urban areas are the carcinogenic, toxic and neurotoxin constituents that are contained within the oil field gases. These include the so-called BTEX chemicals comprising benzene, toluene, ethylbenzene and xylene. For example, benzene and toluene are contained on the so-called Governor's List of toxic chemicals within the State of California, and require a posting of warning signs to the public under the Proposition 65 environmental laws. Benzene is a known human carcinogen, and can cause blood disorders, including aplastic anemia and leukemia, as well as cancer. Benzene and toluene can cause birth defects. Both chemicals are highly volatile, and can easily transform from the liquid crude oil state into the natural gas state (e.g., associated gas), especially under reservoir pressure conditions.

This also becomes a serious problem in partially depleted oil fields that have been converted to underground natural gas storage operations. The storage gas is pumped into the oil field reservoir under high pressure. Frequently, 60% to 70% of the original crude oil still remains in place. When the storage gas comes in contact with the crude oil, aromatic hydrocarbons are transferred from the crude oil to the natural gas stream, enhancing the presence, particularly, of benzene and toluene. When the storage gas is retrieved to the surface for customer delivery, the gas must be processed through scrubbers and dehydration surface equipment. This provides an opportunity for these chemicals to escape into the atmosphere as fugitive emissions, or intentional releases. As a minimum, vapor recovery systems are necessary to control fugitive emissions. Billions of cubic feet of

storage gas can be withdrawn from inventory over a short period of time, increasing the health hazard risks to the surrounding community.

Furthermore, the natural gases that escape to the surface along well bores, faults and pipeline leaks will contain these health hazard chemicals. Also, workers need to be protected against these hazards, especially from long-term exposure.

HYDROGEN SULFIDE ENVIRONMENTAL HAZARDS

Another serious problem is caused by the hydrogen sulfide formation that can occur when the leaking natural gas stream interfaces with high sulfate levels in the near-surface water table. This can give rise to the perpetual generation of hydrogen sulfide through microbial alteration under anaerobic sulfate to sulfide reducing conditions. Hydrogen sulfide is not only highly corrosive, but is a neurotoxin, that must be considered a health hazard even at levels as low as 1 ppm (Kilburn, 1998; Kilburn, 1999).

The corrosive conditions of hydrogen sulfide on both steel casings and cement are well known (Craig, 1993). However, oil field operators, especially regarding the longevity of well completions and well abandonments, often ignore the long-term consequences of hydrogen sulfide, and other corrosive soil conditions. Namely, the steel casings and cement completion practices can be expected to develop gas leaks to the surface as a result of future aging. Accordingly, it would be ill advised to allow building over abandoned well bores, regardless of how carefully they were abandoned with cement seals and plugs. Also, access to the wells with oilfield drilling rigs would be necessary in order to repair leaks that could develop at any time in the future.

Although this research has been devoted to evaluating the environmental hazards of gas migration, these same topics are important regarding near-surface exploration for oil and gas. In fact, the research methodology – especially soil probe studies – evolved originally from this exploration technology point of view. Namely, near-surface exploration for petroleum is based on the detection and interpretation of a great variety of natural phenomena occurring at or near the land surface or sea floor and attributed, directly or indirectly, to hydrocarbons migrating upward from leaky reservoirs at depth. Development of surface exploration methods began in the early 1930's with chemical analysis of gaseous hydrocarbons in

soil air. It has since expanded to include a wide range of geochemical, geophysical, mineralogic, microbiological and other types of anomalies (Toth, 1996).

MITIGATION SYSTEMS OVERVIEW

Mitigation systems, both passive and active, have been developed in recent years in an attempt to cope with the gas migration hazards discussed in this paper. Many of these remain unproven. For example, the most common procedure is to install a geomembrane or plastic liner under the footprint of the structure being built in order to capture the upward migrating gases. Perforated pipes are installed in a gravel blanket located under the membrane in order to vent the gases that are collecting below the structure. These systems have demonstrated a high failure rate. The membranes can become punctured during installation, and/or develop leaks around the multiple penetrations that must accommodate utility and electrical lines, elevator shafts and pilings used for foundations. Gas detectors, used in conjunction with the membranes, require ongoing maintenance and calibration.

These mitigation systems have typically not been designed to deal with the health hazards of the migrating gas, but only to prevent a catastrophic explosion. This is a serious oversight, since the most dangerous chemical constituents of the leaking gas are heavier than air. For example, benzene, toluene and hydrogen sulfide are all heavier than air, and will tend to concentrate at ground level, and lower elevations, creating an inhalation hazard to those living and working in the area.

In summary, ongoing monitoring for the prevention of explosions and fires is essential, along with monitoring for health hazard conditions. The latter requires, at least, an order of magnitude lower threshold detection limits to protect against an inhalation health hazard.

NATURAL GAS STORAGE FIELDS

It has become common practice to utilize depleted oilfields for the purpose of storing large volumes of natural gas underground. It is more economical to store gas in underground reservoirs than construct large

delivery lines, typically from out-of-state sources, that would be capable of satisfying peak demands. Gas is purchased and delivered to the storage field during non-peak demand periods, and retrieved from the storage field during high demand periods, such as during cold spells.

Underground gas storage facilities utilizing old, depleted oil and gas fields are subject to the same gas migration hazards as discussed above, but are often times more serious. The existing wellbores and well completions were not designed to withstand the high pressures that most gas storage facilities are operated at, nor the cyclical variations in pressure experienced by the seasonal high and low operating pressures. For example, during inventory draw-down the cement seals at the bottom of the casing can fail, causing shoe leaks and other seal damage.

Abandoned wells associated with the prior oil or gas field usage, are difficult, if not impossible to reenter and seal in order to prevent gas leakage. Also, since these wells do not allow direct monitoring, gas seepage can be detected only at the surface. However, the leaking gas can spread out and migrate along fault planes, and/or experience lateral migration within the shallow water table, before ever reaching the surface. This can act to conceal the true dangers of the leaking wells. These problems require the placement of deep soil probes, positioned immediately adjacent to the well bores. Also, gas levels within the near-surface water table require monitoring. Field experience has demonstrated that the near-surface water table can serve as a temporary barrier for the upward migration of gas. Often, the gas will collect below the water tale, and spread out laterally before eventually reaching the surface.

For these reasons, it is important to perform a detailed characterization of the near-surface hydrology, including gas concentrations, free gas volumes and water movement directions. The individual gas constituents (e.g., methane, ethane, propane, etc.) have different solubility levels, and must be accounted for when attempting to characterize the origin of the leaking gases.

Gas fingerprinting studies must account for a number of near-surface gas alterations in order to properly interpret the source of the leaking gas. The primary adjustment factor is to account for the mixing between the native oilfield gas and the gas storage gas during migration using a so-called

mixing line. Also, near-surface mixing with biogenic gas can alter the characterization of the gas.

Underground gas storage facilities are frequently located in urban areas where gas, migrating to the surface can cause serious environmental problems. Examples include the following:

(1) MONTEBELLO GAS STORAGE FIELD, CALIFORNIA

The Montebello Oilfield, located in Southern California, was utilized by a gas company to store large volumes of natural gas in a partially depleted oilfield. Prior to converting the Montebello field to a gas storage facility, many oil wells had been abandoned using standards that were based on 1930's vintage technology. The old oilfield also contains several fault planes that are potential paths for gas migration.

The gas company began storing gas in a portion of the Montebello Oilfield in the early 1960's. By the early 1980's, significant gas seepages were discovered at the surface within a residential housing area. The gas seepages endangered homes, requiring evacuation of families. Some of the homes had to be torn down in order to provide access to leaking wells, that were attempted to be reabandoned. Monitoring of the near-surface water table for gas concentrations was undertaken on an emergency basis. Also, gas was found leaking up under the City Hall front lawn.

Because of the endangerment to the homes, and the huge economic losses suffered by the gas company from the lost gas, this storage facility has been closed.

(2) PLAYA DEL REY GAS STORAGE PROJECT

The Playa del Rey Oilfield was converted into a gas storage field in 1942. Shortly thereafter, storage gas was discovered migrating into the adjoining Venice Oilfield at the reservoir level of approximately 6,000 feet. Gas began migrating when the differential pressure reached approximately 300 psi. The storage field has been operated continuously to the present time, with storage gas pressures reaching approximately 1700 psi. A study, performed by the gas company in 1953, estimated that 25% of the injected gas was migrating to the adjoining Venice Oilfield. The operational procedure is based on capturing as much of the leaking gas as possible, and returning it to the primary storage field on an ongoing basis. This requires

numerous old oil wells to be used as recapture gas wells, in order to return the leaking gas.

Over 200 abandoned oil wells are in the area, which used 1930's era technology for the well completions. High-density housing has been built throughout the area, with many homes constructed directly over the old abandoned wells. Virtually no mitigation measures have been provided to deal with the gas migration hazards.

Recent soil gas studies have revealed gas concentrations as high as 90%, within the near-surface soil conditions. Soil probes and vent wells that have been drilled into the near-surface aquifer have measured gas flow rates as high as 25 to 30 liters per minute. One soil gas measuring expert has characterized the area as having the largest gas seep to be found anywhere in the world.

The City of Los Angeles has only recently begun to require mitigation systems to be installed in new construction, but only in the extremely high gas zones. The lessons learned from the Fairfax gas explosion, and the more recent Hutchinson, Kansas gas explosions have been largely ignored.

CONCLUSIONS

If future disasters are to be averted, careful attention must be given to the monitoring for oilfield gas migration hazards. Furthermore, addressing the health hazards posed by certain chemical constituents such as benzene, toluene and hydrogen sulfide requires much lower detection thresholds to be used for monitoring purposes: within the 1 ppm range. Mitigation systems have not proven to be capable of dealing with these extreme hazards.

The main conclusions to be drawn from this paper can be summarized as follows:

1) The primary force controlling the migration of gas to the surface is the difference between the specific weight of water and that of gas (viz., the buoyancy force).

2) Gas migration occurs along faults, and behind wellbore casings to the surface. The volume of gas migration toward the surface is directly related to the type and width of the path along which it migrates.

3) Gas migration can create surface hazards if the gas is allowed to concentrate in localized collector zones (secondary traps), including the collection in shallow water tables.

4) It is not advisable to build over abandoned wellbores. Over time, the cement and well casing will deteriorate resulting in the creation of paths for gas migration to the surface. The migrating gas is both an explosion hazard, and a health risk, because of the presence of chemicals that can cause cancer, birth defects and central nervous system dysfunction.

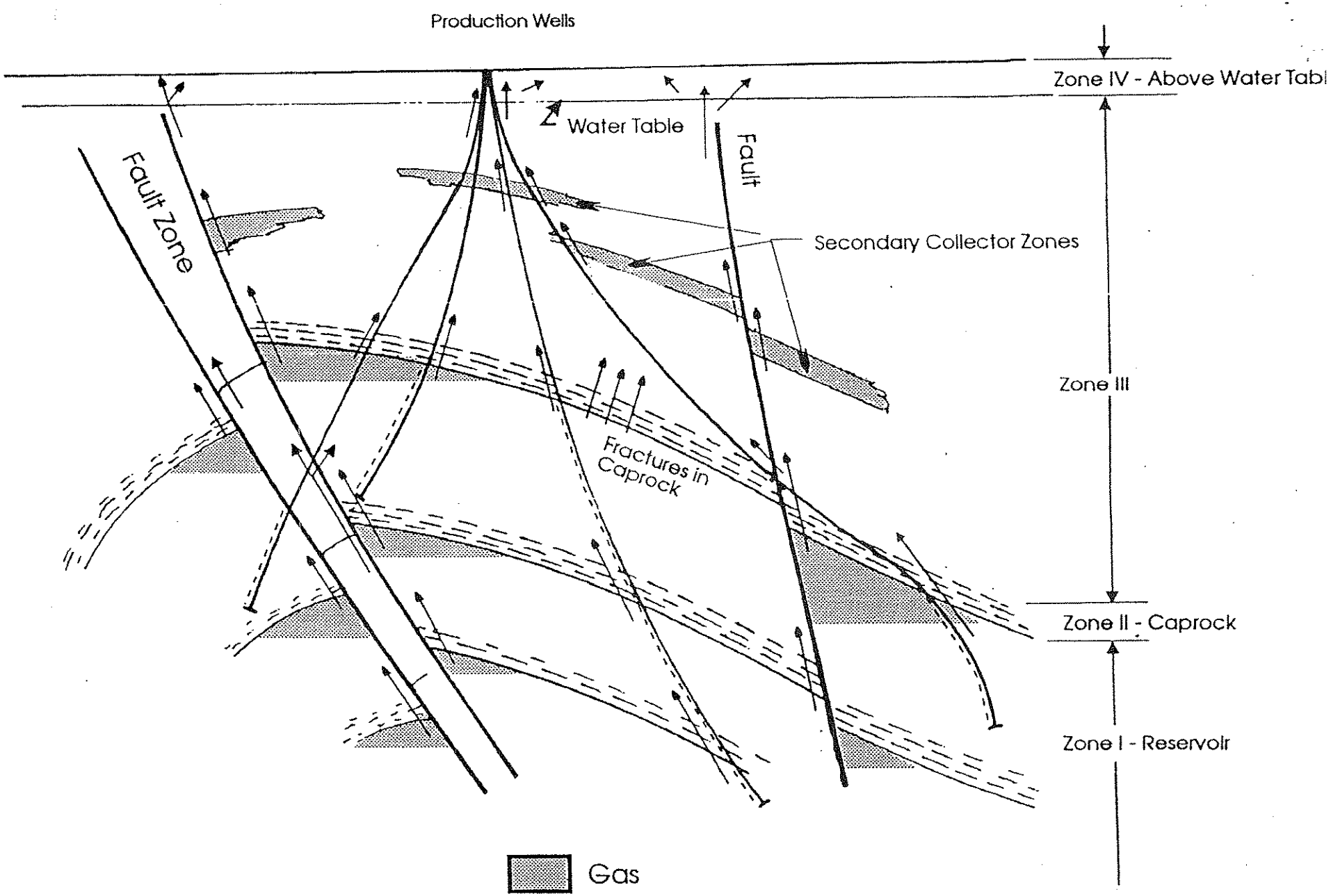
5) Underground natural gas storage facilities have demonstrated a long history of gas migration problems. Gas migration hazards are aggravated because of the high reservoir pressures. Experience has shown that these facilities should not be located anywhere close to urban settings. The Hutchinson, Kansas gas explosion demonstrated that the storage gas can migrate many miles (in that case, seven miles to the explosion site).

6) To avoid catastrophic events as described in this paper, a fundamental awareness and understanding of the gas migration hazards and paths of migration would permit taking preventative steps. A detailed risk assessment needs to be performed for existing facilities, including the development of an emergency response plan.

These results have been presented so that individuals, and responsible governmental entities, will begin to take the necessary steps to protect the public health and safety from these dangers.

REFERENCES

1. KHILYUK, L.F., CHILINGAR, G.V., ENDRES, B.L., and ROBERTSON, J.O., 2001. Gas Migration – Events Preceding Earthquakes, *Butterworth-Heinemann Publisher, 225 Wildwood Ave., Woburn, Massachusetts.*
2. GUREVICH, A.E., ENDRES, B.L., ROBERTSON, J.O., and CHILINGARIAN, G.V., 1993. Gas Migration from Oil and Gas Fields and Associated Hazards, *J.Pet.Sci.Engr., 9:223-228.*
3. GUREVICH, A.E., and CHILINGARIAN, G.V., 1993. Subsidence Over Producing Oil and Gas Fields, and Gas Leakage to the Surface, *J.Pet.Sci.Engr., 9:239-250.*
4. KATZ, S.A., KHILYUK, L.F., and CHILINGARIAN, G.V., 1994. Interrelationships Among Subsidence Owing to Fluid Withdrawal, Gas Migration to the Surface and Seismic Activity. Environmental Aspects of Oil Production in Seismically Active Areas. *J.Pet.Sci.Engr., 11:103-112.*
5. ENDRES, B.L., CHILINGARIAN, G.V., and YEN, T.F., 1991. Environmental Hazards of Urban Oil Field Operations. *J.Pet.Sci.Engr., 6:95-106.*
6. CRAIG, B.D., 1993. Sour-Gas Design Considerations, *Society of Petroleum Engineers, Inc., Monograph Volume 15.*
7. TOTH, J., 1996. Thoughts of a Hydrogeologist on Vertical Migration and Near-Surface Geochemical Exploration for Petroleum, *AAPG Memoir 66, p.279-283.*
8. HOLYSH, S., and TOTH, J., 1996. Flow of Formation Waters: Likely Cause for Poor Definition of Soil Gas Anomalies Over Oil Fields in East-Central Alberta, Canada, *AAPG Memoir 66, p.255-277.*
9. ALLISON, M.L., 2001. The Hutchinson Gas Explosions: Unraveling a Geologic Mystery, *Kansas Bar Association, 26th Annual KBA/KIOGA Oil and Gas Law Conference, vi, p.3-1 to 3-29.*
10. KILBURN, K.H., 1998. Chemical Brain Injury, *Van Nostrand Reinhold Publisher.*
11. KILBURN, K.H., 1999. Evaluating Health Effects From Exposure to Hydrogen Sulfide: Central Nervous System Dysfunction, *Environmental Epidemiology and Toxicology 1, p.207-216*



POTENTIAL PATHS OF GAS MIGRATION

FIGURE 1.

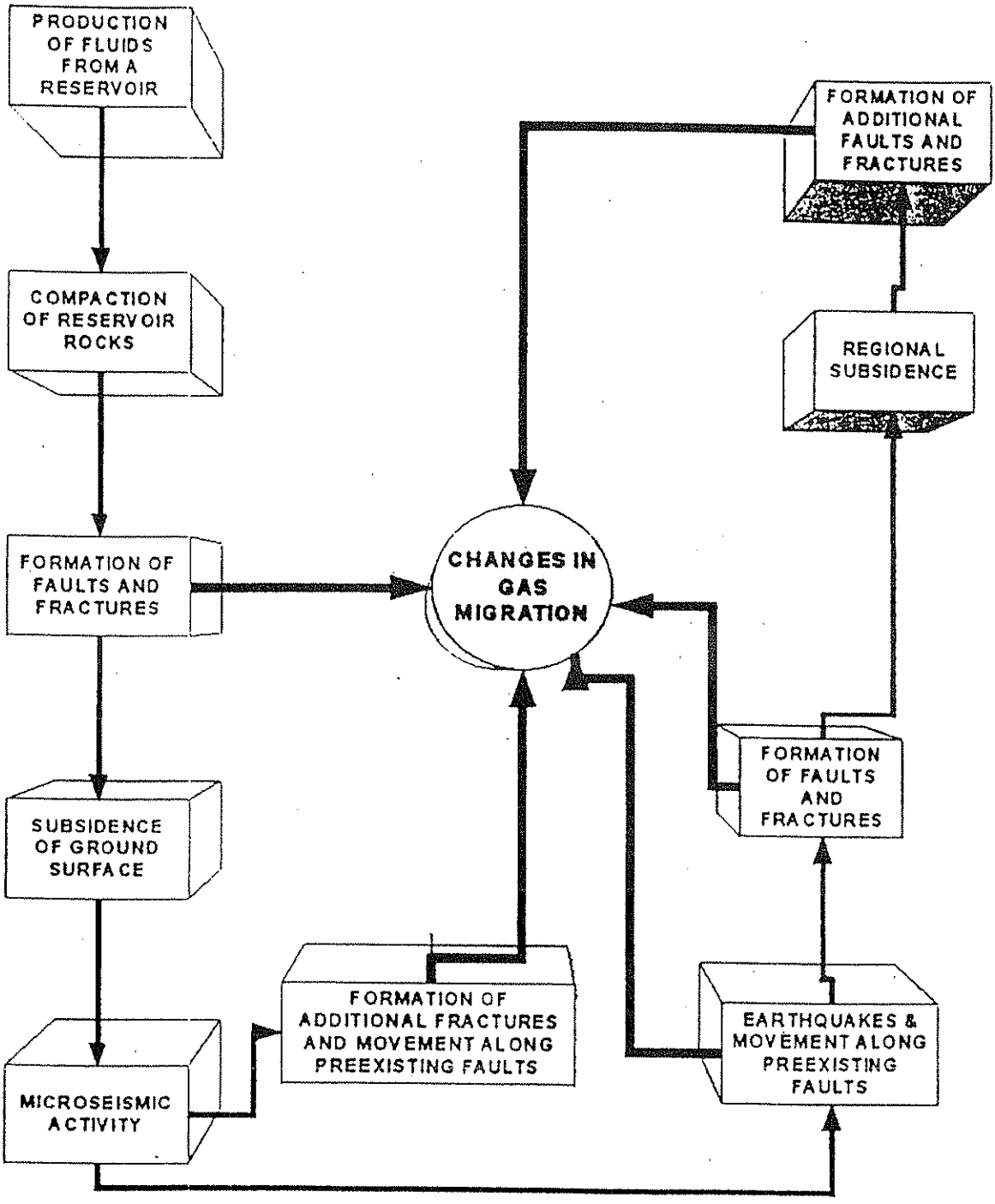


FIGURE 2. Schematic diagram of system relationships among the production of fluids, compaction, subsidence, and seismic activity.

Post gas migration explosions + fires - Kansas - Protocol -

GEOLOGY OF NATURAL GAS PATHWAYS AND ACCUMULATIONS UNDER HUTCHINSON, KANSAS

Presented to the House Environment Committee

March 13, 2001

M. Lee Allison, PhD, R.G.
State Geologist and Director
Kansas Geological Survey
University of Kansas

The Kansas Geological Survey is tasked under statute to investigate and report on the natural resources of the state. We are established as a research unit of the University of Kansas to bring unbiased and scientifically sound expertise to bear on resource issues.

Our role in the Hutchinson situation began the day after the trailer park explosions when it became known that geological investigations were needed. We served initially as geologic advisors to KDHE. When many of the early vent wells turned out to be dry holes, it became clear that complex geologic conditions were likely controlling the pathways and accumulations of the gas. Our work consisted of:

- Determining what layers might serve as geologic conduits for gas under the city;
- Compiling subsurface information on the shape and nature of the geologic layers;
- Compiling information on sinkholes and subsidence in the Hutchinson area;
- Examining rock cores from the Yaggy field and surrounding oil and gas fields;
- Examining geophysical wireline logs from wells to identify possible conduits;
- Producing subsurface geologic maps of relevant horizons;
- Developing a geologic model to guide drilling of vent wells and other remediation actions;
- Recommending additional investigative and exploratory steps.

The Kansas Geological Survey has done the following so far:

- Collected, processed, and interpreted a 3.5-mile long seismic reflection line along Wilson Road between Yaggy and Hutchinson, and a _ mile long line at Rice Park;
- Completed specialized computer processing on the seismic data to identify two possible gas-bearing amplitude anomalies (both were drilled and produced gas);
- Created structure contour maps on a variety of geologic horizons using 3700 oil and gas wells;
- Created a detailed structure contour map on the gas-bearing layer using water well and vent well data;
- Identified and correlated the gas-bearing layer on geophysical logs from oil and gas wells and vent wells in the area;
- Compiled reports on the history of subsidence in the Hutchinson area;

- Examined well cores to determine the geologic origin of the gas-bearing layers in order to predict possible pathways, including the Atomic Energy Commission core in Rice County;
- Acquired, digitized, and processed sonic well logs to create a synthetic seismogram to correlate the seismic lines to the wells;
- Calculated that there are geologically feasible conditions under which high-pressure gas could have traveled 7 miles underground in a few days;
- Examined outcrops in the region that might be equivalent to the gas-bearing layer;
- Advised the Groundwater Management District on a groundwater-monitoring program;
- Analyzed brine samples from the geysers for inorganic materials for source studies;
- Considered the potential for subsidence due to collapse of brine well caverns;
- Produced digital orthophoto quadrangle air photos for plotting data;
- Briefed federal, state, and local officials on the geology;
- Briefed U.S. Department of Energy and NASA; discussed cooperative efforts;
- Organized a one-day technical meeting for involved parties to plan further geologic investigations;
- Worked with KDHE, Kansas Gas Service, and the City of Hutchinson to recommend drilling locations, core locations, and types of logs to run; and
- Responded to scores of inquiries from citizens, consultants, attorneys, and the news media.

We have found that:

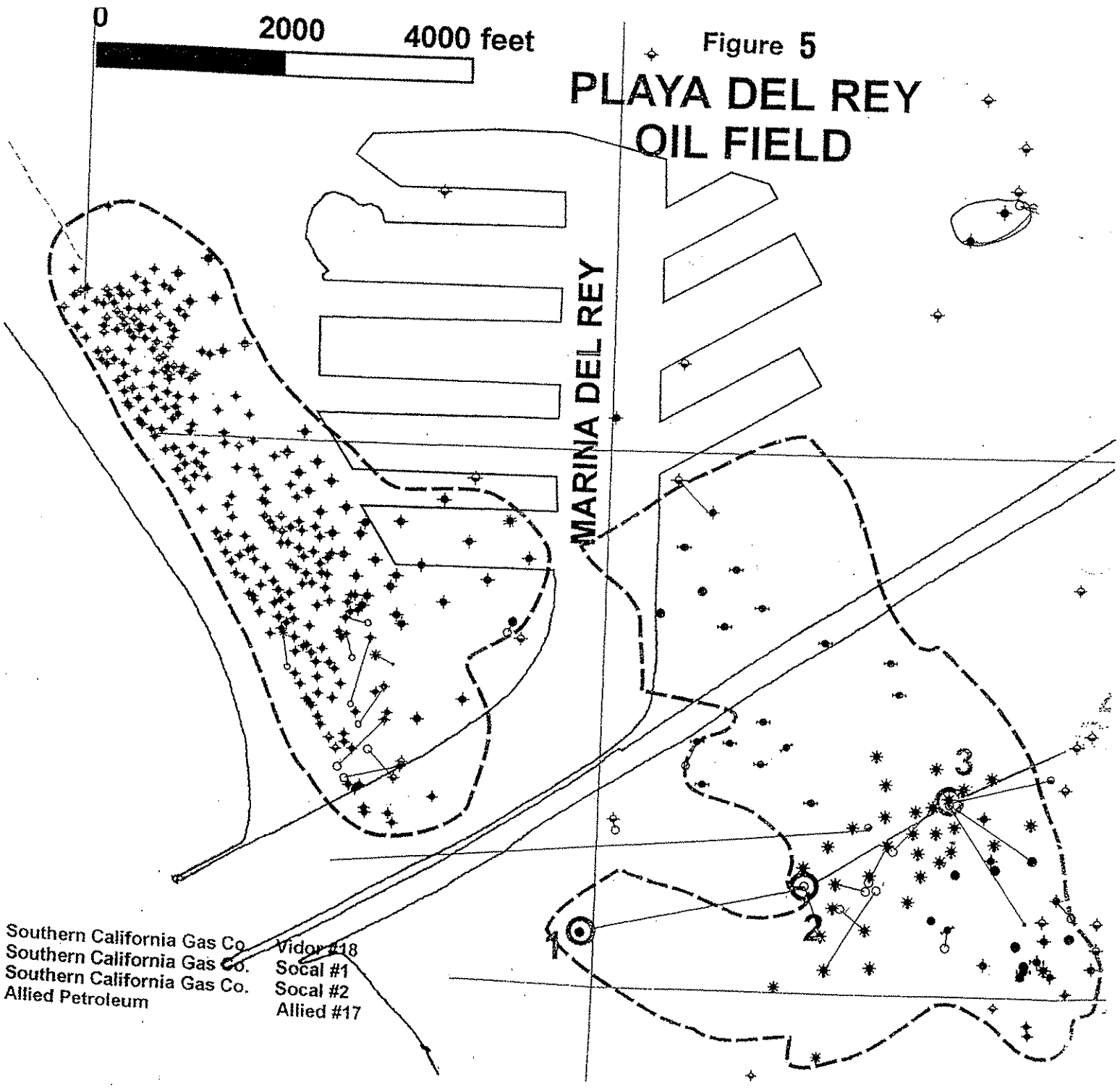
- The gas is confined to a relatively thin geologic layer at the top of the Permian-aged (approximately 250 million years old) Wellington Shale, about 200 feet above the Hutchinson Salt Member;
- The regional dip of the deeper rock layers is to the west, meaning that, all other factors being equal, gas would move in general to the east (because methane is lighter than water, it will tend to move updip – from lower to higher areas - through rock);
- The large number of vent wells that are dry holes suggests that the gas pathways are discrete and cover a relatively small area under the city;
- The seismic amplitude anomalies were drilled and found to contain gas; each is about 150-200 feet across;
- The gas-bearing layer may contain narrow belts of a particular type of rock that is preferentially fractured;
- There are anticlines present (rocks folded into an arch) that could serve to direct gas along their crests; and
- There are deep faults or fractures (many thousands of feet deep) that appear to control the orientation of the Arkansas River channel and may have controlled the location and orientation of geologic deposition during the Permian period as well.

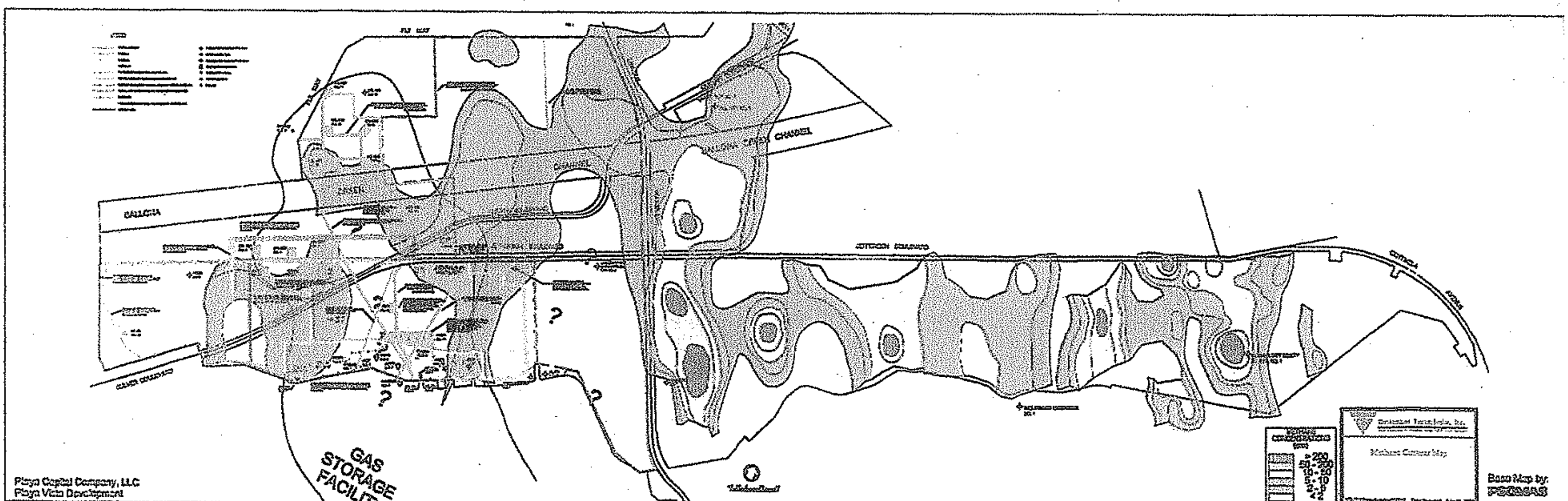
What investigations need to be done to return confidence to Hutchinson and ensure that this cannot happen again?

- Determine which of these factors or combination of factors is responsible for the gas moving under Hutchinson: pathways along buried channels or similar sedimentary features; along structural dip or anticlines; along fractures and faults; or along some combination of these features;
- Verify that the vent wells have adequately drained all the pockets of gas;
- Monitor water wells for contamination;
- Locate abandoned brine wells drilled from the late 1800s onward;
- Evaluate gas accumulations in the surrounding areas;
- Establish base line studies in the event of subsidence;
- Identify other potential gas pathways.

Gas/
Helium

6R 12


0
2000
4000 feet
Figure 5
PLAYA DEL REY
OIL FIELD
MARINA DEL REY
1
2
3
Southern California Gas Co. Vidor #18
Southern California Gas Co. Socal #1
Southern California Gas Co. Socal #2
Allied Petroleum Allied #17


GALLONA
CHANNEL
BALLONA CREEK CHANNEL
GAS
STORAGE
FACILITY
?
Playa Capital Company, LLC
Playa Vista Development
Base Map by:
> 200
50 - 200
10 - 50
5 - 10
2 - 5
< 2
Methane Contour Map

ANALYSIS REPORT

FAXED 3-29-99

Job #: 1803

Lab #: 20799
Sample Name/Number: DW-2
Company: Sepich Associates Inc.
Date Sampled: 3/25/1999
Container: Tedlar Bag
Field/Site Name: Playa Vista, Area-D
Location:
Formation/Depth:
Sampling Point: 65'-73'
Date Received: 3/27/1999

Fountain Park Apts.

Date Reported: 3/29/1999

Component	Chemical mol. %	Delta C-13 per mil	Delta D per mil	C-14 conc. pMC	Tritium TU
Carbon Monoxide	nd				
Helium	0.0022				
Hydrogen	0.0023				
Argon	0.81				
Oxygen	14.98				
Nitrogen	62.18				
Carbon Dioxide	0.23				
Methane	21.77	-63.95	-202.3		
Ethane	0.021				
Ethylene	nd				
Propane	nd				
Iso-butane	nd				
N-butane	nd				
Iso-pentane	nd				
N-pentane	nd				
Hexanes +	nd				

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 221
Specific gravity, calculated: 0.902

Sepich is the Methane Co. for Playa Vista. (Civil Engineer not oilfield expertise)
Helium – a difficult source marker to find GAS WAS found at Sepich's deep probe. – same helium # as oil well Del Rey 13

nd = not detected. na = not analyzed. Isotopic composition of carbon is relative to VPDB. Isotopic composition of hydrogen is relative to VSMOW. Calcualtions for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100 percent. Mol. % is approximately equal to vol. %

ISOTECH Laboratories, Inc. 1308 Parkland Ct. Champaign, IL 61821 217/398-3490

Zymax FORENSICS

Table 1

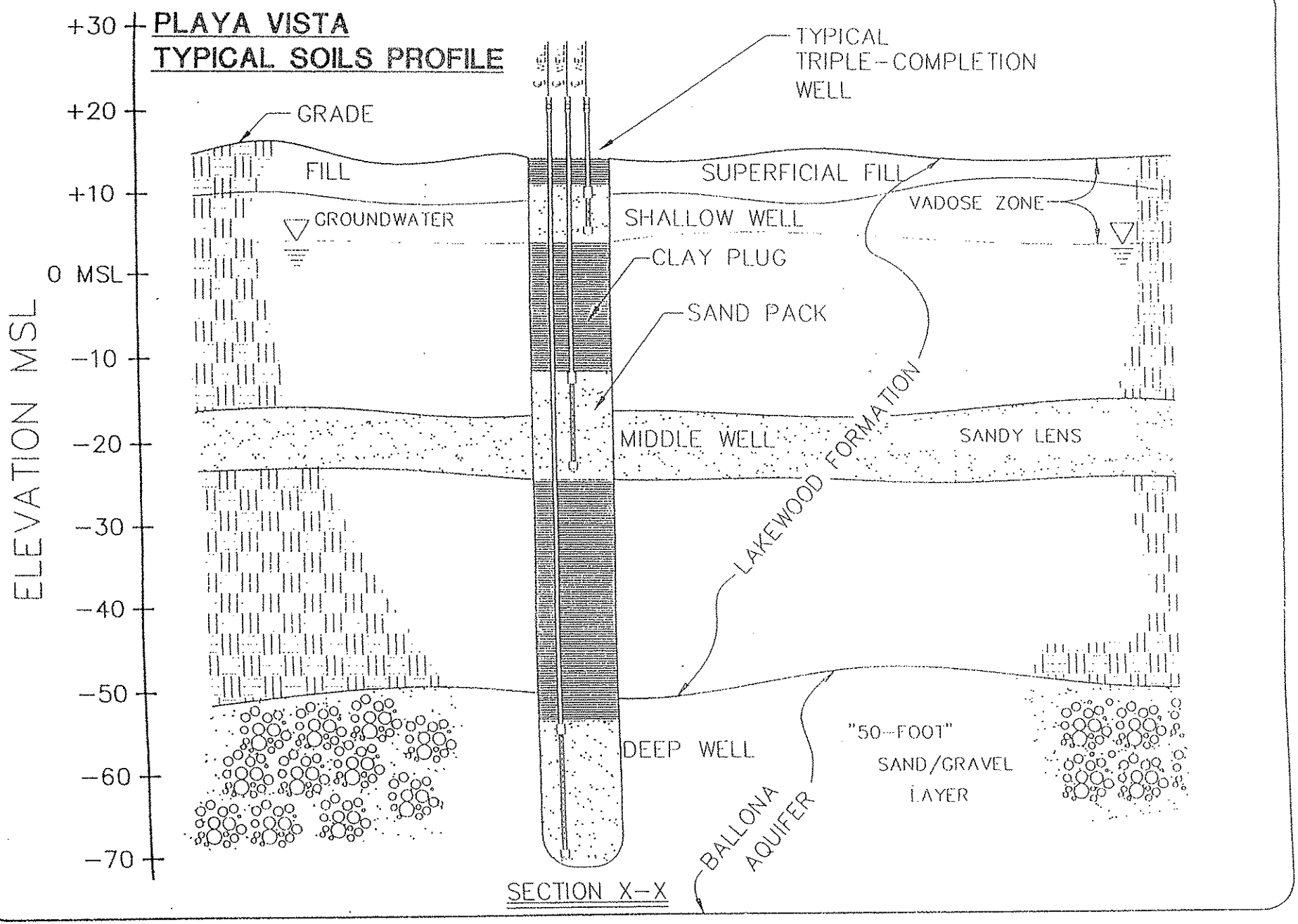
SoCal Gas Company Wells - Gas Compositions[1], Including Stable Isotope Ratios

COMPONENT	INJECTION WELLS				OBSERVATION WELLS					
	Mesar	*Vidor 13*	*SoCal5*	*SCP 1*	*Del Rey 16*	*Del Rey 17*	*Harper 1*	*Vidor 1*	*Vidor 2*	*Vidor 14*
Carbon Monoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hydrogen Sulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	0.011	0.012	0.011	0.012	0.0022	0.012	0.0094	0.0082	0.0013	0.034
Hydrogen Sulfide	0.0015	ND	ND	ND	0.071	ND	ND	0.0081	0.0020	0.0085
Argon	0.0037	0.0053	0.0028	0.0066	ND	ND	0.011	ND	ND	0.0049
Oxygen	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrogen	0.55	0.69	0.50	0.65	28.13	0.43	1.17	0.40	0.17	1.26
Carbon Dioxide	1.17	1.15	1.31	1.25	ND	3.70	7.57	12.75	15.03	0.58
Methane	96.35	95.39	96.03	95.62	57.53	89.21	81.86	78.14	75.40	91.62
Ethane	1.58	2.10	1.61	1.87	6.35	4.17	4.83	4.04	4.50	4.74
Ethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propane	0.23	0.43	0.31	0.34	4.28	1.67	2.54	2.39	2.63	1.12
Isobutane	0.031	0.055	0.042	0.047	0.65	0.16	0.35	0.38	0.35	0.10
N-butane	0.034	0.075	0.058	0.067	1.57	0.31	0.76	0.90	0.82	0.17
Isopentane	0.010	0.020	0.016	0.020	0.49	0.058	0.24	0.31	0.33	0.053
N-pentane	0.0065	0.016	0.013	0.019	0.44	0.056	0.21	0.27	0.31	0.059
Hexanes +	0.026	0.057	0.037	0.095	0.49	0.23	0.45	0.40	0.46	0.25
$\delta^{13}C$ (‰) of Carbon Dioxide	13.26	11.17	12.70	11.26		-2.31	-3.47	-11.32	-10.69	-2.99
$\delta^{13}C$ (‰) of Methane	-42.15	-42.31	-42.09	-42.12	-41.97	-31.25	-44.88	-41.90	-40.51	-42.37
$\delta^{13}C$ (‰) of Ethane	-27.85	-26.43	-28.20	-28.57	-29.40	-29.71	-30.80	-29.99	-29.42	-32.66
δD (‰) of Methane	-204.7	-202.2	-202.5	-203.4	-190.9	-184.0	-197.1	-186.3	-183.7	-174.2

ND: not detected

1. All compositional data are shown as relative percentages, or mol%.

SEPICH ASSOCIATES, Inc. 680 WALNUT STREET MOORPARK, CA (818)707-3036 FAX (818)707-3012
METHANE SPECIALISTS



Helium hits

ZymaX FORENSICS

Report to
City of Los Angeles
Department of Building and Safety
201 North Figueroa Street
Los Angeles, CA 90012-2827

on

Playa Vista Development
Playa Vista, California

Comparison of Gas Analyses from Southern California Gas Company Injection and Observation Wells with Soil Gas and Groundwater Gas from 50ft Gravel Aquifer

by

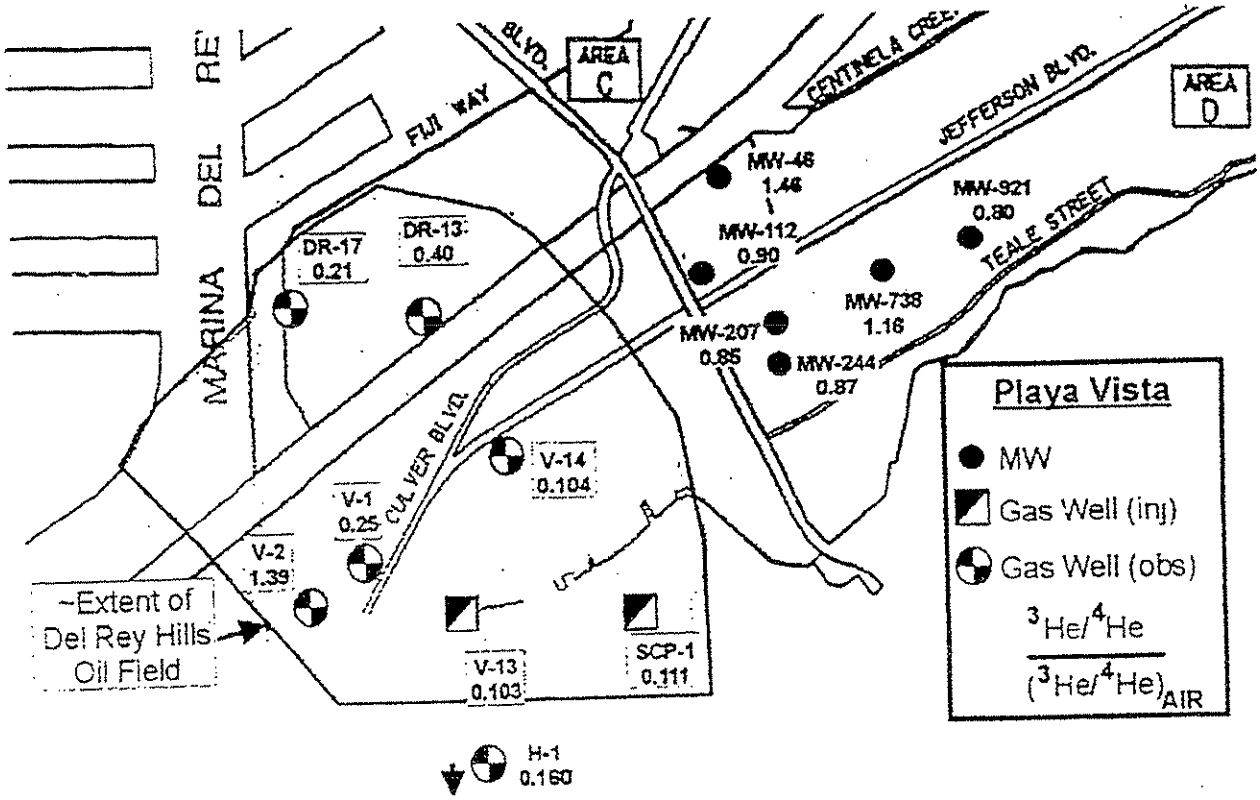
Isaac R. Kaplan
ZymaX forensics, Inc.
16921 Parthenia Street, Suite 201
North Hills, CA 91343

Robert Poreda
Department of Earth and Environmental Sciences
University of Rochester
Rochester, NY 14627

January 29, 2001

Figure 7

A site map of the Playa Vista site showing the locations and helium isotope ratios of the injection (half-filled squares) and observation gas (half-filled circles) wells, and monitoring wells (solid circles).



50' failures

03/22/01 10:00 FAX 310 821 9429

Deep well

PLAYA VISTA

12555 W. JEFFERSON BLVD.
SUITE 300
LOS ANGELES, CALIFORNIA 90066

TEL: 310.822.0074
FAX: 310.821.9429

DATE: MARCH 22, 2001

TO: JOHN SEPICH

COMPANY: SEPICH & ASSOCIATES, INC.

FAX NUMBER: (805) 552-0001

FROM: CHUCK COLTON 310 448 4613

RE: DEEP WELL DESIGN – SUCH AS IT IS

NUMBER OF PAGES INCLUDING COVER SHEET: 7

FACSIMILE

I am attaching for you use:

1. A white paper prepared by CDM and agreed to by the various experts that provides the current consensus with respect to the vent well installation method.

2. "Deep Well Detail" provided by Carlin Environmental Consulting, Inc.

For now these two items are the basis for the deep well portion of the North Crescent Park Apartment plans. Please do not prepare this portion of the plan set yet as we still are working on additional details. You should be prepared to finalize the plans and specifications quickly once I give you the go ahead.

Installation of Vent Wells

Introduction

This document summarizes the design recommendations discussed at a meeting between the City and Playa Vista, and their respective consultants on February 27, 2001. Subsequent discussions were held on February 28, 2001 with Michelle Zyche and Gary Robbins to refine the recommendation.

Permanent gas venting wells will be evaluated as a means for engineered control of gas venting to supplement design measures for methane control in buildings. These vent wells are intended to be active for the life of the project and designed for minimal maintenance. These wells are also intended to effectively drain the maximum potential area of gas pockets. Investigation of each location will be necessary using CPT techniques to verify gas is producible at the location.

Design Related Issues

The design considerations for the permanent wells include the following issues.

Wells should be located in high production potential zones

Wells need to be installed with the minimum practical damage to the gas production zone

Well facilities need to be able to maintain pressure throughout the construction process and during operations to optimize gas production and minimize water invasion of the gas zone near the well

The wells should be designed to minimize need for maintenance and consider the need for periodic re-development

Well locations need to fit with development plans, with aesthetically acceptable above ground facilities

Wells need to be designed to minimize fines production that can lead to filling of the well

The well should be designed an operated to minimize potential for development of water blockage in the gas production zone

Well diameter should be sufficient to minimize potential for continuous gas-lift production of water during operation

Well design should include provisions for initiating gas flow

Site Drilling Experience

A series of 8 VW series wells was installed commencing in late December 2000. A number of different techniques were utilized for installation of these wells. Initially, well VW-1 was advanced to near the gravel aquifer using the CPT. This drive point produced gas at rates greater than 8 liters/minute for three days in an attempt to decrease gas volumes near the well. The rate remained constant during this venting period. Schedule constraints required well completion, so an attempt was made to install permanent casing using hollow-stem techniques. The hollow-stem auger was advanced into the sand and gravel aquifer, and additional venting was initiated through the hollow-stem using a packer assembly. This venting was continued for a day, with no decrease in the rate of about 60 liters/min. An attempt was made to install casing through the hollow-stem while the boring was still venting gas. During installation of the casing and gravel pack, the formation sands liquified due to gas release, resulting in movement into the annulus between the casing and screen assembly, locking the two strings. A replacement well was successfully installed by drilling with an organic polymer rotary system. A

M. J. Smith 2-28-01

2/28/01

2-28-01 W-62-NETECHNIK

temporary 10 foot surface casing was set and the boring advanced into the gravel about 8 feet. A 4-inch PVC completion string was installed and gravel packed above the screen. Bentonite was placed above the gravel pack and the remainder of the annulus grouted to land surface. The temporary surface casing was removed. Seven other vent wells were installed using this technique. These wells have been relatively successful in production of gas, especially VW-1, VW-2, VW-3 and VW-4. Little silting of the well screens has taken place, with a maximum of about 0.5 feet of fines accumulating in well VW-___. Several of the wells exhibit low pressures, suggesting that leakage may be taking place through the annulus or into the formation.

Design Alternatives Considered

Multiple options for well construction and completion were considered during discussions. Consensus was reached regarding the use of a pressure cemented conductor casing through the upper portion of the hole to provide a positive seal. Several alternatives were discussed for drilling the production portion of the well below the conductor casing. The drilling methods considered included hollow-stem augers and rotary drilling methods. A sub-alternative included driving of a screen into the upper portion of the aquifer/gas zone from the boring that would be advanced below the conductor casing. The drive point would be considered a temporary measure for degassing the pocket. After this degassing, standard hollow-stem techniques could be used to complete the well with the production string. In this concept, when gas production decreased to low levels, which would take an unknown time period, the boring would be advanced, if possible, with hollow-stem auger techniques. This has the risk of running into heaving problems if gas remains, as was encountered at VW-1 when this was attempted. This also has the disadvantage of allowing major water invasion of the gas zone near the well that would affect future productivity when the gas pocket recharges. An alternative considered was the use of rotary drilling with the organic polymer fluid to complete the drilling in the lower section.

Well screen designs were also discussed. The design alternatives include standard water well screen with a gravel pack, pre-packed screens, and porous polypropylene. The porous polypropylene design was eliminated due to difficulties in mechanical development. The standard screen relies on effective placement of the properly graded filter pack of adequate thickness around the screen. If the formation is unstable and collapsing during installation, finer formation materials can end up in contact with the screen, leading to entry of fines into the well. A pre-pack screen avoids this problem by including a layer of properly graded sand surrounding the entire inner screen.

The materials and size of the production screen were also discussed. A diameter of 4 inches was selected to allow easier access for maintenance and to minimize water production potential by keeping up-hole gas velocity low. The preferred material for completion is steel, due to the long lifetime required for the facilities. The type of steel necessary need to consider the corrosive potential of the water. PVC may be used in the short term due to availability. One of the concerns is the integrity of the joints in maintaining pressure. This is more difficult in environmental PVC casing, though with the low pressure, this is a minor issue.

After considering the experience with VW-1, we recommend that the degassing of the pocket with a temporary completion string not be done, but rather the permanent string be installed below the conductor casing using rotary drilling with organic polymer fluid.

Recommended Design

The design recommendation for the long term venting wells is summarized in this section. Drilling methods will use fluid rotary methods to advance the boring. The well will be installed in two stages, the first being the conductor casing and the second stage the production string. The specifics of the recommended design are described in following sections.

The initial stage of construction will involve exploration of the selected location using a CPT to verify gas presence, ability to produce and site specific stratigraphy. More than one location may be required to verify a suitable location. These CPT boring will be maintained as temporary monitoring locations for the long term vent well testing. A boring for installation of conductor casing will be advanced using fluid rotary techniques to a depth of about 5 feet above the gravel contact. Either a bentonite or organic polymer based fluid may be used for this stage of construction. A nominal 8-inch casing will be installed to the total depth to serve as a conductor casing. This casing shall be of sufficient strength to allow cementing of the annulus with a portland cement with 5 percent added bentonite and a sand mix, including consideration of elevated temperatures during setting of the amended cement grout. The 8-inch casing shall have a 1 foot thick neat cement grout plug on the bottom end to avoid filling of the casing with cement during placement of the annular seal. Centralizers shall be installed within 5 feet of the bottom of the casing, and at the center point of the conductor casing. Casing joints shall be joined with a gas-tight connection suitable for a methane containing environment. Conductor casing shall be place in the borehole while filled with the drilling fluid, thinned sufficiently for cementing. A cement grout consisting of portland cement, 5 percent bentonite and sand shall be placed by pumping through a tremmie pipe that extends to 5 feet above the base of the casing. The tremmie shall remain at this height until the grout returns to the surface. The tremmie may then be removed from the annulus, maintaining the pipe full of cement. The conductor casing shall remain stabilized and centered in the borehole for the setting period. No disturbance of the casing shall be permitted for 24 hours after completion of the cementing. After a 24 hour setting period, a pressure acceptance test shall be run by pressuring the casing to 20 psi and monitoring the pressure to verify integrity. Figure 1 shows this stage of construction.

After acceptance of the conductor casing, the production boring shall be advanced through the conductor casing to a depth of 8 feet into the gravel using fluid rotary drilling with a organic polymer fluid. The boring shall be filled with the drilling fluid at all times during drilling and completion to maintain positive hydrostatic pressure to avoid gas blowout. Care shall be taken during placement or removal of drilling tools or completion materials to avoid initiation of gas flow. After drilling to the target depth, the production casing and screen shall be assembled and placed to the target depth, maintaining the string in tension by supporting from the surface at all times until final completion. The screen shall be a pre-pack wire wrap screen assembly constructed of metal that is compatible with the aquifer water. The screen slots shall consist of 0.010 inch slot openings. A plate shall be present at the bottom of the screen assembly. The production casing shall consist of steel compatible with the screen materials and formation water. All joints shall consist of gas tight threaded couplings, with appropriate thread lubricant

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Waters Edge at Playa Vista

SOIL GAS INVESTIGATION FOR 5457 AND 5571 S. BRISA ST.

The City has asked Maguire Partners to report on soil gas at the subject site. Included herein are summaries of previous soil gas investigations, and presentation of new data. The data enables a safe methane mitigation design for the project, particularly with respect to location of long-term methane vent wells, and design of future contingency blowers to reduce methane levels in the building subslab vent system. Considerable work was previously done by ETI and CDM; and additional work has been performed by Methane Specialists. Sampling and testing utilizes the protocols, methodology and procedures defined by ETI insofar as they are known.

1. project. The Waters Edge site is shown on the enclosed sketch (see EXHIBIT 1). The entire project is split between Phase 1 (the westerly half) and Phase 2 (the easterly half). This report has been prepared for the Phase 1 portion of the site, which shall be known as the "subject project." The upper soils are recent alluvium including silty-sandy-clayey deposits to approximately 50 feet below existing grade; below that lies a granular layer referred to as the "fifty-foot gravel aquifer" because of its presence below much of the Playa Vista site at an elevation of approximately minus 50 feet MSL (mean sea level).

Various studies by Camp Dresser & McKee and ETI have identified methane soil gas on the larger Playa Vista site.

Figure 1 - Initial Conductor casing

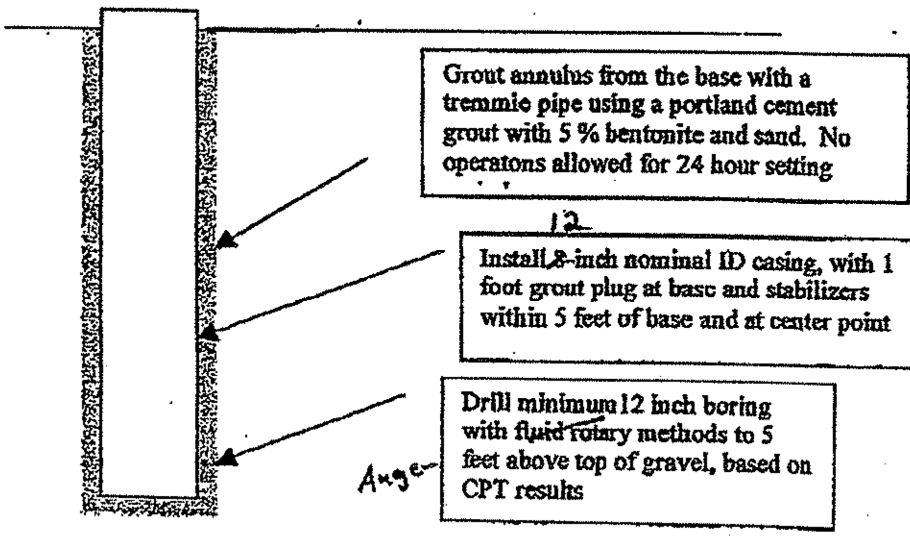
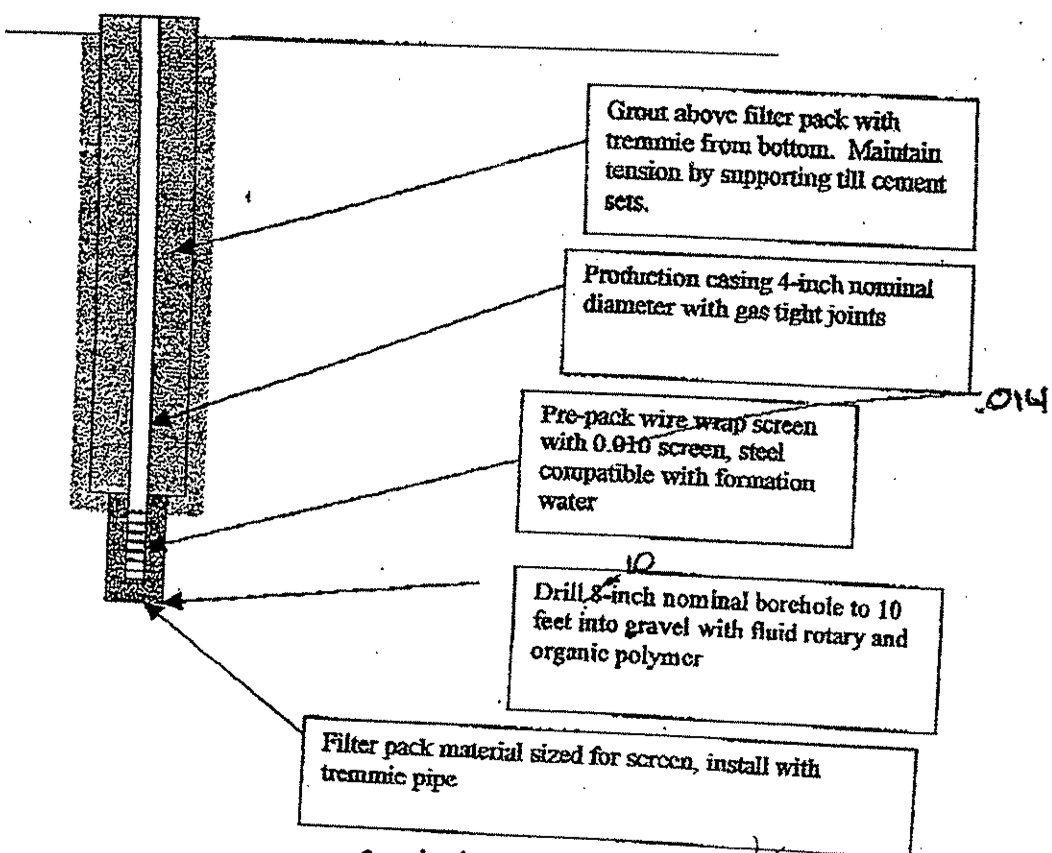


Figure 2 – Production Casing and Screen Installation



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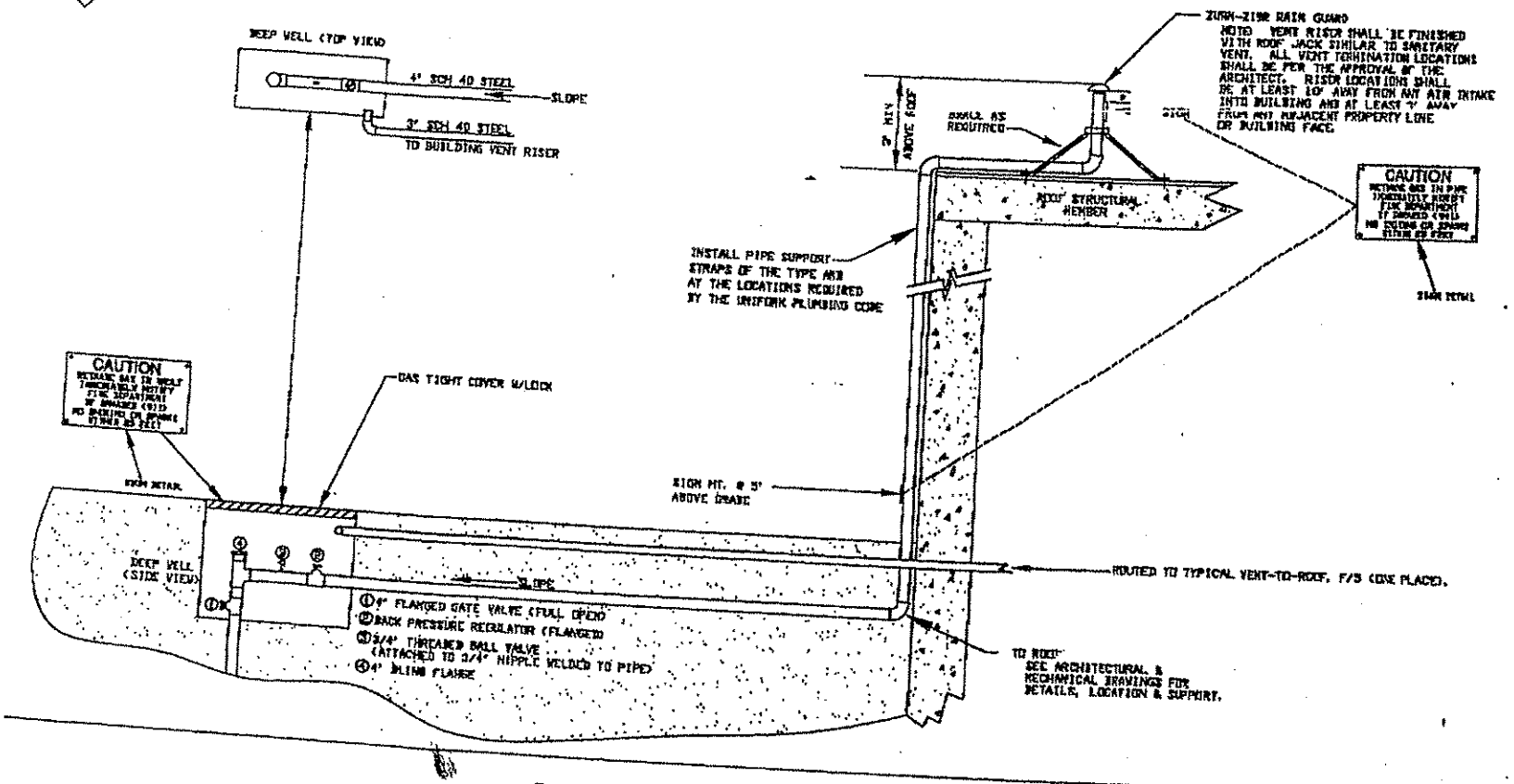
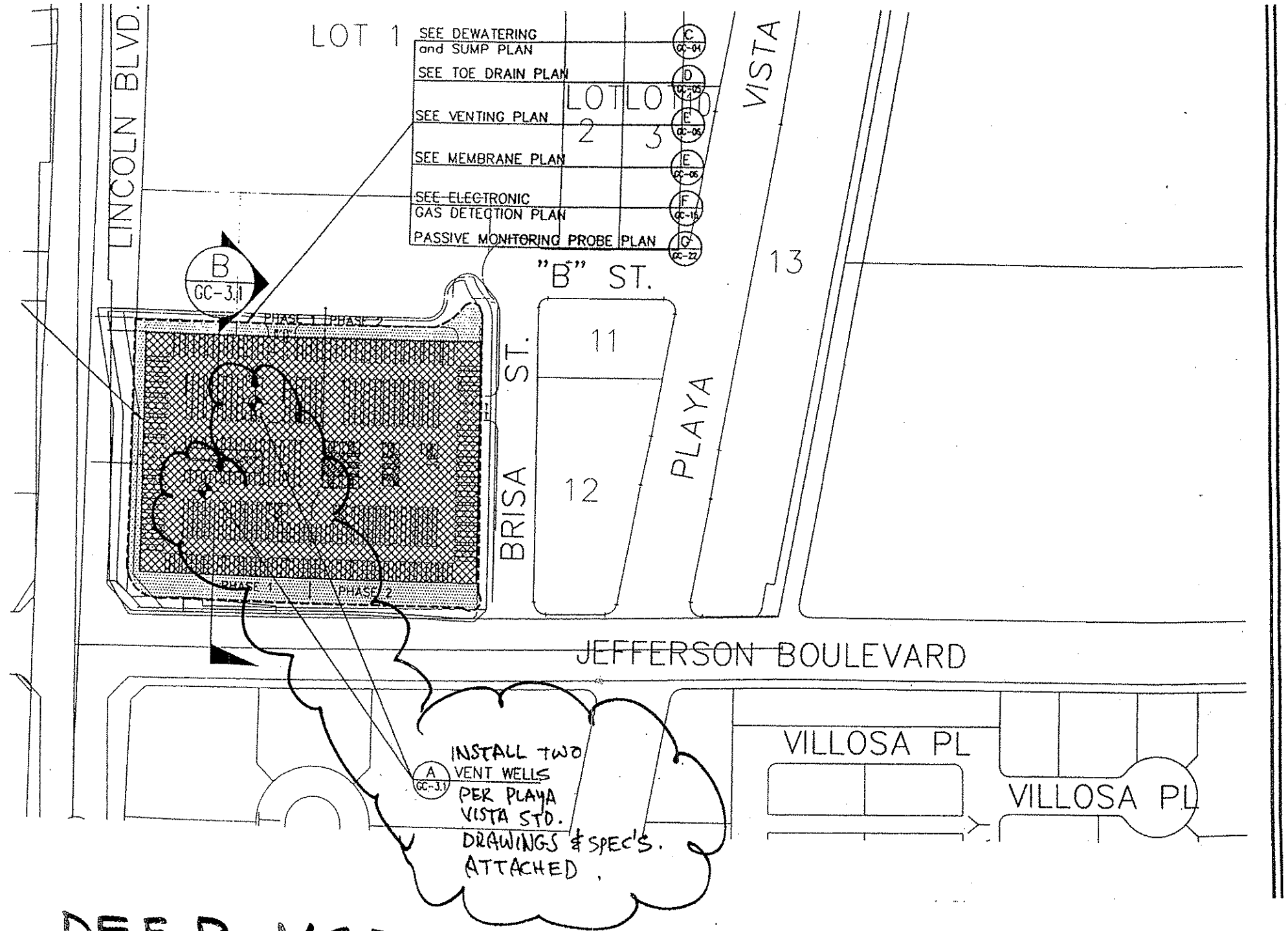


DEEP WELL DETAIL



DEEP VENT WELL DESIGN

EXHIBIT 11

recommended vent well designs

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June 10, 2005

Court of Appeal, State of California
Second Appellate District
Third Division
300 South Spring Street
Los Angeles, CA 90013

ATTN: Joseph A. Lane, Clerk
Masumi Gavinski, Deputy Clerk

RE: ***Environmentalism Through Inspiration and Non-Violent Action v. City of Los Angeles (Playa Capital Company, LLC)***
2d Civ. No. B174856
(Super.Ct. No. BS073182)

Dear Honorable Justices,

Please find the following responsive supplemental letter brief as requested by this Court in its letter dated May 26, 2005 in the above referenced case.

1) Do the methane mitigation measures approved by the city require long-term dewatering at both the subslab level (below the basement of each building) for level 1 mitigation and the level of the so-called 50-foot aquifer for level III mitigation (where level III mitigation is required)?

Yes. The methane mitigation measures approved by the city require long-term dewatering at both the subslab level and the 50-foot aquifer level. The record contains evidence in this regard.

With regard to the need to dewater the gas intake pipes at the subslab level, the following evidence is contained in the record: (AR 30:7814, [1/18/01 Sepich letter "...the building shall have a permanent subslab groundwater dewatering system...]; 31:7916, ["permanent subslab groundwater dewatering system and well venting of fifty-foot

aquifer"]; 31:7919, [same]; AR 32:8334, ["The building shall have a permanent subslab groundwater dewatering system..."].)

With regard to the need to dewater the 50 foot vent wells, a letter from Ray Chan of the City Department of Building and Safety to Gerry Miller, Assistant CLA, dated June 15, 2000, stated in part, "The summary clearly outlines the necessary assessments for the purpose of addressing some major concerns regarding the Playa Vista Project, as reiterated below: Structural Safety Assessments... Pump-and-Treat mitigation system for the 50-foot gravel aquifer." (29:7556; see also 29:7474) Pumping refers to pumping of groundwater.

The methane mitigation measures referenced above must be dewatered or they will not work. (See discussion at 2(a) below). Because the groundwater is close to the surface, dewatering is a central and permanent part of these methane mitigation measures. The record contains evidence that the site has a very high groundwater table. (AR 1:43 [ETI diagram showing high water table of Ballona Creek, Ballona aquifer, and Silverado aquifer]; AR 29:7659 [7/25/00 report prepared for Playa Vista stating, "The surface of the site is nearly level and only a few feet above sea-level"]; AR 27:7218 [12/10/98 Archeology Report stating: "Within 30 minutes of excavation, all but the top 3 feet of the trench had filled with water... the excavations had to be abandoned about 1 m below the surface due to water infiltration."]; EIR 13:8164; 8:4164-5 [confirming that shallow water levels exist throughout the Project area].)

2) Please describe in greater detail the purpose of dewatering and the design and operation of the dewatering systems. Does the administrative record contain sufficient information in this regard?

Dewatering, removing water from the gravel blanket beneath new buildings is essential in order for the gas collection system to function properly. The gravel blanket is a critical

component of the proposed methane mitigation system. This highly porous and permeable layer allows upwardly migrating gas (methane, H_2S, and other associated gases) to easily move laterally toward and into perforated horizontal collection pipes buried within the gravel blanket. Once gases enter the perforated collection pipes, they are vented away from buildings.

Conversely, if the gravel blanket and the residing intake pipes were to be invaded by water, the pipes will clog with water, silt, debris, mineral deposits and bacterial growth, rendering the system ineffectual. If shallow groundwater collects in the gravel blanket, it blocks pore spaces and permeable pathways, thus inhibiting lateral gas movement. The upwardly mobile gases accumulate under pressure below the foundation, increasing in concentration, creating the potential for an explosion hazard. Any toxics carried with the methane seeping into a building can also cause health problems. The same common sense principles govern the 50 foot vertical gas intake pipes (vent wells).

An inoperable gas collection system represents a hazard to buildings and occupants.

The administrative record contains some information with regard to the purpose of dewatering. For example, John Sepich, Playa's expert, explained that dewatering is important to ensure the effective operation of the methane mitigation systems, "permanent groundwater dewatering measures are also critical to insuring the proper operation of the methane mitigation systems." (27:7257). "The Playa Vista underground area is supposed to remain free of water in order to keep the gas intake pipes from clogging." (15:4178 [Petitioners Grassroots Coalition, Spirit, ETINA written comments to City Council entitled, "Response to CLA Report, June 5, 2001 Prepared for the LA City Council Committees Reviewing the CLA Report RE: Playa Vista."].).

With regard to the subslab dewatering, Sepich explained, "Vent systems under basements can effectively vent soil gas from a substantial radius around the structure, particularly where a basement permanent dewatering system is in place" (27:7261), and permanent groundwater dewatering measures are designed to keep the subslab methane vent piping clear."(28:7330).

According to ETI and the City, however, vent systems under basements is not enough to ensure that the methane will be mitigated to a level that reduces health, safety and environmental hazards. Venting gas from the 50 foot aquifer is also required or the site is too dangerous to build. (AR 30:7835; 30;7837).

The administrative record does not appear to contain sufficient information on the design of the 50 foot vent wells. For example, a report dated 6/5/00 from LADBS to the City Council Budget & Finance Committee states, "one of the issues that LADBS identified that must be addressed is 'What are the specifications and design requirements for the "Pump and Treat Program" to mitigate and monitor methane gas at Playa Vista?'" and "Additional water well sampling/testing, pump testing and analysis (as recommended by the ETI report) are needed to provide data to create design specifications and requirements… Report shall include actual design specifications and detailed plans." (17:4531)

As another example, an April 25, 2001 letter from LADBS to Playa stated, "The reports are ambiguous with regard to the recommendations for permanent vent wells. Provide clear recommendations regarding the wells and provide recommendations for the design of the wells, as necessary." (32:8372). There does not appear to be any other information in the record regard to actual design specifications.

But the 50 foot vent wells, which are required "if development of the area [can proceed]," must be functional. (AR 25:6734; 29:7536 [ETI to LADBS stating, "If the pump and treat or equivalent methane mitigation system is not effective or if Playa Capital does not install an appropriate mitigation system in the 50-foot gravel, ETI believes that the development of the area should not proceed."].)

There is no evidence in the administrative record that the vent wells are functioning.[1] Mitigation measures must be feasible if the City is to rely on them for a finding that a project will have no significant impact. CEQA § 21081 prohibits an agency from approving or carrying out a project where there is the potential for a significant impact unless "changes or alterations have been required in, or incorporated into, the project which mitigates or avoids the significant effects on the environment." (See *also* Guidelines § 15091.)

In this case, the City's implied finding that implementation of the new methane mitigation measures would reduce potentially significant impacts to less-than-significant levels is not supported by substantial evidence because the record does not contain an evaluation of the feasibility of the methane mitigation measures proposed. Most significantly, there is no evidence that effective operation of the 50 foot vent wells is feasible.

Where a mitigation measure serves as "an independent basis for finding no significant impact, the failure to evaluate whether the [mitigation measure] was feasible... was fatal to a meaningful evaluation by the city council and the public [of the EIR]." (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 728.)).

[1] Data that supports the infeasibility of the 50 foot vent wells is in the Joint Appendix at 10:2698, para. 3 (temporary vent wells failed due to clogging), but the trial court did not allow Petitioners to augment the administrative record with this document because it is dated after the June 12, 2001 decision. However, the information contained in the letter is from the time frame of this record.

This failure poses a grave problem for two reasons:

(1) the City documents the fact that building is dependent upon the effective operation of the 50 foot vent wells. (25:6734; 30:7837, [LADBS concurring]; 29:7536).

(2) the City's determination that no significant impact would result from the project was based on mitigation measures being feasible.

But evidence is non-existent that the most important mitigation measure is feasible. The City admitted that it didn't know that the 50 foot vent well system was feasible when they set forth in writing that the system was still in a "progressive research and design stage" at the time of approval on June 12, 2001. (AR 4:1075; 5:1201, [letter stating, "mitigation is new territory" contained in CLA Report as Appendix D]) Thus, the City failed to proceed in a manner required by law and therefore abused its discretion. (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 25-26).

Many times Petitioner Grassroots Coalition raised concerns about the high water table and the resulting question of the mitigation measures' feasibility, only to be ignored. For example, Grassroots Coalition queried, "There is also no drainage system under the Visitor Center. How does the City ensure that the high water table of the Playa Vista site, which is at ground level or above during the rainy season, will not invade and render the gas intake pipes useless under the Visitor Center? Moisture can also render gas detection devices useless, how does the City ensure that the gas detection system will detect the failures of the units and or detect the failure of gas intake pipes to function due to clogging?" (15:4179 [letter to PLUM Committee for June 5, 2001 hearing on CLA Report]). It also asked, "Why has the City withheld information on the testing of the experimental aquifer

vent wells? When 50% of the vent wells have clogged with silt, rendering them useless; why does the CLA Report state otherwise?" (15:4179)

(b) A diagram at page 7279 of the administrative record appears to depict a venting pipe and a dewatering pipe both horizontal in the soil. Is this interpretation correct?

Yes, Petitioners agree that this interpretation is correct. The dewatering pipe is located below the venting pipe.

3) If the administrative record contains insufficient information concerning the purpose of dewatering and the design and operation of the dewatering systems

(a) Is there substantial evidence in the administrative record to support a determination by the city that no significant environmental effects will result from dewatering?

No. As explained in Petitioners' Opening Brief at pages 28-29 and Petitioners' Reply Brief at pages 12-13 and 17-18, substantial evidence to support a determination by the city that no significant environmental effects will result from dewatering is wholly lacking.

The failure of the City to consider and analyze such potential significant impacts is especially unforgivable given that the City did consider such impacts resulting from temporary, construction-related dewatering with regard to the installation of Project's sewer line in the 1993/95 EIR. Clearly, the City was aware of the potential implications of dewatering and the need to consider and analyze such impacts, but avoided the issues when it approved the new methane mitigation measures on June 12, 2001.

For those issues where the substantial evidence test applies, an agency must do more than rely upon favorable text plucked from the administrative record. The evidence alleged to support the agency's findings must have "solid value" in light of the entire record, including contrary evidence. (*Bank of America v. State Water Resources Board* (1974) 42 Cal.App.3d 198, 213- 14; Guidelines § 15384 (a).) CEQA states:

> Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly inaccurate or erroneous . . . is not substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.

(Pub. Resources Code § 21082.2, sub. (c); Guidelines § 15384.)

With regard to the question of subsidence resulting from the new mitigation measures' permanent dewatering, the City apparently asked the question, but their answer is not supported by any evidence, and certainly not substantial evidence. (AR 986, [Question No. 3 in CLA Report – "...will future mitigation measures cause subsidence issues which may undermine the structural integrity of the future development?"]; Id., [conclusory answer with no supporting evidence, "There is no evidence that proposed methane mitigation measures would result in increased potential for subsidence in the area."].) As the Second District Court of Appeal has stated,

> A fundamental purpose of an EIR is to provide decision makers with information they can use in deciding *whether* to approve a proposed project, not to inform them of the environmental effects of projects that they have already approved. If post-approval environmental review were allowed, EIR's would likely become nothing more than *post hoc* rationalizations to support the action already taken. We have expressly condemned this use of EIRs.

(*Natural Resources Defense Council v. Los Angeles* (2002) 103 Cal.App.4th 268, 284-85.)

(b) Have Petitioners substantiated their claim that dewatering may have a significant environmental impact?

Yes. Petitioners have substantiated their claim that dewatering may have a significant environmental impact by relying upon evidence in the administrative record. In Petitioners Opening Brief at pages 27-28 and Petitioners Reply Brief at pages 15-17, Petitioners explain with relevant case law authority and citations to the record that

substantial evidence supports a conclusion that dewatering may have a significant environmental impact.

Additionally, a June 12, 2000 study done for Playa Vista called "Subsidence Evaluation Review" states that "sinking is due to either lowering of groundwater or to the extraction of oil, water, gas.." "This suggests that subsidence may have been the result of sediment compaction due to ground water withdrawal." (29:7597). Ground water withdrawal is achieved by dewatering the ground.

Even the City's own CLA Report substantiated the claim that dewatering may have a significant environmental impact. (4:1080 ["...Removal of fluids from underground reservoirs or aquifers can create voids that may result in eventual ground surface subsidence...Ground subsidence can result in differential settlement and cause damage to engineered structures."].)

As Petitioners pointed out in their Opening and Reply briefs, the 1993 EIR expressly cautioned against conducting any long-term dewatering at the project site (and in fact, no long-term dewatering was contemplated by the Project at that time) *precisely because* long-term dewatering would have a significant impact on the environment in the form of increasing the risk of subsidence and toxic groundwater plume expansion. (AR 24:6507).

4) Petitioners contend the methane mitigation measures will require long-term dewatering which may cause soil subsidence and expansion of an existing plume of groundwater contamination, so an SEIR is required to address those potentially significant environmental impacts.

(a) Was this ground for noncompliance with the CEQA timely presented to the city council before the close of the public hearing on June 12, 2001.

Yes, the grounds for noncompliance with CEQA was timely presented to the City Council before the close of the public hearing on June 12, 2001.[2]

As noted below, CEQA § 21177 does not apply to this case. However, even if this section were applicable, Petitioners have satisfied the requirement of exhaustion of administrative remedies in that they, and others, had clearly communicated, on an ongoing basis, their concerns about the City's noncompliance with CEQA prior to the close of the public hearing on June 12, 2001.

Petitioners presented their concerns about the environmental impact of the project to the City both orally and in writing numerous times once the new information was discovered. In fact, it was due to the Petitioners' discovery of a soil gas study on file with the Regional Water Quality Control Board that the LADBS began investigating the nature of the methane problems on the Playa Vista development site. (AOB 4).

In a February 8, 2000 letter to the LA City Council, Petitioner Grassroots Coalition raised the issue of the dewatering and its impact on the environment in the form of subsidence and toxic groundwater plume expansion. (7:1966; 1969, ["Ballona, like Belmont is a [sic] entirely unique situation with complex circumstances with which need to be dealt with in concert. SUBSIDENCE, DEWATERING, CORROSION, TOXIC PLUME, TOXIC GAS, TAR SANDS... New information of ground water withdrawal raises serious, unaddressed concerns for subsidence occurrence."].)

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[2] It is worth pointing out that many members of the public who attempted to participate in the public hearings were not allowed to speak. For example, at the June 5, 2001 Planning and Land Use Management Committee hearing, 36 citizens opposing the project signed speaker cards, but only 11 were allowed to speak, and only for an average of 1 minute each (AR 4:869-922; 16:4356; 21:5712; 21:5726; 21:5767). At the June 12, 2001 City Council hearing, 25 citizens opposing the project signed speaker cards, but only 12 were allowed to speak. (AR 4:930-980; 23:6300; 23:6309; 23:6318-9; 23:6330-31).

Bernard Endres, Ph.D., an oil and gas consultant, submitted a presentation in writing to the City Council Budget and Finance Committee on June 7, 2000 which raised the issue of the toxic plume under Playa Vista, and requested that the City look into the interaction of toxic plume, gas mitigation systems, and subsidence. (19:5241).

The following comments were made with regard to the CLA Report during the July 18, 2000 public "Scoping Hearing":

- George Bizetti, Chairman of the Association for Accountability and Equal Education, explained that the Playa Vista area has water that is 98% soaked with methane and "a high water table which is really hard to mitigate." (29:7617-8)
- Michelle Cypert, with the Sierra Club, remarked that the city should look at the cost of Level III mitigation, "given that there is a gravel aquifer that needs to be mitigated if any construction takes place, water that is going to have to be pumped and you will have to have permanent, perpetual monitoring..." (29:7620-21)

At the June 5, 2001 Planning and Land Use Management Committee hearing, a letter was submitted into the record from Sandra Genis, Planning Resources, on behalf of Environment Now, stating that mitigation of the methane "is complicated by the high water table existing on the site... If methane laden water is pumped for treatment, seawater intrusion into the aquifer could result, which is also a significant impact. This matter should... be subject to the full range of discussion and public participation provided under CEQA. Issues to be resolved include the extent to which the [methane] hazard can be mitigated and potential impacts of any mitigation program adopted." (16:4236).

Prior to the City Council's June 12, 2001 decision, Petitioner Grassroots Coalition presented to the City the concern about the inoperability of the 50 foot vent wells. (See e.g., 3:734 [Diagram submitted on June 12, 2001 to City Council]).

At the City Council meeting on June 12, 2001, Petitioners again raised concerns that a subsequent or supplemental EIR was necessary to address the additional environmental impacts resulting from the planned mitigation measures. Kathy Knight presented a letter at the hearing which stated,

> "We incorporate all of our comments, and those of Spirit of the Sage Council, and Grassroots Coalition and Earthways Foundation regarding the Playa Vista gas problem given to the different departments of Los Angeles . . . . We have spent many thousands of dollars copying and supplying all these documents to multiple departments of the City, only to have them be totally ignored."

(AR 4:446).

It is of no import that some of these speakers are not members of the Petitioner organizations. "As codified in CEQA, the exhaustion doctrine does not require that the petitioner personally presented the issue to the agency as long as somebody else did so and the petitioner timely objected to the project on another ground. (*Federation of Hillside and Canyon Associations v. City of Los Angeles*, (2004) 126 Cal. App. 4th 1180, 1263). In addition, Petitioners need not have stated the precise terms that they raise in later litigation. "A petitioner need not have articulated every basis for objecting to the project, but must have participated in the administrative process. Thus, a petitioner who has taken part in the administrative process may assert any issues raised by other parties during the administrative proceedings." (*Galante Vineyards v. Monterey Peninsula Water Management*, (1997) 60 Cal. App. 4th 1109, 1119).

The sum of oral and written comments supported by documentation and submitted by Petitioners to City agencies over the course of years demonstrate that they "actively participated in the administrative review process" and thus, exhausted administrative remedies. *See Bakersfield Citizens for Local Control v. City of Bakersfield*, 124 Cal. App. 4th 1184, 1201 (2004).

All of these aforementioned instances of public comment served the purpose for which section 21177 was designed. "'The essence of the exhaustion doctrine is the public agency's opportunity to receive and respond to articulated factual issues and legal theories before its actions are subjected to judicial review.'" (*Azusa Land Reclamation Company v. Main San Gabriel Basin Watermaster*, (1997) 52 Cal. App. 4th 1165, 1215, *quoting Ultramar, Inc. v. South Coast Air Quality Management Dist.*, (1993) 17 Cal. App. 4th 689.) The City was well aware of factual issues and legal theories that raised the question of whether a subsequent or supplemental EIR should be prepared.

(b) If not, is there any basis to excuse the failure to timely present the issue? In particular, did the notice of the city council meeting or the content of the discussion at the meeting fairly apprise Petitioners that the measures under consideration included long-term dewatering?

1. CEQA § 21177 does not apply to this case because there was no public comment period or public hearing under CEQA and the City did not issue a Notice of Determination

CEQA § 21177, subd. (a) states,

> "No action or proceeding may be brought pursuant to Section 21167 unless the alleged grounds for noncompliance with this division were presented to the public agency orally or in writing by any person during the public comment period provided by this division or prior to the close of the public hearing on the project *before the issuance of the notice of determination*." (emphasis added).

The court in *Azusa Land Reclamation Company* held that the exhaustion requirement under CEQA § 21177 applies where CEQA provides a public comment period or there is a public hearing before a notice of determination is issued. However, when "there was no 'public comment period provided by [CEQA]' and there was no 'public hearing . . . before the issuance of the notice of determination'. . . *Public Resources Code section 21177* has no application. . . ." (*Azuza Land Reclamation, supra*, 52 Cal. App. 4th 1165, 1210). "[W]here an agency approves a project and simultaneously decides that the project is exempt from CEQA, there is no 'public hearing . . . before the issuance of the notice of determination.'" (*Id).*

The City Council's action of deciding an SEIR was not required in the case at bar is tantamount to the lead agency's action in *Azuza* of deciding the project was exempt from CEQA. Accordingly, exhaustion of administrative remedies was not required. "The *only* prerequisite to an action challenging an exemption determination is that it be brought within 180 days [or 35 days, if a notice of exemption is filed] of the date of the final decision of the agency." (*Id.* at 1210) (emphasis in original). Here, no notice of determination was filed and therefore the only prerequisite to an action challenging a failure to prepare an SEIR was that it be brought within 180 days.

2. CEQA § 21177 does not apply to this case because the City failed to give notice required by law.

CEQA § 21177, subd. (e) states, "this section does not apply to any alleged grounds for noncompliance with [CEQA] ... if the public agency failed to give notice required by law."

"[E]xhaustion of administrative remedies has not been required of CEQA petitioners who did not receive proper notice of administrative hearings." (*McQueen v. Board of Directors of the Mid-Peninsula Regional Open Space District*, (1988) 202 Cal. App. 3d 1136, 1150).

Here, Petitioners did not receive proper notice of the City Council's June 12, 2001 meeting, in that there was no information in the City's notice that dewatering was required of the methane mitigation measures. (AR 26:7069-70) There was no discussion of mitigation measures' long-term dewatering at the hearing. (AR 23:6299-6349). The CLA Report where Methane System Requirements are outlined in table 2-1, do not show dewatering is required by the methane mitigation system. (24:6707) "[P]etitioner's situation [is] tantamount to a lack of notice due to the incomplete and misleading project description employed by the district." (*McQueen*, 202 Cal. App. 3d at 1150). Further, "[if] an agency provides a public hearing on its decision to carry out or approve a project, the agency should include environmental review as one of the subjects for the hearing." *Id.* (internal quotations omitted). Here, the agency did not.

5) Does the administrative record support the conclusion that the city council, in connection with its decision on June 12, 2001

(a) considered the contention that the methane mitigation measures will require long-term dewatering which may cause soil subsidence and expansion of an existing plume of groundwater contamination, and

Yes, with regard to the issue of subsidence. (AR 24:6710-12; 4:1062-3; 5:1184). No, with regard to the issue of toxic groundwater plume expansion.

(b) determined that those potentially significant environmental effects either will not occur or will be insignificant?

Yes, with regard to subsidence. (AR 4:1062-3; 5:1184). No, with regard to toxic groundwater plume expansion.

Dated: June 10, 2005

Respectfully Submitted,

LAW OFFICE OF SABRINA VENSKUS

By: _____

Sabrina D. Venskus
Attorney for Petitioners and Appellants

PROOF OF SERVICE

I, Sabrina Venskus, hereby declare under penalty of perjury that I am over the age of eighteen (18) and am not a party to the instant case. On June 10, 2005, I served the attached document:

SUPPLEMENTAL BRIEF LETTER

by placing a copy thereof, enclosed in a separate sealed container, with the postage thereon fully prepaid, in the United States mail, first class, in the County of Los Angeles, State of California, each of which envelopes was addressed as indicated further below, and that my business address is 171 Pier Avenue, Suite 204, Santa Monica, California, 90405.

Jack Brown
Assistant City Attorney
700 City Hall East
200 North Main Street
Los Angeles, CA 90012

Robert D. Crockett
Kathleen O'Prey Truman
Damon Mamalakis
Latham and Watkins
633 W. Fifth Street, Suite 4000
Los Angeles, CA 90071

Clerk, Superior Court
Department 33
111 N. Hill Street
Los Angeles, CA 90012

Clerk, Supreme Court (five copies)
300 South Spring Street
Los Angeles, CA 90013

EXECUTED THIS 10th day of June, 2005, in the County of Los Angeles, State of California.

SABRINA VENSKUS

Subsidence

INTER-DEPARTMENTAL CORRESPONDENCE

February 20, 2001

To: Vitaly B. Troyan, P.E.
City Engineer

From: David T. Hsu, Chief of Grading Section
Department of Building and Safety

Subject: REGIONAL GROUND SUBSIDENCE AT PLAYA VISTA, PLAYA DEL REY AND THE MARINA PENINSULA, AND RELATED GAS MIGRATION PROBLEMS, dated February 15, 2001, prepared by Bernard Endres, Ph.D.

REFERENCE: Inter-Departmental Correspondence, dated October 24, 2000, City Engineer

The Department of Building and Safety has received a report concerning subsidence for the Playa Vista area that may affect your conclusions regarding this issue. Please evaluate the attached data with regard to the conclusions of the above referenced letter and inform me of any revisions to your conclusions. Please be aware that an appeal concerning the issue of subsidence at the Playa Vista development has been filed with the Board of Building and Safety Commissioners. Therefore, time is very important with regard to your conclusions.

If you have any questions regarding this information please contact myself at (213)977-6317 or Dana Prevost at (213)97706326.

Attachments: 1) Report dated February 15, 2001, by Bernard Endres Ph.D.

G:/grdocs/grletters/playavista/subsidenceendres

NO RESPONSE

LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

Date: May 3, 2000

To: Dana Prevost, David Hsu, Grading Engineering Section
Los Angeles Dept. of Building and Safety

From: Art Kurimoto, Survey Supervisor, Survey Division, Bureau of Engineering
Los Angeles Dept. of Public Works

Subject: **Playa Vista Project Grading Report and Improper Misquotes Regarding Area Subsidence**

It has come to my attention that a report inquiring about methane gas migration leading to ground subsidence in the area of the Playa Vista Development Project has used statements made by me (in a five minute telephone conversation on May 19, 1999) as expert testimony refuting any such ground subsidence during the period of 1975 to 1985. I am alarmed at this, as any statements made by me have been taken out of context.

In my conversation with Mr Steve Kolthoff of Group Delta Consultants, I explained that the City of Los Angeles conducted precise leveling operations citywide on a five year cycle. I explained that I knew of no subsidence studies in the area. However, there are streets such as Jefferson Blvd, Lincoln Blvd and Culver Blvd that have a history of benchmarks that have been remeasured every five years on average since the 1950's as part of a vertical control maintenance program.

In 1985, this citywide leveling program was ended due to lack of funding. This had nothing to do with any subsidence study. I stated that a simple comparison of existing benchmarks along these streets over the years would show vertical ground movement variations in five year increments. I also stated that these records were public information and could be purchased at our Engineering counter for a small reprographics fee.

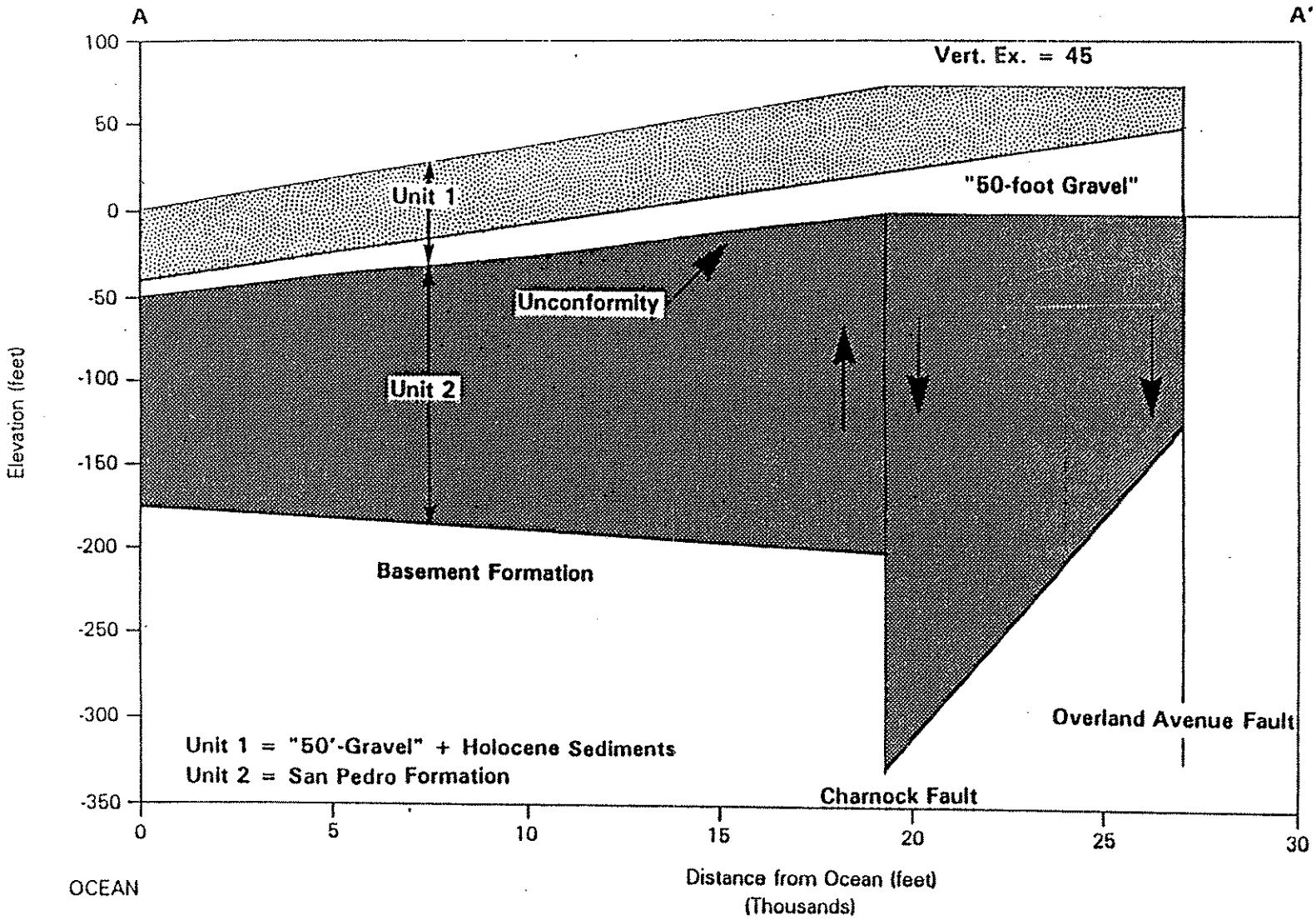
I stated that it was my opinion that there was little or no appreciable ground movement over these recorded benchmarks (which are on the roadway, not in the marshland) and any real comparison would have to be done by Mr. Kolthoff himself.

I do not have any expertise in any matter involving methane gas migration. I do not have any information on any ground subsidence in the project area of the Playa Vista Development. I refute any reference to me as having given expert testimony on any matter regarding ground subsidence at all. Clearly, I have been misquoted during my short conversation with Mr. Kolthoff, and had I known that I would be used as an advisor in a published report, I would have ended the conversation immediately.

Should you have any further questions in this regard, I am available at my office each day.

Phone 310-575-8493
Fax 310-575-8866
E-mail wlasurvey@eng.ci.la.ca.us

Art Kurimoto



Kennedy/Jenks Consultants

Santa Monica Groundwater Management Plan

Idealized Geologic Cross-Section A-A'

K/J 910012
June 1992

Figure 2.3

BERNARD ENDRES, PH.D.
3045 TUNA CANYON ROAD
TOPANGA, CA 90290

TELEPHONE (310) 455-0023 * FACSIMILE (310) 455-3618

3

15 February 2001

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING & SAFETY
201 N. Figueroa, 3rd Floor
Los Angeles, CA 90012

ATTENTION: DANA PREVOST

Re: REGIONAL GROUND SUBSIDENCE AT PLAYA VISTA, PLAYA DEL REY AND THE MARINA PENINSULA, AND RELATED GAS MIGRATION PROBLEMS

Dear Mr. Prevost:

Pursuant to your recent request, I have prepared this letter as a review of issues regarding regional ground subsidence and the related gas migration issues in Playa Vista, Playa del Rey and the Marina Peninsula areas.

1. SUBSIDENCE IS CAUSED BY FLUID WITHDRAWAL:

Fluid withdrawal from a petroleum reservoir or aquifer leads to the inevitable result of causing land subsidence at the surface, and compaction of sands at the reservoir level. The compaction is due to a pressure decrease in the reservoir or aquifer, and causes the overlying formations and the land surface to sink. This deformation leads to fracturing of the geological formations in the surrounding areas, causes movement along existing fault structures, and damages the oil and gas well casings and seals. This gives rise to the upward migration of gas from the petroleum reservoir. The interaction between subsidence and gas migration is illustrated in Exhibit 1.

The geological deformation is greatest at the reservoir level and propagates to the surface as a bowl shaped configuration, as illustrated in Exhibit 2. The maximum subsidence is at the center of the bowl. For a petroleum reservoir, the extent of the subsidence bowl at the surface is approximately twice the areal extent of the reservoir. The cross-sectional distribution of compressive and tensile stresses within the subsiding formation is also illustrated in Exhibit 2.

As a general rule, the amount of subsidence experienced at the surface correlates directly with the volume of fluid production within the reservoir. A convenient representation is to plot cumulative subsidence versus time, and cumulative fluid production versus time in order to characterize this correlation. The survey data and fluid production history of the referenced area supports this correlation.

2. FLUID WITHDRAWAL HAS CAUSED SIGNIFICANT SUBSIDENCE AT PLAYA VISTA, PLAYA DEL REY AND THE MARINA PENINSULA AREAS:

Fluid production of oil and brine water from the Playa del Rey and Venice oil fields caused nearly two feet of surface subsidence between 1927 and 1970. The California Division of Oil and Gas (DOG) documented this in their Sixtieth Annual Report published in 1974. Exhibit 3 presents the iso-contours of subsidence from that report, showing the vertical movement in feet during 1937 to 1970 (viz., Figure 3 from the DOG report). This figure also illustrates the productive limits of the "Del Rey Hills Area," the "Venice Area" and the "Kidson Area."

Exhibit 4 presents the cumulative subsidence in feet for the time period 1927 to 1970 for selected bench marks, along with cumulative oil field production (viz., Figure 4 from the DOG report). These data support the following conclusions:

1. Surface subsidence directly correlates with the fluid production from the oil fields.

2. Surface subsidence directly correlates with the productive limits of the oil fields.

3. The areal extent of the subsidence extends well beyond the productive limits of the oil fields.

4. Subsidence was continuing unabated at the end of the measurement data in 1970.

Although fluid production from these areas has continued to the present time, subsidence monitoring has been ignored. Southern California Gas Company (SOCALGAS) has operated an extensive oil field dewatering program within the "Del Rey Hills Area" and the "Venice Area" for many years. This has been necessary since the gas storage operations requires continuous pumping of brine water from these areas to prevent invasion of the water into the primary storage zone reservoir.

The average daily production from their dewatering wells is approximately 2,500 barrels of brine water per day. This would equate to over 90,000 barrels per year, or over 27 million barrels of fluid production between 1970 and the present. It is inevitable that this has contributed to the subsidence problem, additional geological fracturing, and additional damage to the oil and gas well casings and seals.

3. CITY OF LOS ANGELES SURVEY DATA HAS CONFIRMED THE EXISTENCE OF A SERIOUS SUBSIDENCE PROBLEM:

I utilized survey data generated by the City of Los Angeles to evaluate the extent of the subsidence problem in the Playa Vista Area (near Jefferson Blvd. and Lincoln Blvd.) in the vicinity of the Playa del Rey oil field. The data utilized is presented in Exhibit 5.

The elevation data for a bench mark at Jefferson and Lincoln was as follows ("STD SUR MON, VEN I-4, ON CENTER LINE INTER OF JEFFERSON BLVD AND LINCOLN BLVD. ** GONE 1972 **"):

YEAR	ELEVATION (FEET)
1956	7.057
1960	7.006
1963	6.945
1968	6.828
1970	6.790
TOTAL ELEVATION CHANGE:	-.267 FEET (1956 to 1970).

This was compared to a bench mark in the Marina Peninsula Area, located near the intersection of Pacific Street and Lighthouse, that had a history of being a subsidence prone area. For example, observe the subsidence contours presented in Exhibit 3 for this area.

The elevation data for a bench mark in the vicinity of Pacific Street and Lighthouse was as follows ("USC & GS DISK MARKED P-767-1945 SET IN S CURB OF BRIDGE 26.7 FT E OF CENTER LINE ROADWAY OF PACIFIC ST. * 3.5 FT E OF W END OF BRIDGE ** GONE 1986 **").

YEAR	ELEVATION (FEET)
1955	14.947
1956	14.877
1960	14.827
1963	14.789
1970	14.682
TOTAL ELEVATION CHANGE:	-.265 FEET (1955 to 1970).

In summary, these data establish that the Jefferson/Lincoln area subsided .267 feet over a 14-year interval from 1956 to 1970. The Pacific/Lighthouse area, a well known subsidence prone area, subsided .265 feet over a 15-year interval from 1955 to 1970. Accordingly, these data confirm that the subsidence problems caused by oil field production are widespread, and extend to the areas that are under development at Playa Vista. No systematic monitoring of these problems has been undertaken since 1970.

4. THE SUBSIDENCE PROBLEMS IMPACT THE INTEGRITY OF THE OIL AND GAS WELLS THROUGHOUT THE AREA:

Fracturing of the geological formation and damage to the well casings from subsidence will cause upward migration of gas to the surface, exacerbating the near surface soil gas conditions. In the referenced area, over 200 oil wells were drilled and completed prior to the onset of the significant subsidence discussed in this document. Accordingly, subsidence must be recognized as a major contributor to the gas migration problems that have been documented at Playa Vista.

Exhibit 6 sets forth the location of the oil and gas wells within the Playa del Rey and Venice oil field areas. These areas are all interconnected with a highly permeable gravel zone that was formed by the old Los Angeles Riverbed. This provides a ready conduit for the migration of gas as it leaks up the old and corroded well casings. These wells were drilled prior to the time that significant subsidence had occurred in the oil fields. Accordingly, this subsidence has aggravated the well leakage problems.

SOCALGAS owns all of the mineral rights in this area, and has been the oil field operator for many years. As a consequence, they have the primary responsibility for monitoring for oil field subsidence, but have not done so. Furthermore, they have failed to adequately investigate the integrity of the many old wells in the area, and have failed to perform adequate soil gas studies.

It is apparent that the gas migration problems at Playa Vista are strongly interrelated with the movement of leaking gas easterly within these gravel zones as a result of being "swept" by the tidal forces and wave energy within these permeable zones.

5. SURFACE DEFORMATION:

Deformation due to compression and extension at and near the land surface causes fissures in the soil and damages buildings, pipelines, and other structures. In the subject areas, these problems are complicated by the 100% liquefaction prone region that has been identified in the Seismic Hazards Map published by the Division of Mines and Geology, and by the near surface water table.

Regional water tables will remain at nearly the same elevation after local subsidence lowers the land surface. The effect is to decrease the depth to the water level. If the water table rises (relative to the land surface), higher than the bottom slab of a building, the uplift pressure on the structure will be noticeably increased. This could cause the slab to eventually rupture.

Likewise, the below-slab installation of a gas membrane barrier for gas control purposes could be adversely impacted by these same uplift pressure conditions. Since the gas membrane must perform without failure over the lifetime of the structure (viz., exceeding 70 years), the long-term consequences of the subsidence must be evaluated. As a minimum, this would require ongoing monitoring of the subsidence problem using dedicated bench marks and appropriate surveying techniques.

These survey techniques have been implemented successfully in many oil fields throughout the world. For example, the city of Long Beach requires continuous monitoring for subsidence in the Wilmington Field, and has an elaborate water injection program to mitigate the consequences of surface sinking and water incursion in this coastal area.

The city of Beverly Hills has imposed a contractual obligation upon all oil field operators within the city to monitor for subsidence. This has been ongoing for at least the past 50 years, when it was first imposed upon the Occidental Petroleum operations within the city.

The city of Redondo Beach failed to impose such a requirement on oil field operations conducted under the King Harbor Boat Marina. Approximately two feet of subsidence, which occurred over a period of 20 years of oil production, caused the breakwater rubble barrier, constructed by the U.S. Army Corps of Engineers, to sink. A winter storm in 1988 destroyed the rubble barrier, and the city of Redondo Beach and the U.S. Army Corps of Engineers were held liable for the millions of dollars of damage that resulted to the shoreline structures. They were found to have been negligent for failing to monitor for the subsidence and for their failure to take protective measures to minimize the risk of injury.

It is significant to point out that the level of subsidence measured in the Playa del Rey and Venice coastal areas through 1970 is similar to the subsidence that caused the destruction of the King Harbor at Redondo Beach. However, it is alarming that this profound example of destruction has largely gone ignored as it relates to the Playa Vista development.

The conduct of SOCALGAS in failing to monitor for subsidence over the past 30 years falls well below the standard of care for oil field operators. In addition, their refusal to perform appropriate soil gas surveys in the area has endangered public health and safety.

6. LESSONS LEARNED REGARDING SUBSIDENCE PROBLEMS THAT CAUSED THE COLLAPSE OF THE BALDWIN HILLS DAM:

Another example of oil field related subsidence that deserves careful review is the failure of the Baldwin Hills Dam on December 14, 1963. This facility was designed, constructed and operated by the Department of Water and Power. It was an earthen dam that was constructed over the Inglewood oil field, and used a spray-on membrane barrier similar to the "liquid boot" product. The basic design was flawed because it failed to account for the moving and unstable soil conditions created by the subsiding oil field operated by Chevron.

The reservoir failed so abruptly that there was not enough time to evacuate all of the people located in the area. The foundation of the dam and the membrane barrier lining ruptured and within hours the reservoir was empty. Five persons drowned, 41 homes were destroyed and another 986 homes were severely damaged. The dam purportedly had a monitoring system capable of detecting leakage of water into the area below the membrane barrier.

An investigation conducted after the dam collapse revealed that land subsidence and soil movement had created tears in the membrane barrier, allowing some water to escape and undermine the integrity of the dam's earthen foundation. These studies also revealed that the subsidence was not uniform, and caused differential settling across the diagonal face of the dam. None of this movement was monitored or accounted for in the design of the dam.

These lessons learned are especially significant as they relate to the gas membrane barrier installed at the Fountain Park apartment complex. There has been no showing that this membrane barrier will have the capability to withstand the geological and hydrostatic forces that can be anticipated to exist over the lifetime of the structure.

The problems can be viewed as the reverse of what caused the Baldwin Hills Dam disaster. Gas cannot be allowed to leak upward through the membrane barrier. However, the membrane barrier must survive the forces caused by a combination of movements from earthquake liquefaction, oil field subsidence, multiple piling penetrations, and the upward pressures from a shallow water table.

The pilings and stone columns have already been demonstrated to exacerbate the gas migration problem, placing even greater importance on this problem area.

7. MONITORING REQUIREMENTS:

The following conditions require monitoring and evaluation of their interrelations:

1. Surface vertical and horizontal deformations performed by leveling surveys, to be conducted on an ongoing basis.

2. An evaluation of fluid production being carried out by SOCALGAS, with an identification of well locations and production zones.

3. An evaluation of gas seepage from well locations utilizing soil gas monitoring techniques.

4. An evaluation of the hydrology conditions existing within the gravel aquifers within the vicinity of the oil and gas wells.

5. An evaluation of the dynamic conditions of the water table and other piezometric surfaces, including the influences of tidal action and seasonal variations.

6. An evaluation of the mechanical condition and well leakage information for all of the oil and gas wells located in the Playa del Rey and Venice oil fields.

7. Development of a gas mitigation and earthquake risk assessment plan consistent with the problems identified by this investigation.

The cost burden for these studies should be the responsibity of SOCALGAS. They have responsibility for the safe operation of the Playa del Rey and Venice oil fields by virtue of being the successor in interest to the operations of these fields that first began in the late 1920's. Also, SOCALGAS has derived, and continues to derive, significant economic benefit by the continued operation of these fields as part of their gas storage operations.

It is critical that SOCALGAS be required to disclose all well record information that is within their possession. This is necessary to protect public health and safety, and to facilitate an independent review of the risks posed by their operations. For example, there is overwhelming evidence that SOCALGAS failed to disclose to the DOG, and to the public, important information regarding well leakage problems. Also, they have falsely represented to the city of Los Angeles that there is no vertical gas migration at Playa del Rey.

8. THERE IS A HUGE INCOMPATIBILITY BETWEEN SOCALGAS OPERATIONS AND RESIDENTIAL DEVELOPMENT:

SOCALGAS currently has an application pending before the State of California Public Utilities Commission (PUC) seeking authorization to sell certain residential lots within the Playa del Rey and Marina Peninsula areas. Previously they had sold many residential lots in these areas without obtaining approval from the PUC. The validity of these sales, and possible violations of PUC regulations is currently under review by the PUC.

In many instances, these lot sales have resulted in homes being built directly over old oil and gas wells. SOCALGAS has taken the position that the city of Los Angeles is solely responsible for the permitting and approval procedures regarding this residential development. On the other hand, SOCALGAS has failed to disclose the serious leakage problems they have experienced with these wells. Most of the wells that were proclaimed to have been abandoned to the current standards of the DOG have developed leaks.

There has been a failure to evaluate the long-term consequences of subsidence, well leakage problems and earthquake hazards on these real estate developments. This responsibility has been delegated to the city of Los Angeles by SOCALGAS without adequate disclosure of the public health and safety risks posed by their operations. As a consequence, virtually no mitigation measures have been imposed by the city, and no monitoring procedures have been required.

The SOCALGAS underground gas storage operation in the city of Montebello had to be shut down because of well leakage problems into homes. Some homes had to be torn down to provide access to the leaking wells. In addition, homes built over the wells prevented appropriate monitoring of the gas migration hazards.

Before additional housing construction is allowed in the Playa Vista, Playa del Rey and Marina Peninsula areas a thorough investigation of the hazards to public health and safety must be performed. This is dictated by the City of Los Angeles Building Code which is primarily intended to protect the residents in these areas who have little or no knowledge of the extreme dangers posed by these oil field operations.

9. CONCLUSIONS:

Fluid withdrawal from the Playa del Rey and Venice oil fields has created regional ground subsidence that has impacted, and will continue to impact, real estate developments at Playa Vista, Playa del Rey and the Marina Peninsula areas. Nearly two feet of subsidence occurred between 1927 and 1970. However, there has been no systematic monitoring for subsidence since 1970.

This is an ongoing problem since SOCALGAS continues to produce large volumes of brine water from many wells in the area as part of their underground gas storage operations.

The subsidence has caused fracturing of the geological formation and damage to the well casings causing upward migration of gas to the surface, thereby exacerbating the near surface soil gas problems.

The long-term consequences of the surface deformation will impact the integrity of the gas membrane barriers necessary to protect structures from the migrating gas.

A systems engineering approach is necessary in evaluating the interactive consequences of subsidence, gas migration and movement of gas through the near surface aquifers from the locations of the leaking wells. This requires a detailed evaluation of the hydrology and the tidal actions that are responsible for moving the gases easterly within the aquifers and under the Playa Vista development.

There is an urgent need for SOCALGAS to disclose all of the well record information within their possession in order to facilitate an independent investigation of the public health and safety risks posed by the oil field and gas storage operations.

A monitoring program needs to be initiated that would systematically evaluate the subsidence and gas migration problems on a regional basis in order to properly assess the hazardous conditions.

Sincerely yours,

Bernard Endres

Bernard Endres, Ph.D.

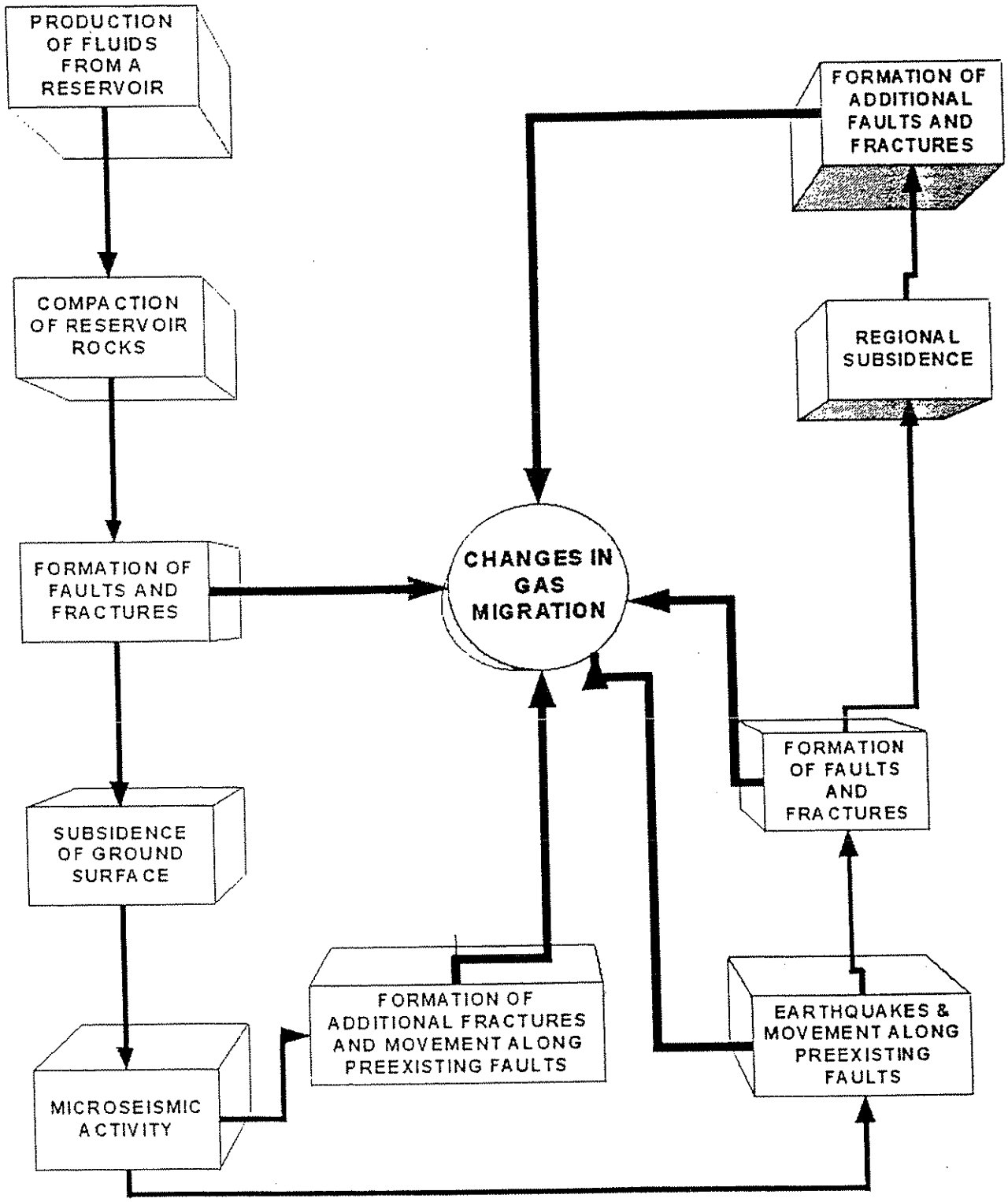
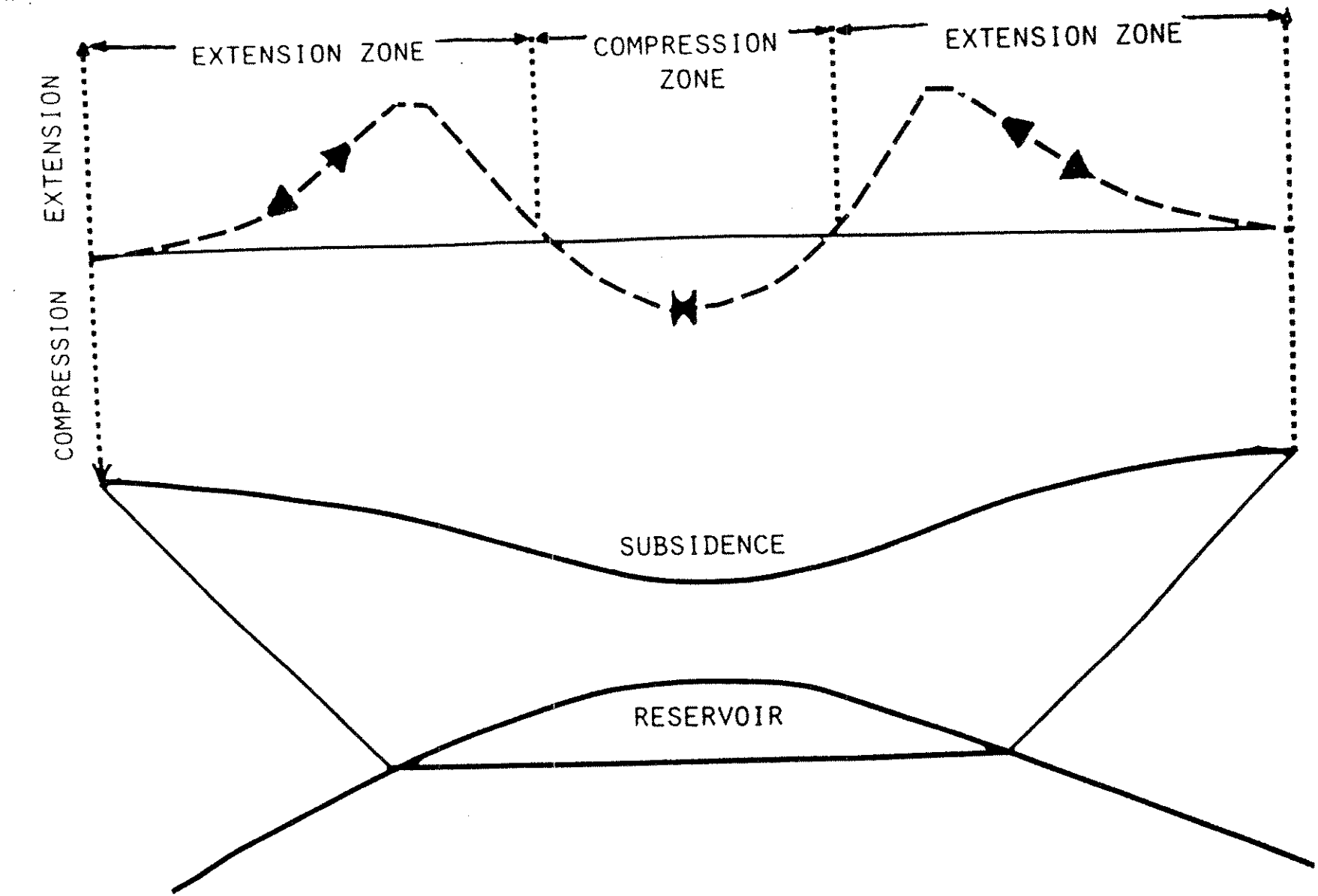
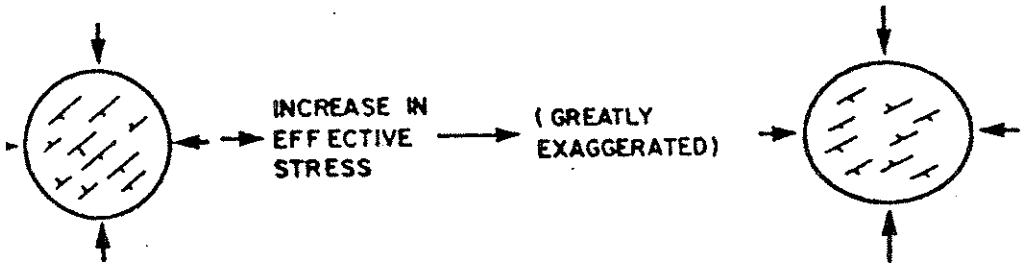


Figure 21-1. Schematic diagram of system relationships among the production of fluids, compaction, subsidence, and seismic activity. (*Modified after Chilingarian et al., 1995, fig. 1, p. 41.*)

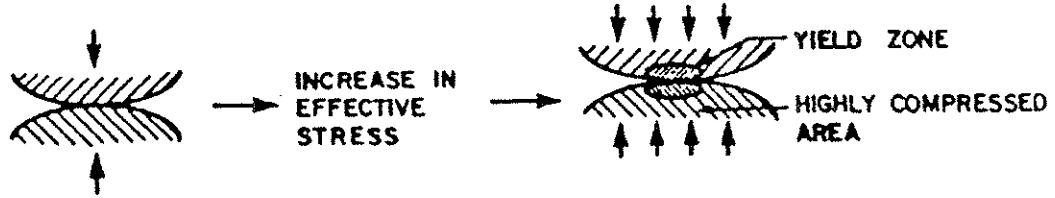


compressive and tensile stress distribution in subsiding formations.

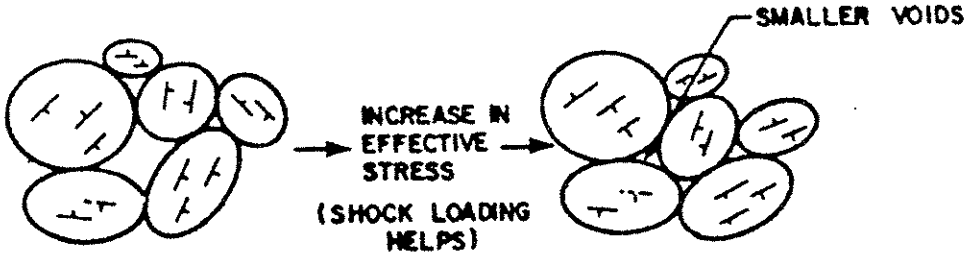
ELASTIC DISTORTION AND COMPRESSION



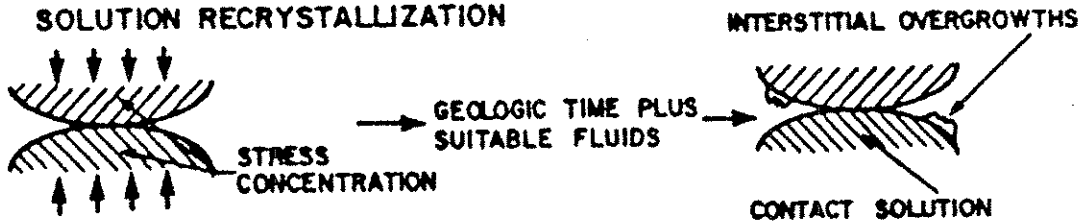
CONTACT POINT COMPRESSION AND YIELD



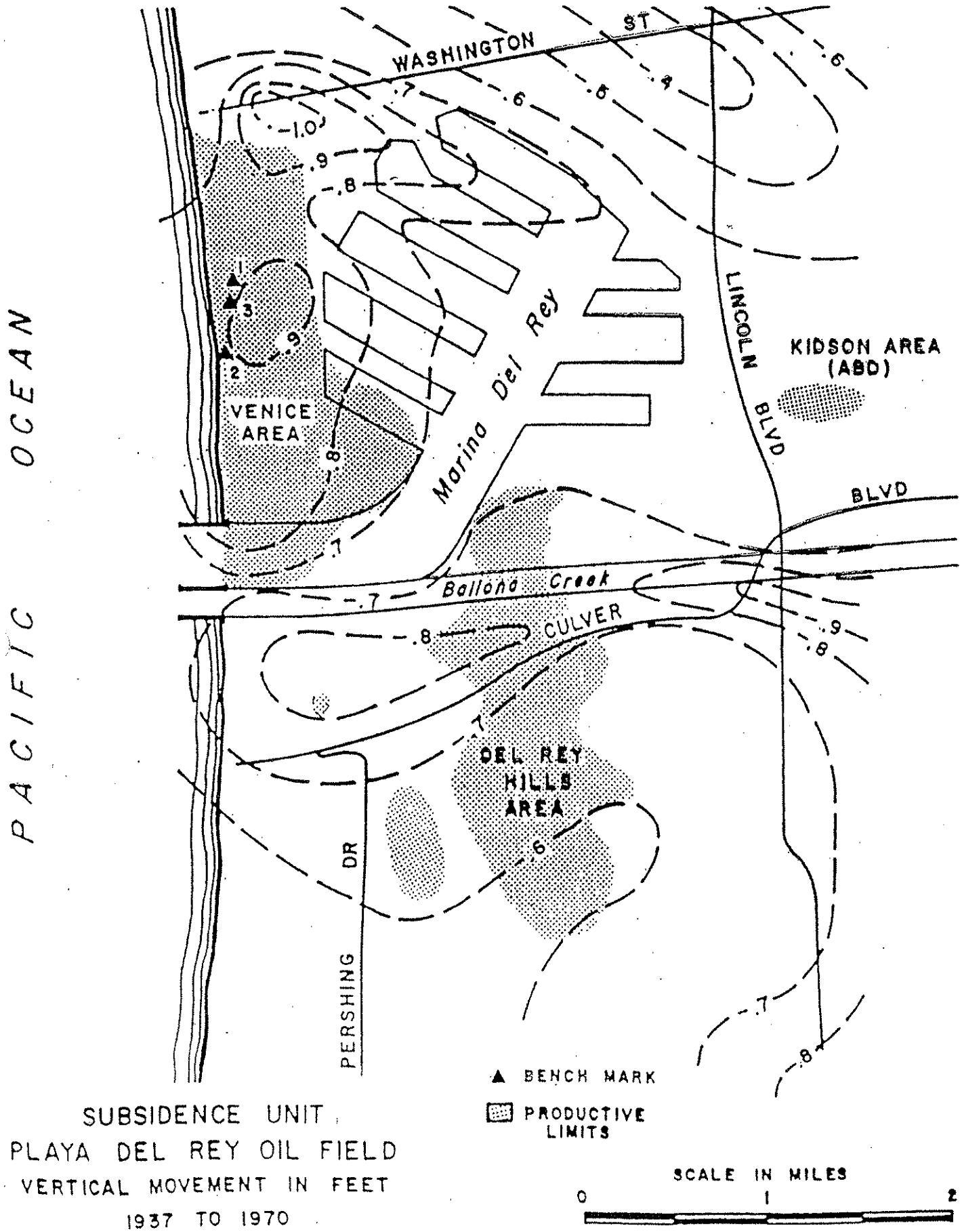
GRAIN REARRANGEMENT



SOLUTION RECRYSTALLIZATION



Mechanisms of volume decrease



SUBSIDENCE UNIT
PLAYA DEL REY OIL FIELD
VERTICAL MOVEMENT IN FEET
1937 TO 1970

Figure 3

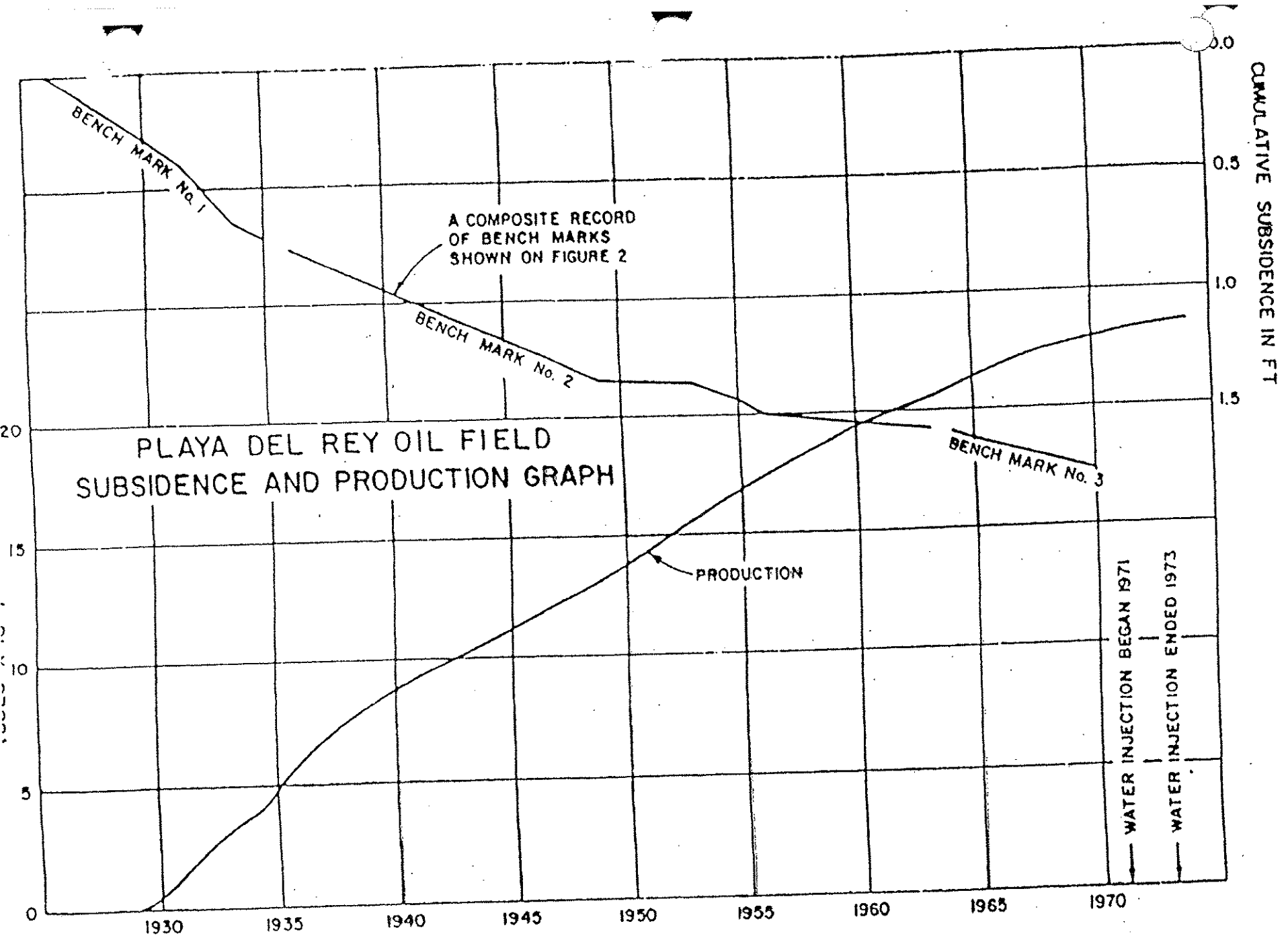

PLAYA DEL REY OIL FIELD
SUBSIDENCE AND PRODUCTION GRAPH
BENCH MARK No. 1
BENCH MARK No. 2
BENCH MARK No. 3
A COMPOSITE RECORD OF BENCH MARKS SHOWN ON FIGURE 2
PRODUCTION
WATER INJECTION BEGAN 1971
WATER INJECTION ENDED 1973
CUMULATIVE SUBSIDENCE IN FT
0.0
0.5
1.0
1.5
20
15
10
5
0
1930
1935
1940
1945
1950
1955
1960
1965
1970

Figure 4

S_ R MON, SAW J-12, ON CENTER LINE INTERSECTION OF MCLAUGHLIN AVE & WASHINGTON PL	366 70 (18.400)	60.414 68P (18.414)	60.526 63S (18.448)			17-108
SPK N CURB MCLAUGHLIN AVE,3FT W/O BCR WASHINGTON PL	61.932 85 (18.877)	61.850 80 (18.852)				17-108
WIRE SPK IN SE CURB HERBERT ST, 6FT NE OF BC CURB RETURN NE OF MCLAUGHLIN AVE	54.101 85 (16.490)	53.989 80 (16.456)	54.140 70 (16.502)	54.187 68P (16.516)	54.299 63S (16.550)	17-108
STD SUR MON, SAW J-12A, ON CENTER LINE MCLAUGHLIN AVENUE, 48.30FT NORTHWEST OF CENTER LINE WASHINGTON BLVD.	44.012 85 (13.415)	43.914 80 (13.385)	44.050 70 (13.426)	44.097 68P (13.441)	44.212 63S (13.476)	17-108
WIRE SPK IN E CURB OF W RDWY CULVER BLVD, 4.8FT S OF N CURB LINE PRODUCED, OF MCLAUGHLIN AV, N END CB	38.966 80 (11.877)	39.097 70 (11.917)	39.143 68P (11.931)	39.257 63S (11.966)		17-109
SPK 2FT E/O E CURB OF WEST BDWY CULVER BLVD, 12FT N/O C/L PROD MCLAUGHLIN AVE, N END CB	39.058 85 (11.905)					17-109
STD SUR MON, VEN K-1, ON CENTERLINE INTER OF CULVER BLVD EAST ROADWAY AND SLAUSON AVENUE,FROM THE EAST.	37.006 70 (11.279)	37.051 68P (11.293)	37.166 63S (11.328)			17-109
LACO FC DISK *STMPD 116-20300,1971* 2FT W/O WEST CURB CULVER BLVD, 9.5FT N/O NORTH ABUT OF FLOOD CONTROL CHANNEL, N END GUARD RAIL, APPROX 150FT S/O SLAUSON AVE EAST	39.278 85 (11.972)	39.180 80 (11.942)				17-109
WIRE SPK IN E CURB CULVER BLVD, 1.6FT S OF BC CURB RETURN S OF STONER AVE	36.037 85 (10.984)	35.938 80 (10.954)	36.072 70 (10.995)	36.116 68P (11.008)	36.232 63S (11.044)	17-109
SPK N CURB INGLEWOOD BLVD, 10FT E/O BCR CULVER BLVD, EAST RDWY	35.026 85 (10.676)	34.924 80 (10.645)				17-109
STD SUR MON, VEN J-1B, ON CENTER LINE INTERSECTION CULVER BLVD E RDWY & INGLEWOOD BLVD	35.090 70 (10.695)	35.134 68P (10.709)	35.247 63S (10.743)			17-109
WIRE SPK IN E CURB CULVER BLVD, 0.6FT S OF BC CURB RETURN S OF FARIAS AVE	30.197 85 (9.204)	30.108 80 (9.177)	30.247 70 (9.219)	30.290 68P (9.232)	30.405 63S (9.267)	17-109
WIRE SPK IN W CURB CULVER BLVD W RDWY, 11.8FT N OF BC CURB RETURN N OF WESTLAWN AVE, S END CB	22.871 85 (6.971)	22.772 80 (6.941)	22.898 70S (6.979)			17-110

	ELEV	TK	ELEV	TK	ELEV TK
SPK N CURB CULVER BLVD, WEST RDWY, 24FT N/O MASCAGNI STREET N END CB	19.445 85 (5.927)		19.347 80 (5.897)		17-1102
STD SUR MON, VEN J-2A, ON CENTER LINE CULVER BLVD EAST ROADWAY, 49FT SOUTH OF CENTER LINE PRODUCED OF MASCAGNI STREET.	18.527 70 (5.647)		18.568 68P (5.660)	18.692 63S (5.697)	17-1103
WIRE SPK IN E CURB CULVER BLVD E RDWY, 38.3FT N OF BC CURB RETURN N OF BRADDOCK DR, N END CB ** GONE 1976 **	17.044 70S (5.195)				17-1104
SSM ON C/L INTER CULVER BLVD ELY RDWY & BRADDOCK DR	15.200 70 (4.633)		15.241 68P (4.645)	15.365 63S (4.683)	17-1105
WIRE SPK IN N CURB MCCONNELL AVE, 2.6FT W OF BC CURB RETURN W OF CULVER BLVD, W RDWY	15.043 85 (4.585)		14.947 80 (4.556)	15.072 70S (4.594)	17-1106
STD SUR MON, VEN I-2, ON THE INTER OF CENTER LINE CULVER BLVD AND CENTER LINE PRODUCED OF BEETHOVEN STREET, 4FT SOUTH OF MOST SOUTHERLY CURB LINE PRODUCED OF SEARS SERVICE CENTER LOCATED AT #12870 CULVER BLVD.	12.363 70 (3.768)		12.404 68P (3.781)	12.517 63S (3.815)	17-1107
WIRE SPK IN E CURB CULVER BLVD, 7FT N OF SLY DRIVE-WAY TO BLDG #12870, 0.15MI SLY FROM MCCONNELL AVE	13.173 85 (4.015)		13.077 80 (3.986)	13.208 70S (4.026)	17-1108
WIRE SPK N CURB CULVER BLVD., 1 FT E OF BC CURB RETURN E OF OFF RAMP HWY 90 GOING EAST EAST BOUND ON RAMP	12.615 85 (3.845)		12.526 80 (3.818)	12.655 70S (3.857)	17-1109
BOLT IN ELY CORNER OF CONC BASE OF CROSSING SIGNAL AT NW SIDE OF CULVER BLVD ABOUT 135FT SW OF ALLA RD 13FT N OF P.E. RR TRACKS, 27FT SE OF S.P. RR TRACKS ** GONE 1973 **	12.874 63S (3.924)				17-1110
STD SUR MON, VEN I-3A, ON CENTER LINE CULVER BLVD, 0.12MI WESTERLY FROM FREEWAY 90, 55FT NORTH OF POWER POLE #32912M.	8.606 70 (2.623)		8.647 68P (2.636)	8.764 63S (2.671)	17-1111
BOLT IN W CURB LINCOLN BLVD, 52FT S OF BC CURB RETURN S OF FIJI WAY	8.940 85 (2.725)		8.848 80 (2.697)	9.030 75 (2.752)	8.918 74S (2.718) 8.948 74P (2.727) 17-1151

	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	BM N
BRA DISC *STMPD L.A.CO ENGINEER R.E. 7078* IN CONC MON, UNDER COVER, ON APPARENT CTR LINE INTERS OF FIJI WAY & ADMIRALTY WAY, IN THE MARINA COMPLEX	15.440 (4.706)	80	15.622 (4.762)	75	15.518 (4.730)	74S	15.554 (4.741)	74P	15.562 (4.743)	70R	17-115
BOAT SPK IN THE INTER OF FIJI WY & ADMIRALTY WY, 0.7FT E OF BOAT SPK ON C/L EC, STA 17 PLUS 15.00, OF FIRST CURVE IN FIJI WY W OF LINCOLN BLVD *** GONE 1969 ***	16.438 (5.010)	63									17-115
BRASS NAIL IN LEAD N CURB FIJI WAY, 1FT W/O BCR W/O ADMIRALTY WAT ** NOTE MILEAGE **	16.440 (5.011)	85									17-115
BRASS DISC *STMPD L.A.CO ENGINEER R.E. 7078* IN CONC MON, UNDER COVER, ON APPARENT CTR LINE 0.14MI W OF ADMIRALTY WAY, OPPOSITE DRVWY ENTRANCE TO FISHERMANS VILLAGE PARKING LOT	13.392 (4.082)	80	13.580 (4.139)	75	13.511 (4.118)	74P	13.519 (4.121)	70R			17-115
SPK 1FT N/O N CURB FIJI WAY, 6FT E/O DRIVE TO FISHERMANS VILLAGE, W END CB 0.14MI W/O ADMIRALTY WAY	14.137 (4.309)	85									17-115
USC&GS BM DISC *STMPD TIDAL NO. 4 1968* IN FIJI WAY 0.7FT N OF NLY CURB LINE, 138FT W OF WLY CURB LINE OF ENTRANCE TO FISHERMANS VILLAGE, W END CB 0.50MI WLY FROM ADMIRALTY WAY 0.64MI W/O ADMIRALTY WAY	12.713 (3.875)	85	12.615 (3.845)	80	12.790 (3.898)	75	12.681 (3.865)	74S	12.710 (3.874)	74P	17-116
USC&GS BM DISC *STMPD TIDAL NO. 3 1967* IN FIJI WAY IN CTR OF CURB RETURN AT S END OF MEDIAN; 53FT S OF CTR LINE DRVWY FOR PIECES OF EIGHT RESTAURANT 42.7FT E OF W CURB FIJI WAY	14.774 (4.503)	85	14.695 (4.479)	80	14.869 (4.532)	75	14.764 (4.500)	74S	14.798 (4.510)	74P	17-116
USC&GS BM DISC *STMPD TIDAL NO. 2 1967* IN FIJI WAY IN CTR OF CURB RETURN N END OF MEDIAN, 28FT S OF CTR LINE OF N DRVWY ENTRANCE TO ADMINISTRATION PARKING LOT, 0.69MI W/O ADMIRALTY WAY	15.226 (4.641)	85	15.131 (4.612)	80	15.310 (4.666)	75	15.198 (4.632)	74S	15.232 (4.643)	74P	17-117
USC&GS DISC * STMPD TIDAL NO. 1 1967 * IN NORTHEAST CORNER OF COAST GUARD BUILDING IN CONCRETE FOUNDATION, 29.5FT WEST OF CENTER FIJI WAY, 17FT SOUTH OF CENTER LINE OF DRIVE WAY NORTH OF COAST GUARD BUILDING.	14.728 (4.489)	85	14.593 (4.448)	80	14.759 (4.499)	75	14.641 (4.463)	74S	14.657 (4.467)	74P	17-117

	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	B
L A CO F C DISK IN TOP OF SW PIER TO OIL DERRICK, 67.5FT W OF CENTER LINE SPEEDWAY AND 37.5FT N OF CENTER LINE PROD 46TH AVE ** GONE 1963 **	16.459 (5.017)	60	16.502 (5.030)	56	16.569 (5.050)	55					17-
SPK W CURB PACIFIC AV 5FT N/O BCR N/O LIGHTHOUSE ST	13.199 (4.023)	85									17-
USC & GS DISK MARKED P-767-1945 SET IN S CURB OF BRIDGE 26.7FT E OF CENTER LINE ROADWAY OF PACIFIC AVE, 8FT S OF CENTER LINE PRODUCED, OF LIGHTHOUSE ST, *3.5FT E OF W END OF BRIDGE* ** GONE 1986 **	14.682 (4.475)	70	14.789 (4.508)	63	14.827 (4.519)	60	14.877 (4.535)	56	14.947 (4.556)	55	17-
STD SUR MON, VEN E-4, AT CENTER LINE INTER OF PACIFIC AVENUE AND LIGHTHOUSE STREET.	12.249 (3.733)	70R	12.247 (3.733)	70	12.354 (3.765)	63	12.391 (3.777)	60	12.440 (3.792)	56	17-
L.A.CFCD STEEL PIN IN LEAD, IN N CURB CULVER BLVD, 20.5FT E OF W BUILDING LINE OF APARTMENT COMPLEX AT #405, 0.09MI WLY FROM NICHOLSON STREET	4.042 (1.232)	85	3.947 (1.203)	80	4.110 (1.253)	75	4.022 (1.226)	74S	4.043 (1.232)	74P	17-
BOLT 1FT S/O S CURB CULVER BLVD, 49FT W/O BCR NICHOLSON ST, W END CB	3.973 (1.211)	85	3.868 (1.179)	80							17-
WIRE SPIKE IN SOUTH CURB CULVER BLVD, 54FT WEST OF CENTER LINE NICHOLSON STREET. ** GONE 1972 **	4.038 (1.231)	70	4.077 (1.243)	68P	4.169 (1.271)	63	4.222 (1.287)	60	4.270 (1.301)	56	17-
STD SUR MON, VEN G-5A, IN CULVER BLVD, 14FT SOUTH OF CENTER STRIPE, ON CENTER LINE P.I., OPPOSITE PP #1277854E, 512.7FT EAST OF CENTER LINE NICHOLSON STREET, 0.37MI WEST OF JEFFERSON BLVD.	3.236 (0.986)	75	3.145 (0.959)	74S	3.162 (0.964)	74P	3.154 (0.961)	70R	3.171 (0.967)	70	17-
STD SUR MON, VEN H-4, AT CENTER LINE INTER OF CULVER BLVD AND JEFFERSON BLVD.	4.690 (1.430)	75	4.579 (1.396)	74S	4.604 (1.403)	74P	4.595 (1.401)	70R	4.608 (1.405)	70	17-
PBM DISC STAMPED * 17-02311, 1979 * CTR HEADWALL, 7FT S/O S EDGE PAVEMENT JEFFERSON BLVD, 12FT ELY C/L INTERSECTION CULVER BLVD	5.548 (1.691)	85	5.482 (1.671)	80							17

(METRIC IN PARENTHESES)

(SAT.) JUNE 17, 2000; 5:15 P.M.

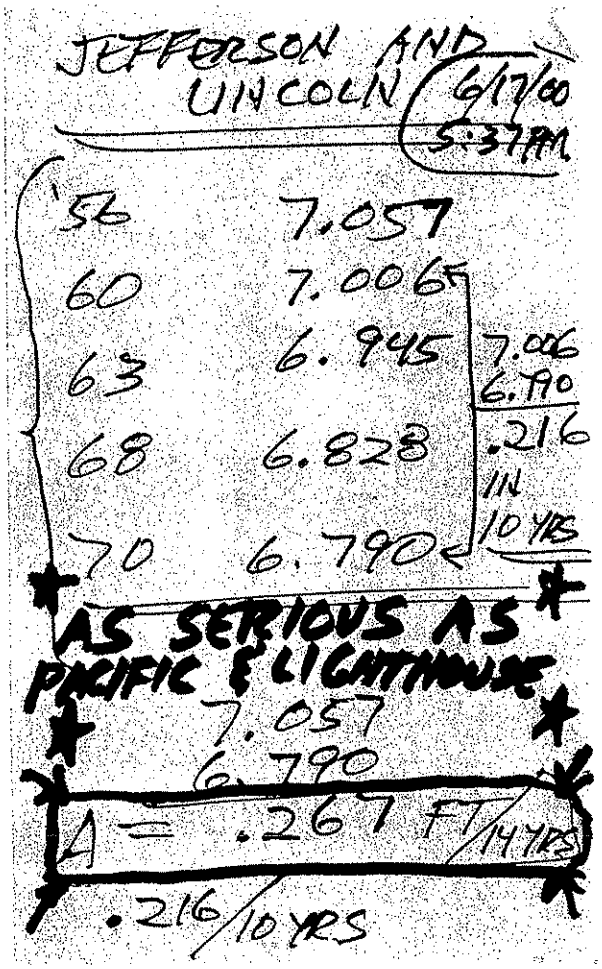
PACIFIC AVE

AND LIGHTHOUSE

YR.	ELEVATION
'55	14.947
'56	14.877
'60	14.827
'63	14.789
'70	14.682

14.947
14.682
Δ = .265 FT
15 YRS.

	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	B
STD SUR MON, VEN J-5C, AT CENTER LINE INTER OF LINCOLN BLVD AND 83RD STREET.	131.653 (40.128)	75	131.587 (40.108)	74P	131.585 (40.107)	70R	131.605 (40.113)	70	131.642 (40.124)	68P	17-
SPK 1FT W/O W CURB LINCOLN BLVD, 10FT N/O C/L EC, 400FT N/O 83RD ST, N END CB	94.787 (28.891)	85									17-
STD SUR MON, VEN J-5B, IN CONC MON ON CENTER LINE P.I. OF LINCOLN BLVD FROM THE SOUTH, 0.22MI NORTH OF CENTER LINE 83RD STREET, 62.3FT NORTH OF A L&T IN EAST CURB ON CENTER LINE TANGENT SOUTH, 65.4FT SOUTHEAST OF L&T IN NORTHEAST CURB * BAR DAMAGED *	80.981 (24.683)	80	81.166 (24.739)	75	81.102 (24.720)	74P	81.093 (24.717)	70R	81.113 (24.723)	70	17-
SQ SPIKE IN W CURB LINCOLN BLVD 14.8FT S OF BC TO RDWY NEAR L A CITY LINE 0.55 MILES S OF JEFFERSON BLVD ** GONE 1969 **	51.086 (15.571)	63	51.154 (15.592)	60	51.196 (15.605)	56	51.250 (15.621)	55	51.293 (15.634)	53	17-
SSM ON CTR LINE LINCOLN BL , 27FT N OF N CURB LINE PROD OF N.O.S SERVICE ROAD TO THE EAST	46.381 (14.137)	85	46.316 (14.117)	80	46.502 (14.174)	75	46.432 (14.152)	74P	46.422 (14.149)	70R	17-
SQUARE SPK IN CULVERT HEADWALL, 50FT PLUS OR MINUS W OF C/L LINCOLN BL, 53FT S OF C/L PROD OF ROAD TO HUGHES AIRCRAFT. 0.28MI S OF JEFFERSON BLVD	6.988 (2.130)	85	6.913 (2.107)	80	7.094 (2.162)	75	7.017 (2.139)	74P	7.003 (2.135)	70R	17-
STD SUR MON, VEN I-4, ON CENTER LINE INTER OF JEFFERSON BLVD AND LINCOLN BLVD. ** GONE 1972 **	6.790 (2.070)	70	6.828 (2.081)	68P	6.945 (2.117)	63	7.006 (2.135)	60	7.057 (2.151)	56	17-
CITY OF L.A. SURV PBM *STMPD 17-02492 1973* 2FT E OF E CURB LINE OF LINCOLN BLVD, 19.4FT N OF BC CURB RETURN N OF JEFFERSON BLVD, N END CB	11.841 (3.609)	85	11.811 (3.600)	80	12.008 (3.660)	75	11.908 (3.630)	74S	11.949 (3.642)	74P	17-
WIRE SPK IN CULVERT HEADWALL, 49.5FT E/O C/L LINCOLN BLVD 45FT S OF CENTER LINE JEFFERSON BLVD ** GONE 1968 **	6.752 (2.058)	63	6.814 (2.077)	60	6.864 (2.092)	56	6.921 (2.110)	55	6.964 (2.123)	53	17-
LA CO FC DISC MARKED BM-115-228 SET IN HAND RAIL BASE AND ON E SIDE OF HAND RAIL 0.7FT N OF N ABUTMENT OF LINCOLN BLVD BRIDGE OVER BALLONA CREEK 0.26MI NLY FROM JEFFERSON BLVD *CDH BRIDGE #53 118*	19.610 (5.977)	85	19.521 (5.950)	80	19.589 (5.971)	74S	19.624 (5.981)	74P	19.618 (5.980)	70R	17-
CITY OF L.A. DISC IN W FACE OF MOST NLY COLUMN OF ABANDONED RR BRIDGE OVER LINCOLN BLVD. 4.5FT E OF E CURB, 0.33MI N OF JEFFERSON BLVD *STMPD T 977*	12.864 (3.921)	80	13.054 (3.979)	75	12.939 (3.944)	74S	12.972 (3.954)	74P	12.967 (3.952)	70R	17


JEFFERSON AND LINCOLN
6/17/00
5:37AM
'56 7.057
60 7.006
63 6.945
68 6.828
70 6.790
7.006
6.790
.216
IN
10 YRS
AS SERIOUS AS PACIFIC & LIGHTHOUSE
7.057
6.790
Δ = .267 FT/14 YRS
.216/10 YRS

	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	EL	YR	BM NI
STD TRAV MON * STMPD VEN H-3 1951 * IN LINCOLN BLVD OF W EDGE CONC PVMT, 25FT N OF C/L OF DRVWY TO PIER 1 IMPORTS. 256FT N/N CURB FIJI WAY.VEN H3 1951	6.570 (2.003)	75	6.457 (1.968)	74S	6.486 (1.977)	74P	6.506 (1.983)	70	6.545 (1.995)	68P	17-025
SPK S CURB MINDANAO WAY, 0.4FT E/O BCR LINCOLN BL, W END CB	8.553 (2.607)	85	8.455 (2.577)	80							17-025
STD TRAV MON * STMPD VEN H-3A 1951 * IN LINCOLN BLVD, 1.5FT EAST OF WEST EDGE CONCRETE PAVEMENT, 4FT NORTH OF PP #110719M, 4FT NORTH OF PP #1277914E 0.10MI NORTH OF MINDANAO WAY.	8.644 (2.635)	75	8.527 (2.599)	74S	8.556 (2.608)	74P	8.573 (2.613)	70	8.613 (2.625)	68P	17-025
CUT SPK IN CULVERT HEADWALL 49FT W OF CENTER LINE LINCOLN BLVD 22FT S OF CENTER LINE PE RY TRACK 1FT S OF N END OF HEADWALL, 0.09MI N OF BALI WAY ** GONE 1975 **	13.119 (3.999)	74P	13.138 (4.004)	70	13.178 (4.017)	68P	13.271 (4.045)	63	13.324 (4.061)	60	17-025
USC&GS BM DISC *STMPD N 1217 1971* IN W HEADWALL, 1.5FT S OF N END, OF CONCRETE CULVERT, 6.7FT W OF W CURB LINE LINCOLN BLVD, 0.26MI NLY FROM MINDANAO WAY, 33FT N OF NLY RAIL OF OLD S.P. TRAN. CO. TRACK	14.022 (4.274)	85	13.921 (4.243)	80	14.104 (4.299)	75	13.994 (4.265)	74S			17-025
STD TRAV MON * STMPD VEN G-2B 1951 * IN LINCOLN BLVD. 1.5FT WEST OF EAST EDGE CONCRETE PAVEMENT, IN FRONT OF BRICK BUILDING #4305 12FT NORTH OF POWER P #110709M, 0.12MI NORTH OF P.E RR RIGHT OF WAY.	14.639 (4.462)	74P	14.650 (4.465)	70	14.691 (4.478)	68P	14.784 (4.506)	63	14.826 (4.519)	60	17-026
SPK W CURB LINCOLN BLVD, 2FT S/O BCR E/O MAXELLA AVE	16.329 (4.977)	85									17-026
STD SUR MON, VEN G-2C, IN LINCOLN BLVD 5FT WEST OF CENTER LINE, 25.5FT NORTH OF SOUTH PROP LINE PRODUCED OF MAXELLA AVENUE, TO THE WEST.	15.184 (4.628)	80	15.373 (4.686)	75	15.260 (4.651)	74S	15.291 (4.661)	74P	15.301 (4.664)	70	17-026
USC&GS BM DISC *STMPD V 977 1964* W CURB LINCOLN BLVD, 4.8FT N OF N LINE BLDG #4111, S END OF MOST SLY OF TWO CULVERTS, 0.37MI N OF P.E. RR R/W ** GONE 1973 **	13.969 (4.258)	70	14.010 (4.270)	68P							17-026
WIRE SPIKE IN W CURB LINCOLN BLVD 0.2 MILES S OF WASHINGTON BLVD N END CULVERT & 47FT N/O POLE #240834M ** GONE 1973 **	13.990 (4.264)	70	14.031 (4.277)	68P	14.120 (4.304)	63	14.157 (4.315)	60	14.210 (4.331)	56	17-026

SPK E END CB ON N'LY SIDE NOS SERVICE ROAD 81 85 17-18470
0.64 W/O BM #27-18400, 244 PLUS 50 (1 240)

SSM ON C/L P.I. N.O.S AT THE INTERS OF SERVICE RD 51.749 80 51.966 75 51.882 74P 51.894 70R 51.917 70 17-18500
AND ROAD TO RADAR TOWER ON THE HILL, 146FT E OF E (15.773) (15.839) (15.814) (15.817) (15.824)
END OF CB, 10.5FT S OF N FLOW LINE OF RD
0.76MI W OF BM 17-18400, STA 234 PLUS 49.33

SPK IN E END CB ON N'LY SIDE NOS SERVICE ROAD 53.320 85 17-1850
0.82MI W/O BM #17-18400, 234 PLUS 40 (16.252)

SPK IN E END CB ON N'LY SIDE NOS SERVICE ROAD 53.100 85 17-1852
0.93MI W/O BM #17-18400, 229 PLUS 00 (16.185)

SPK IN E END CB ON N'LY SIDE SERVICE ROAD 51.306 85 17-1854
1.02MI W/O BM #17-18400, 224 PLUS 25 (15.638)

COPPER WIRE IN D.H. IN E RIM OF MH IN CTR OF 52.372 80 52.476 74P 52.478 70R 52.495 70 17-1855
SERVICE RD, 1.09MI W OF BM #17-18400 (15.963) (15.995) (15.995) (16.000)
263FT N OF C/L TANGENT N.O.S, STA 219 PLUS 63.76
* RESET 1975 *

SPK IN E END CB ON N'LY SIDE NOS SERVICE ROAD 50.541 85 17-1856
1.13MI W/O BM #17-18400, 217 PLUS 30 (15.405)

SSM IN CTR OF SERVICE RD, 115.1FT W OF SPK IN E END 48.756 80 48.944 75 48.865 74P 48.863 70R 48.882 70 17-1860
OF CB, 1.19MI W OF BM #17-18400 (14.861) (14.918) (14.894) (14.893) (14.899)
STA 213 PLUS 71.46

2.5IN DISC IN N SIDE AT THE CENTER OF CONC 55.951 75 55.882 74P 55.874 70R 55.844 70 17-1875
STRUCTURE, INSIDE 5FT WIRE FENCE ENCLOSURE, 350FT (17.054) (17.033) (17.030) (17.021)
S OF SSM OF 1ST ANGLE PT IN CENTINELA AVE, W OF
SEPULVEDA BLVD *C/L N.O.S. 313 PLUS 33.30*
**FROM THIS POINT PEG UP A WIDE DIRT RD TO THE TOP
OF HILL, THEN LEFT TO END OF SPUR**

SSM ON C/L N.O.S. @ STA 308 PLUS 88.32, ABOUT 750FT 123.464 74P 123.451 70R 123.430 70 17-1877
SLY OF FIRST C/L ANGLE PT IN CENTINELA AVE WEST OF (37.632) (37.628) (37.621)
SEPULVEDA BLVD, 270FT N OF W END OF 20FT CB AT THE
INTERSECTION OF RIGGS PL & KENTWOOD AVE, ON WLY
PRODUCTION OF CTR LINE OF CONCRETE WALK AT N SIDE
OF ARIZONA CIRCLE, 4FT SW OF SHOULDER OF SLOPE
* ABANDONED 1976 *

	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	
SQ SPK, 2FT W OF W CURB LINE PRODUCED, OF KENTWOOD AVE, 50FT N OF CTR LINE RIGGS PL, IN W END 20FT CB	120.340 (36.680)	75	120.277 (36.660)	74P	120.261 (36.656)	70R	120.247 (36.651)	70			17-
WIRE SPK IN E END OF CB, N SIDE OF N.O.S. SERVICE ROAD, ABOUT 800FT WLY OF LINCOLN BLVD	52.234 (15.921)	85	52.159 (15.898)	80	52.344 (15.954)	75	52.270 (15.932)	74P	52.264 (15.930)	70R	17-
SSM ON C/L TANG. N.O.S. 0.32MI W OF LINCOLN BLVD 4FT N OF N FLOW LINE OF SERVICE RD & 53.3FT W OF 4IN PIPE GATE POST STA 182 PLUS 09.54	51.693 (15.756)	80	51.876 (15.812)	75	51.809 (15.791)	74P	51.800 (15.789)	70R	51.827 (15.797)	70	17-
SPK IN E END CB ON N'LY SIDE NOS SERVICE ROAD 0.34MI W/O LINCOLN BLVD, 182 PLUS 70	52.195 (15.909)	85									17-
SPK E END OF CB N SIDE OF SERVICE RD, 0.58MI W OF LINCOLN BLVD	52.956 (16.141)	85	52.877 (16.117)	80	53.057 (16.172)	75	52.994 (16.153)	74P	52.974 (16.146)	70R	17-
SPK IN E END CB ON N'LY SIDE NOS SERVICE ROAD 0.78MI W/O LINCOLN BLVD, 160 PLUS 40	51.266 (15.626)	85									17-
SPK IN E END CB ON N'LY SIDE NOS SERVICE ROAD 0.83MI W/O LINCOLN BLVD, 157 PLUS 00	51.703 (15.759)	85									17-
CHISEL CROSS WLY SIDE INNER RIM N.O.S. MH, NEAR C/L N.O.S. AT APPROX STA 159 PLUS 25, AT CTR OF R&O SERVICE RD, ABOUT 1000FT ELY OF INTER OF CABORA DR & FALMOUTH AVE, ABOUT 600FT WLY OF 8FT GAS CO CHAIN LINK FENCE ACROSS N.O.S. SERVICE ROAD	51.503 (15.698)	80	51.676 (15.751)	75	51.638 (15.739)	74P	51.582 (15.722)	70R	51.607 (15.730)	70	17-
SPK 1FT W/O W CURB SINALOA RD, 26FT S/O C/L PROD CABORA DRIVE, FRONT OF ELECTROLIER	56.138 (17.111)	85									17-
COPPER WIRE IN D.H., IN NLY RIM OF N.O.S. MH, ON APPROX C/L N.O.S. ABOUT STA 142 PLUS 00, 9FT NLY OF SLY CURB LINE PROD OF CABORA DR, 15FT WLY OF WLY CURB LINE OF SINALOA RD	16.204 (4.939)	80	16.365 (4.988)	75	16.284 (4.963)	74S	16.283 (4.963)	74P	16.289 (4.965)	70R	17-
2.5IN BRONZE DISC STAMPED *VEN. L.A. CITY SURVEY, N.C.O.S. 32 PLUS 27.00, 1961*, ON C/L N.C.O.S., IN S SIDE OF 5FT DIAMETER CONC MH STRUCTURE, 1250FT N OF IMPERIAL HWY ALONG DIRT RD PASSING E OF CALIF. SAND CO. BLDG, 50FT W OF SAID RD, 215FT E OF P POLE #883845E, THE MOST ELY OF THE SIXTH SET OF POLES COUNTED NLY FROM THE CALIFORNIA SAND COMPANY PLANT ** GONE 1976 **	74.495 (22.706)	74P	74.529 (22.716)	70							17

(METRIC IN PARENTHESES)

CABORCA & SINALOA

NEAR BILLOW VISTA

'70	16.289
74P	16.283
74S	16.284
75	16.365
80	16.204

	ELEV YR	ELEV YR	ELEV YR	ELEV YR	ELEV YR
CITY OF L.A. SURV PBM *STMPD 17-05781 1973* 2FT N OF N CURB LINE JEFFERSON BLVD, 4.8FT E OF BC CURB RETURN E OF GROSVENOR BLVD, W END OF CB	13.415 85 (4.089)	13.323 80 (4.061)	13.514 75 (4.119)	13.433 74S (4.094)	13.444 74P17- (4.098)
CITY OF L.A. SURV PBM *STMPD 17-05785 1973* 1FT N OF N CURB LINE JEFFERSON BLVD, 8.3FT W OF BC CURB RETURN W OF WESTLAWN AVE, W END OF CB	14.183 85 (4.323)	14.111 80 (4.301)	14.326 75 (4.367)	14.249 74S (4.343)	14.265 74P17- (4.348)
STD SUR MON, VEN K-3, ON CENTER LINE JEFFERSON BLVD, 58.5FT W OF CENTER LINE PE RY TRACK, 0.37 MILES W OF CENTINELLA BLVD ** GONE 1973 **	14.425 70 (4.397)	14.461 68P (4.408)	14.609 63 (4.453)	14.689 60 (4.477)	14.711 56 17- (4.484)
CITY OF L.A. SURV PBM *STMPD 17-05800 1973* 3.9 FT N OF N CURB LINE JEFFERSON BLVD, 20FT E OF E END OF CONCRETE APRON FOR ELY DRIVEWAY TO COLLINS FOODS INTERNATIONAL AT #12731, IN NW CORNER OF CB	13.727 85 (4.184)	13.648 80 (4.160)	13.826 75 (4.214)	13.747 74S (4.190)	13.769 74P17- (4.197)
CUT SPK IN CULVERT HEADWALL, 1FT E/O W END, 23FT S OF JEFFERSON BLVD, 165FT W/O C/L INTER P.E.RY & JEFFERSON BLVD, W/O CENTINELLA BLVD ** GONE 1972 **	14.048 70 (4.282)	14.085 68P (4.293)	14.232 63 (4.338)	14.315 60 (4.363)	14.337 56 17- (4.370)
CITY OF L.A. SURV PBM *STMPD 17-05820 1973* 2FT N OF N CURB LINE JEFFERSON BLVD, 5FT E OF BC CURB RETURN E OF MC CONNELL AVE, W END CB	12.385 85 (3.775)	12.310 80 (3.752)	12.506 75 (3.812)	12.423 74S (3.787)	12.453 74P17- (3.796)
CITY OF L.A. SURV PBM *STMPD 17-05826 1973* 2.8FT S OF S CURB LINE JEFFERSON BLVD, 27.3FT E OF E CURB LINE PRODUCED, OF BEETHOVEN ST, IN NE CORNER OF CONCRETE FOOTING FOR TRAFFIC SIGNAL CONTROL BOX	13.963 85 (4.256)	13.967 80 (4.257)	14.154 75 (4.314)	14.072 74S (4.289)	14.096 74P17- (4.296)
CUT SPK IN CULVERT HEADWALL, 1FT E OF W END, 25.5FT S OF CTR LINE JEFFERSON BLVD, ABOUT 400FT W OF BEETHOVEN ST, 30FT E OF DRIVEWAY TO POWER STATION, 0.22MI W OF MCCONNELL AVE, 0.5MI E OF LINCOLN BLVD ** GONE 1972 **	9.180 70 (2.798)	9.217 68P (2.809)	9.393 63 (2.863)	9.467 60 (2.886)	9.508 56 17- (2.898)
CITY OF L.A. SURV PBM *STMPD 17-05845 1973* 4FT W OF W CURB LINE OF ALLA RD, 10.2FT N OF BC CURB RETURN N OF JEFFERSON BLVD, N END CB	12.287 85 (3.745)	12.208 80 (3.721)	12.388 75 (3.776)	12.290 74S (3.746)	12.317 74P17 (3.754)

	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR	ELEV	YR
STD SUR MON, VEN I-4B, ON CENTER LINE JEFFERSON BLVD, 1.05MI WESTERLY FROM CENTINELA AVENUE, 68FT EAST OF PP #310227M. ** GONE 1973 **	7.898 (2.407)	70	7.935 (2.419)	68P	8.081 (2.463)	63	8.146 (2.483)	60	8.191 (2.497)	56 17
CITY OF L.A. SURV PBM *STMPD 17-05865 1973* 2FT E OF E CURB LINE OF BAY ST, 10.8FT N OF BC CURB RETURN N OF JEFFERSON BLVD, N END CB	12.746 (3.885)	85	12.694 (3.869)	80	12.883 (3.927)	75	12.783 (3.896)	74S	12.823 (3.908)	74P17-
WIRE SPIKE 25.5FT S OF JEFFERSON BLVD 234.5FT E OF CENTER LINE LINCOLN BLVD, 0.5FT E OF W END OF CULVERT HEADWALL ** GONE 1972 **	7.930 (2.417)	70	7.968 (2.429)	68P	8.086 (2.465)	63	8.151 (2.484)	60	8.203 (2.500)	56 17-
WIRE SPIKE IN W CURB CENTINELA AVE 0.8FT N OF BC CURB RET N OF MATTESON AVE ** GONE 1963 **	56.736 (17.293)	60	56.768 (17.303)	56	56.820 (17.319)	55	56.848 (17.327)	53		17-
WIRE SPIKE IN W CURB CENTINELA AVE 1.2FT S OF BC CURB RET S OF MATTESON AVE	55.905 (17.040)	85	55.823 (17.015)	80	56.036 (17.080)	75	55.974 (17.061)	70	56.021 (17.075)	68P17-
WIRE SPIKE IN W CURB CENTINELA AVE .5FT N OF BC CURB RETURN NORTH OF BARBARA AVENUE.	54.685 (16.668)	80	54.889 (16.730)	75	54.829 (16.712)	70	54.876 (16.726)	68P	54.987 (16.760)	63 17-
WIRE SPK IN W CURB CENTINELA AVE, 0.5FT N/O BC RET N/O CASWELL AVE	52.664 (16.052)	85	52.592 (16.030)	80	52.796 (16.092)	75	52.738 (16.075)	70	52.785 (16.089)	68P17-
WIRE SPIKE IN W CURB CENTINELA AVE 0.7FT N OF BC CURB RET N OF MITCHELL AVE	50.650 (15.438)	80	50.844 (15.497)	75	50.817 (15.489)	70	50.864 (15.503)	68P	50.967 (15.535)	63 17-
STD SUR MON, SAW I-12B, ON CENTER LINE INTER OF CENTINELA AVENUE AND MITCHELL AVENUE, FROM THE WEST ** GONE 1960 **	50.717 (15.459)	56	50.764 (15.473)	55						17-
WIRE SPIKE IN W CURB CENTINELA AVE 0.8FT S OF BC CURB RETURN NORTH OF WASHINGTON PLACE.	49.109 (14.968)	75	49.062 (14.954)	70	49.108 (14.968)	68P	49.269 (15.017)	60	49.318 (15.032)	56 17-
STD SUR MON, VEN I-1A, CENTER LINE CENTINELA AVENUE 13.2FT SOUTH OF CENTER LINE WASHINGTON PLACE, EAST * RESET 1969 *	47.796 (14.568)	56	47.846 (14.583)	55	47.886 (14.596)	53				17-
WIRE SPK IN S CURB WASHINGTON PL, 21.5FT E OF BC CURB RET E OF CENTINELA AVE, E END CB	48.468 (14.773)	85	48.386 (14.748)	80	48.585 (14.809)	75	48.530 (14.792)	70	48.576 (14.806)	68P17

oil fields / gas storage

GR16

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ENVIRONMENTAL HAZARDS AND MITIGATION MEASURES FOR OIL AND GAS FIELD OPERATIONS LOCATED IN URBAN SETTINGS

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ABSTRACT

This paper presents a methodology for evaluating the environmental hazards posed by gas migration from oil and gas reservoirs, or underground natural gas storage facilities, and into the near-surface environment. Geological faults and improperly completed or abandoned well bores (e.g., due to poor cementing practices) are described as the primary pathways by which the gas can reach the surface. Furthermore, the gas migration problem can be exacerbated by such factors as subsidence, earthquake activity and well corrosion.

Soil gas monitoring, geochemical gas fingerprinting and geological profiling are used in order to identify the magnitude and location of the environmental risks. Shallow and deep soil probes are used in order to characterize the near-surface hydrology, and to identify possible collector zones where gas concentrations can build to dangerous levels.

These techniques have proven to be important in the planning for and design of mitigation systems necessary to protect residential and commercial properties from the migrating gases. For example, some jurisdictions have imposed regulatory controls and design requirements regarding the installation of gas mitigation systems. Also, these methods are important in establishing safe procedures for the operation of oil and gas fields, or underground natural gas storage facilities.

A number of case histories are discussed that have been used by the authors to validate the methodology, and to illustrate the seriousness of the problem. A clear case is made for the need to perform ongoing monitoring for these conditions, especially in an urban setting.

INTRODUCTION

The major paths for vertical migration of gas are formed by natural faults and fractures in the rock formations that overlie the reservoir. Natural lithification processes and tectonic activities formed these breaks or channels. These are illustrated in Figure 1 as subtending zones I, II, and III. However, in many geological settings, these fault zones can be discontinuous, but still allow the gas to literally hopscotch from one fault to another, or to act in conjunction with leaking wellbores in the same manner.

Wellbores of operational, idle or abandoned wells often result in literally pipeline flow of large volumes of gas to the surface. This is an especially serious problem where the well, usually in the annular space between the drill hole and the casing, was not properly sealed with cement. Also, the wellbore may have been hydraulically fractured during the cementing phase of well completion. Vertical fractures may extend for tens of feet from the wellbore depending upon the characteristics of the formation and the injection pressures used for placement of the cement. The cement will fill some of the larger fractures surrounding the casing, but the cement particles cannot enter the smaller fractures away from the wellbore.

SOURCES OF GAS FOR MIGRATION

During the course of oilfield production, fluid is produced from the reservoir causing a drop in pressure. This liberates the gas held in solution, and allows the gas to migrate. The free gas can migrate upward due to differences in the specific weight between the gas and the surrounding fluids (viz., upward buoyancy forces). Figure 1 illustrates the migration of gas from the reservoir to secondary collector zones, and eventually to the surface.

Initially, the gas is trapped below the caprock within the reservoir, forming a free gas zone. However, this free gas can escape through the caprock due to natural fractures in the caprock or man-induced fractures. Man-induced fractures include: wellbores penetrating the caprock during drilling, fracturing pressures occurring during oilfield operations, or by subsidence resulting from production of fluids from the reservoir.

Well completion practices rely upon squeezing cement slurry into the annular space between the drillhole and the steel casing. However, the inevitable movement of the rock formation resulting from the subsidence can destroy the intended sealing joint at the caprock interface. Once through the caprock, the gas can follow faults and fractures, as illustrated by Zone III, in Figure 1. In Zone III, secondary gas traps can often be found where layers of shale or other impervious layers slow down the upward migration of gas and permit it to gather in pockets. Figure 2 is presented to illustrate the interaction between subsidence and gas migration.

In secondary and tertiary recovery operations, water is often injected under high pressure into the reservoir to increase the production of oil. This water displaces the free gas in the reservoir, forcing the gas to migrate under this pressure influence. This free gas is then able to migrate along the paths described above, toward the surface.

The 1985 Fairfax Explosion and Fires

The phenomenon of natural gas migrating to the earth's surface from oil and gas field reservoirs via geological faults, fractures and well bores is a serious environmental problem. An explosion hazard is created if the gas collects in a confined space and reaches a five percent (5%) mixture ratio

with air (viz., the lower explosive limit for natural gas). The Ross Department Store in the Fairfax area of Los Angeles, California exploded on March 24, 1985, seriously injuring 23 people. Fires burned for days through cracks in the sidewalks and parking lots until a vent well was drilled to relieve the pressure build-up. Extensive investigations, including gas fingerprinting, confirmed that the gas had migrated to the surface along faults and poorly maintained well bores. Shallow soil gas probe holes were installed to monitor any future build-up of gas. In 1989 these gas monitoring wells indicated that large volumes of gas were again building up under the site. Fortunately, the area was evacuated immediately. It was discovered that the single vent well, that had been installed to vent the gas, had become plugged with silt at the slotted interval depth of 80 feet.

Other serious gas seeps have occurred in this area over many years. It is also the location of the famous La Brea Tar Pits where gas and oil continually migrate to the surface along the 6th Street Fault. This site has been used by the authors as a large "natural laboratory" to study and research the phenomenon of gas migration discussed in this paper. Over the past 15 years, this research has been expanded to address similar gas migration problems located in many parts of the world. This paper will provide an overview of these findings. References 1 through 5 provide a detailed treatment of these topics, including an analytical formulation of the gas migration mechanisms.

THE 2001 HUTCHINSON, KANSAS EXPLOSION AND FIRES

Research on these topics is continuing at the University of Southern California, including at the graduate student level. This is expected to contribute important new information to the understanding of the geological, geochemistry and hydrogeology principles that control gas migration. The most recent incident that is under investigation is the natural gas explosion that destroyed the downtown area of Hutchinson, Kansas on January 17, 2001. The next day, natural gas exploded under a mobile home park outside of the city, killing two people. Gas and water geysers reached heights of 30 feet. The gas leaks were traced to an underground natural gas storage field located nearly seven miles from the explosion sites. The gas had migrated through geological faults and permeable formations from leaking well bores at the storage site. Investigation has revealed that virtually no monitoring was in place in order to prevent this disaster. Worse yet, the emergency

response teams had no clue as to the cause of the disaster. For example, the fire department was unable to extinguish the flames, illustrating the lack of preparedness for such an event. In the case of the 1985 Fairfax explosion, the fire department had been called, and had responded to gas odors in the area 30 minutes before the explosion. Because of their lack of preparedness, they mistakenly believed it was sewer gas, and returned to the fire station. Shortly thereafter, the alarm was sounded to respond to the explosion and fire that devastated the area that they had just returned from.

ENVIRONMENTAL HEALTH HAZARDS OF CERTAIN OIL FIELD CHEMICALS

Additional concerns regarding the environmental hazards of oil and gas migration in urban areas are the carcinogenic, toxic and neurotoxin constituents that are contained within the oil field gases. These include the so-called BTEX chemicals comprising benzene, toluene, ethylbenzene and xylene. For example, benzene and toluene are contained on the so-called Governor's List of toxic chemicals within the State of California, and require a posting of warning signs to the public under the Proposition 65 environmental laws. Benzene is a known human carcinogen, and can cause blood disorders, including aplastic anemia and leukemia, as well as cancer. Benzene and toluene can cause birth defects. Both chemicals are highly volatile, and can easily transform from the liquid crude oil state into the natural gas state (e.g., associated gas), especially under reservoir pressure conditions.

This also becomes a serious problem in partially depleted oil fields that have been converted to underground natural gas storage operations. The storage gas is pumped into the oil field reservoir under high pressure. Frequently, 60% to 70% of the original crude oil still remains in place. When the storage gas comes in contact with the crude oil, aromatic hydrocarbons are transferred from the crude oil to the natural gas stream, enhancing the presence, particularly, of benzene and toluene. When the storage gas is retrieved to the surface for customer delivery, the gas must be processed through scrubbers and dehydration surface equipment. This provides an opportunity for these chemicals to escape into the atmosphere as fugitive emissions, or intentional releases. As a minimum, vapor recovery systems are necessary to control fugitive emissions. Billions of cubic feet of

storage gas can be withdrawn from inventory over a short period of time, increasing the health hazard risks to the surrounding community.

Furthermore, the natural gases that escape to the surface along well bores, faults and pipeline leaks will contain these health hazard chemicals. Also, workers need to be protected against these hazards, especially from long-term exposure.

HYDROGEN SULFIDE ENVIRONMENTAL HAZARDS

Another serious problem is caused by the hydrogen sulfide formation that can occur when the leaking natural gas stream interfaces with high sulfate levels in the near-surface water table. This can give rise to the perpetual generation of hydrogen sulfide through microbial alteration under anaerobic sulfate to sulfide reducing conditions. Hydrogen sulfide is not only highly corrosive, but is a neurotoxin, that must be considered a health hazard even at levels as low as 1 ppm (Kilburn, 1998; Kilburn, 1999).

The corrosive conditions of hydrogen sulfide on both steel casings and cement are well known (Craig, 1993). However, oil field operators, especially regarding the longevity of well completions and well abandonments, often ignore the long-term consequences of hydrogen sulfide, and other corrosive soil conditions. Namely, the steel casings and cement completion practices can be expected to develop gas leaks to the surface as a result of future aging. Accordingly, it would be ill advised to allow building over abandoned well bores, regardless of how carefully they were abandoned with cement seals and plugs. Also, access to the wells with oilfield drilling rigs would be necessary in order to repair leaks that could develop at any time in the future.

Although this research has been devoted to evaluating the environmental hazards of gas migration, these same topics are important regarding near-surface exploration for oil and gas. In fact, the research methodology – especially soil probe studies – evolved originally from this exploration technology point of view. Namely, near-surface exploration for petroleum is based on the detection and interpretation of a great variety of natural phenomena occurring at or near the land surface or sea floor and attributed, directly or indirectly, to hydrocarbons migrating upward from leaky reservoirs at depth. Development of surface exploration methods began in the early 1930's with chemical analysis of gaseous hydrocarbons in

soil air. It has since expanded to include a wide range of geochemical, geophysical, mineralogic, microbiological and other types of anomalies (Toth, 1996).

MITIGATION SYSTEMS OVERVIEW

Mitigation systems, both passive and active, have been developed in recent years in an attempt to cope with the gas migration hazards discussed in this paper. Many of these remain unproven. For example, the most common procedure is to install a geomembrane or plastic liner under the footprint of the structure being built in order to capture the upward migrating gases. Perforated pipes are installed in a gravel blanket located under the membrane in order to vent the gases that are collecting below the structure. These systems have demonstrated a high failure rate. The membranes can become punctured during installation, and/or develop leaks around the multiple penetrations that must accommodate utility and electrical lines, elevator shafts and pilings used for foundations. Gas detectors, used in conjunction with the membranes, require ongoing maintenance and calibration.

These mitigation systems have typically not been designed to deal with the health hazards of the migrating gas, but only to prevent a catastrophic explosion. This is a serious oversight, since the most dangerous chemical constituents of the leaking gas are heavier than air. For example, benzene, toluene and hydrogen sulfide are all heavier than air, and will tend to concentrate at ground level, and lower elevations, creating an inhalation hazard to those living and working in the area.

In summary, ongoing monitoring for the prevention of explosions and fires is essential, along with monitoring for health hazard conditions. The latter requires, at least, an order of magnitude lower threshold detection limits to protect against an inhalation health hazard.

NATURAL GAS STORAGE FIELDS

It has become common practice to utilize depleted oilfields for the purpose of storing large volumes of natural gas underground. It is more economical to store gas in underground reservoirs than construct large

delivery lines, typically from out-of-state sources, that would be capable of satisfying peak demands. Gas is purchased and delivered to the storage field during non-peak demand periods, and retrieved from the storage field during high demand periods, such as during cold spells.

Underground gas storage facilities utilizing old, depleted oil and gas fields are subject to the same gas migration hazards as discussed above, but are often times more serious. The existing wellbores and well completions were not designed to withstand the high pressures that most gas storage facilities are operated at, nor the cyclical variations in pressure experienced by the seasonal high and low operating pressures. For example, during inventory draw-down the cement seals at the bottom of the casing can fail, causing shoe leaks and other seal damage.

Abandoned wells associated with the prior oil or gas field usage, are difficult, if not impossible to reenter and seal in order to prevent gas leakage. Also, since these wells do not allow direct monitoring, gas seepage can be detected only at the surface. However, the leaking gas can spread out and migrate along fault planes, and/or experience lateral migration within the shallow water table, before ever reaching the surface. This can act to conceal the true dangers of the leaking wells. These problems require the placement of deep soil probes, positioned immediately adjacent to the well bores. Also, gas levels within the near-surface water table require monitoring. Field experience has demonstrated that the near-surface water table can serve as a temporary barrier for the upward migration of gas. Often, the gas will collect below the water tale, and spread out laterally before eventually reaching the surface.

For these reasons, it is important to perform a detailed characterization of the near-surface hydrology, including gas concentrations, free gas volumes and water movement directions. The individual gas constituents (e.g., methane, ethane, propane, etc.) have different solubility levels, and must be accounted for when attempting to characterize the origin of the leaking gases.

Gas fingerprinting studies must account for a number of near-surface gas alterations in order to properly interpret the source of the leaking gas. The primary adjustment factor is to account for the mixing between the native oilfield gas and the gas storage gas during migration using a so-called

mixing line. Also, near-surface mixing with biogenic gas can alter the characterization of the gas.

Underground gas storage facilities are frequently located in urban areas where gas, migrating to the surface can cause serious environmental problems. Examples include the following:

(1) MONTEBELLO GAS STORAGE FIELD, CALIFORNIA

The Montebello Oilfield, located in Southern California, was utilized by a gas company to store large volumes of natural gas in a partially depleted oilfield. Prior to converting the Montebello field to a gas storage facility, many oil wells had been abandoned using standards that were based on 1930's vintage technology. The old oilfield also contains several fault planes that are potential paths for gas migration.

The gas company began storing gas in a portion of the Montebello Oilfield in the early 1960's. By the early 1980's, significant gas seepages were discovered at the surface within a residential housing area. The gas seepages endangered homes, requiring evacuation of families. Some of the homes had to be torn down in order to provide access to leaking wells, that were attempted to be reabandoned. Monitoring of the near-surface water table for gas concentrations was undertaken on an emergency basis. Also, gas was found leaking up under the City Hall front lawn.

Because of the endangerment to the homes, and the huge economic losses suffered by the gas company from the lost gas, this storage facility has been closed.

(2) PLAYA DEL REY GAS STORAGE PROJECT

The Playa del Rey Oilfield was converted into a gas storage field in 1942. Shortly thereafter, storage gas was discovered migrating into the adjoining Venice Oilfield at the reservoir level of approximately 6,000 feet. Gas began migrating when the differential pressure reached approximately 300 psi. The storage field has been operated continuously to the present time, with storage gas pressures reaching approximately 1700 psi. A study, performed by the gas company in 1953, estimated that 25% of the injected gas was migrating to the adjoining Venice Oilfield. The operational procedure is based on capturing as much of the leaking gas as possible, and returning it to the primary storage field on an ongoing basis. This requires

numerous old oil wells to be used as recapture gas wells, in order to return the leaking gas.

Over 200 abandoned oil wells are in the area, which used 1930's era technology for the well completions. High-density housing has been built throughout the area, with many homes constructed directly over the old abandoned wells. Virtually no mitigation measures have been provided to deal with the gas migration hazards.

Recent soil gas studies have revealed gas concentrations as high as 90%, within the near-surface soil conditions. Soil probes and vent wells that have been drilled into the near-surface aquifer have measured gas flow rates as high as 25 to 30 liters per minute. One soil gas measuring expert has characterized the area as having the largest gas seep to be found anywhere in the world.

The City of Los Angeles has only recently begun to require mitigation systems to be installed in new construction, but only in the extremely high gas zones. The lessons learned from the Fairfax gas explosion, and the more recent Hutchinson, Kansas gas explosions have been largely ignored.

CONCLUSIONS

If future disasters are to be averted, careful attention must be given to the monitoring for oilfield gas migration hazards. Furthermore, addressing the health hazards posed by certain chemical constituents such as benzene, toluene and hydrogen sulfide requires much lower detection thresholds to be used for monitoring purposes: within the 1 ppm range. Mitigation systems have not proven to be capable of dealing with these extreme hazards.

The main conclusions to be drawn from this paper can be summarized as follows:

1) The primary force controlling the migration of gas to the surface is the difference between the specific weight of water and that of gas (viz., the buoyancy force).

2) Gas migration occurs along faults, and behind wellbore casings to the surface. The volume of gas migration toward the surface is directly related to the type and width of the path along which it migrates.

3) Gas migration can create surface hazards if the gas is allowed to concentrate in localized collector zones (secondary traps), including the collection in shallow water tables.

4) It is not advisable to build over abandoned wellbores. Over time, the cement and well casing will deteriorate resulting in the creation of paths for gas migration to the surface. The migrating gas is both an explosion hazard, and a health risk, because of the presence of chemicals that can cause cancer, birth defects and central nervous system dysfunction.

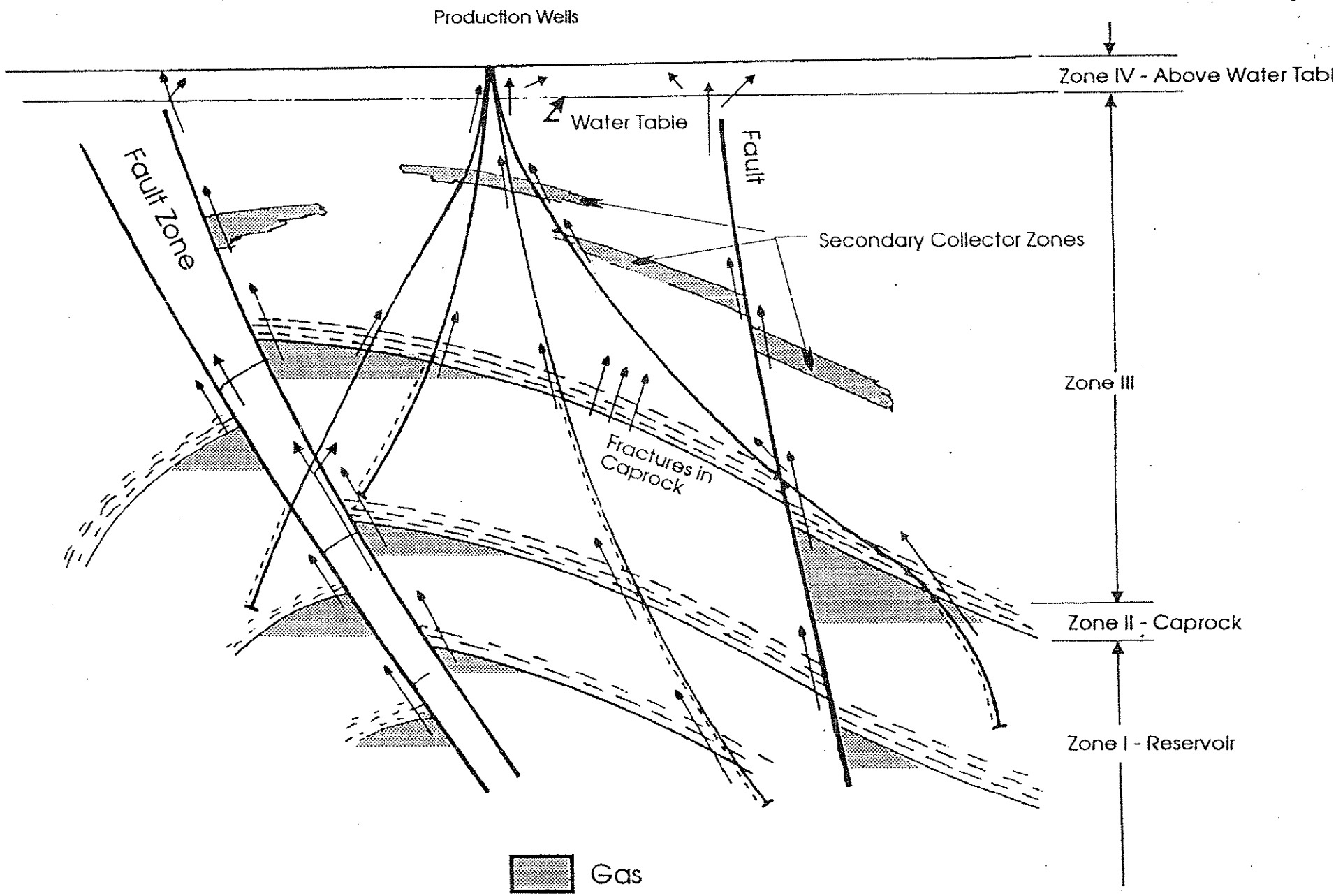
5) Underground natural gas storage facilities have demonstrated a long history of gas migration problems. Gas migration hazards are aggravated because of the high reservoir pressures. Experience has shown that these facilities should not be located anywhere close to urban settings. The Hutchinson, Kansas gas explosion demonstrated that the storage gas can migrate many miles (in that case, seven miles to the explosion site).

6) To avoid catastrophic events as described in this paper, a fundamental awareness and understanding of the gas migration hazards and paths of migration would permit taking preventative steps. A detailed risk assessment needs to be performed for existing facilities, including the development of an emergency response plan.

These results have been presented so that individuals, and responsible governmental entities, will begin to take the necessary steps to protect the public health and safety from these dangers.

REFERENCES

1. KHILYUK, L.F., CHILINGAR, G.V., ENDRES, B.L., and ROBERTSON, J.O., 2001. Gas Migration – Events Preceding Earthquakes, *Butterworth-Heinemann Publisher, 225 Wildwood Ave., Woburn, Massachusetts.*
2. GUREVICH, A.E., ENDRES, B.L., ROBERTSON, J.O., and CHILINGARIAN, G.V., 1993. Gas Migration from Oil and Gas Fields and Associated Hazards, *J.Pet.Sci.Engr., 9:223-228.*
3. GUREVICH, A.E., and CHILINGARIAN, G.V., 1993. Subsidence Over Producing Oil and Gas Fields, and Gas Leakage to the Surface, *J.Pet.Sci.Engr., 9:239-250.*
4. KATZ, S.A., KHILYUK, L.F., and CHILINGARIAN, G.V., 1994. Interrelationships Among Subsidence Owing to Fluid Withdrawal, Gas Migration to the Surface and Seismic Activity. Environmental Aspects of Oil Production in Seismically Active Areas. *J.Pet.Sci.Engr., 11:103-112.*
5. ENDRES, B.L., CHILINGARIAN, G.V., and YEN, T.F., 1991. Environmental Hazards of Urban Oil Field Operations. *J.Pet.Sci.Engr., 6:95-106.*
6. CRAIG, B.D., 1993. Sour-Gas Design Considerations, *Society of Petroleum Engineers, Inc., Monograph Volume 15.*
7. TOTH, J., 1996. Thoughts of a Hydrogeologist on Vertical Migration and Near-Surface Geochemical Exploration for Petroleum, *AAPG Memoir 66, p.279-283.*
8. HOLYSH, S., and TOTH, J., 1996. Flow of Formation Waters: Likely Cause for Poor Definition of Soil Gas Anomalies Over Oil Fields in East-Central Alberta, Canada, *AAPG Memoir 66, p.255-277.*
9. ALLISON, M.L., 2001. The Hutchinson Gas Explosions: Unraveling a Geologic Mystery, *Kansas Bar Association, 26th Annual KBA/KIOGA Oil and Gas Law Conference, vi, p.3-1 to 3-29.*
10. KILBURN, K.H., 1998. Chemical Brain Injury, *Van Nostrand Reinhold Publisher.*
11. KILBURN, K.H., 1999. Evaluating Health Effects From Exposure to Hydrogen Sulfide: Central Nervous System Dysfunction, *Environmental Epidemiology and Toxicology 1, p.207-216*



POTENTIAL PATHS OF GAS MIGRATION

FIGURE 1.

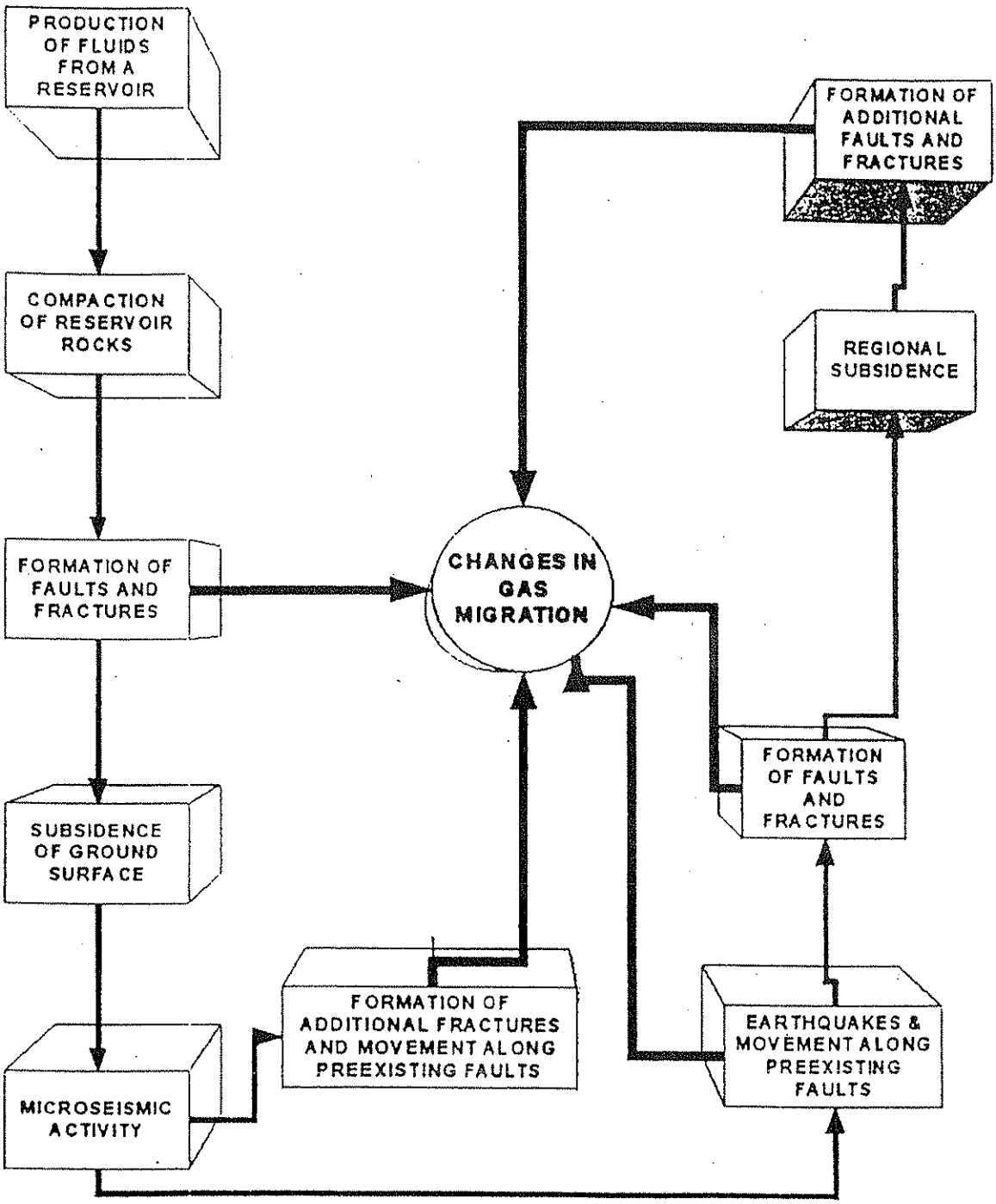


FIGURE 2. Schematic diagram of system relationships among the production of fluids, compaction, subsidence, and seismic activity.

POST gas migration explosions + fires - Kansas - Protocol -

GEOLOGY OF NATURAL GAS PATHWAYS AND ACCUMULATIONS UNDER HUTCHINSON, KANSAS

Presented to the House Environment Committee

March 13, 2001

M. Lee Allison, PhD, R.G.
State Geologist and Director
Kansas Geological Survey
University of Kansas

The Kansas Geological Survey is tasked under statute to investigate and report on the natural resources of the state. We are established as a research unit of the University of Kansas to bring unbiased and scientifically sound expertise to bear on resource issues.

Our role in the Hutchinson situation began the day after the trailer park explosions when it became known that geological investigations were needed. We served initially as geologic advisors to KDHE. When many of the early vent wells turned out to be dry holes, it became clear that complex geologic conditions were likely controlling the pathways and accumulations of the gas. Our work consisted of:

- Determining what layers might serve as geologic conduits for gas under the city;
- Compiling subsurface information on the shape and nature of the geologic layers;
- Compiling information on sinkholes and subsidence in the Hutchinson area;
- Examining rock cores from the Yaggy field and surrounding oil and gas fields;
- Examining geophysical wireline logs from wells to identify possible conduits;
- Producing subsurface geologic maps of relevant horizons;
- Developing a geologic model to guide drilling of vent wells and other remediation actions;
- Recommending additional investigative and exploratory steps.

The Kansas Geological Survey has done the following so far:

- Collected, processed, and interpreted a 3.5-mile long seismic reflection line along Wilson Road between Yaggy and Hutchinson, and a _ mile long line at Rice Park;
- Completed specialized computer processing on the seismic data to identify two possible gas-bearing amplitude anomalies (both were drilled and produced gas);
- Created structure contour maps on a variety of geologic horizons using 3700 oil and gas wells;
- Created a detailed structure contour map on the gas-bearing layer using water well and vent well data;
- Identified and correlated the gas-bearing layer on geophysical logs from oil and gas wells and vent wells in the area;
- Compiled reports on the history of subsidence in the Hutchinson area;

- Examined well cores to determine the geologic origin of the gas-bearing layers in order to predict possible pathways, including the Atomic Energy Commission core in Rice County;
- Acquired, digitized, and processed sonic well logs to create a synthetic seismogram to correlate the seismic lines to the wells;
- Calculated that there are geologically feasible conditions under which high-pressure gas could have traveled 7 miles underground in a few days;
- Examined outcrops in the region that might be equivalent to the gas-bearing layer;
- Advised the Groundwater Management District on a groundwater-monitoring program;
- Analyzed brine samples from the geysers for inorganic materials for source studies;
- Considered the potential for subsidence due to collapse of brine well caverns;
- Produced digital orthophoto quadrangle air photos for plotting data;
- Briefed federal, state, and local officials on the geology;
- Briefed U.S. Department of Energy and NASA; discussed cooperative efforts;
- Organized a one-day technical meeting for involved parties to plan further geologic investigations;
- Worked with KDHE, Kansas Gas Service, and the City of Hutchinson to recommend drilling locations, core locations, and types of logs to run; and
- Responded to scores of inquiries from citizens, consultants, attorneys, and the news media.

We have found that:

- The gas is confined to a relatively thin geologic layer at the top of the Permian-aged (approximately 250 million years old) Wellington Shale, about 200 feet above the Hutchinson Salt Member;
- The regional dip of the deeper rock layers is to the west, meaning that, all other factors being equal, gas would move in general to the east (because methane is lighter than water, it will tend to move updip – from lower to higher areas - through rock);
- The large number of vent wells that are dry holes suggests that the gas pathways are discrete and cover a relatively small area under the city;
- The seismic amplitude anomalies were drilled and found to contain gas; each is about 150-200 feet across;
- The gas-bearing layer may contain narrow belts of a particular type of rock that is preferentially fractured;
- There are anticlines present (rocks folded into an arch) that could serve to direct gas along their crests; and
- There are deep faults or fractures (many thousands of feet deep) that appear to control the orientation of the Arkansas River channel and may have controlled the location and orientation of geologic deposition during the Permian period as well.

What investigations need to be done to return confidence to Hutchinson and ensure that this cannot happen again?

- Determine which of these factors or combination of factors is responsible for the gas moving under Hutchinson: pathways along buried channels or similar sedimentary features; along structural dip or anticlines; along fractures and faults; or along some combination of these features;
- Verify that the vent wells have adequately drained all the pockets of gas;
- Monitor water wells for contamination;
- Locate abandoned brine wells drilled from the late 1800s onward;
- Evaluate gas accumulations in the surrounding areas;
- Establish base line studies in the event of subsidence;
- Identify other potential gas pathways.

9-10

SOCAL Docs

The Gas Company®

November 21, 2001

Patricia McPherson
Grassroots Coalition
3749 Greenwood Avenue
Los Angeles, California 90066

Southern California Gas Company
555 W. Fifth Street
Los Angeles, CA
90013-1011
Mailing Address:
Box 3249
Los Angeles, CA
90051-1249

RE: SoCalGas Data Responses to Grassroots Coalition in C.00-05-010, C.00-05-011, C.00-05-012 (Questions 1-6,10-14,17, 18,20-23,29,36-38,47-48,51,54)

Dear Ms. McPherson:

Enclosed please find the Southern California Gas Company's (SoCalGas) responses to questions 1-6,10-14,17,18,20-23,29,36-38,47,48,51, and 54 of the Grassroots Coalition's Data Requests dated September 14, 2001 and October 11, 2001 in the above referenced proceeding. SoCalGas is continuing to respond to your additional data requests and will provide them as soon as they are completed.

If you have any questions regarding the enclosed data request responses, please feel free to contact me.

Sincerely,

Gregory M. Healy

Gregory M. Healy

Enclosures

Table 1

Marina Del Rey Soil Gas and Playa Del Rey Storage Gas Analyses

Sample location:	V 3	Del Rey 18	SCP 1	Del Rey 15 & Del Rey 18	Vidor 17	Vidor 12	Vidor 9	Line 1159
Zone:	Barhole in Mariner's Village Surface Gas	Gas from Surface Casing	Storage Shut-in	Storage: "Del Rey Gas Cap"	Storage, flowing (providing lift gas for DR 15 & 18)	Storage, flowing	Storage Shut-in	"Del Rey Gas Cap"
Date Sampled:	4/18/01	4/17/01	10/16/00	2/2/98	2/2/98	3/13/98	3/13/98	11/15/93
			Hydrocarbon Analysis (in mole %)					
Oxygen	air total:	0.285	0.069	0.083	0.055	0.000	0.367	0.64
Nitrogen	94.947	1.715	2.634	0.720	0.787	0.776	2.065	0.42
Carbon Dioxide	2.247	0.062	1.003	1.243	1.219	1.227	1.226	0.98
Methane	2.806	97.894	90.561	94.105	94.675	94.216	92.083	94.80
Ethane			3.901	3.302	2.652	2.932	3.340	3.03
Propane			1.001	0.571	0.435	0.591	0.660	0.68
iso-Butane			0.299	0.0600	0.0640	0.0701	0.0761	0.069
n-Butane			0.289	0.0850	0.0640	0.0959	0.0985	0.110
iso-Pentane			0.0970	0.0270	0.0170	0.0262	0.0251	0.032
n-Pentane			0.0115	0.0240	0.0140	0.0216	0.0202	0.028
C6+ Residuals			0.0975	0.0500	0.0180	0.0438	0.0038	
% Combustibles	2.806	97.894	96.2570	98.224	97.939	97.997	96.307	98.749
Carbon Isotope Ratio	**-40.52**	**-68.65**	**-41.72**	**-42.73**	**-42.76**	**-42.1**	**-43.1**	**-42.9**
Deuterium Isotope Ratio	**-119**	**-218**	**-196**					**-186**
Isotope Ratio Lab**	Zymax	Zymax	Zymax	GGC	GGC	GGC, GS	GS	GGC
Helium (in ppm)	**9**	**ND < 7**	**117**	**144**	**135**	**140**	**150**	**230**

Background helium concentrations at the EAC:
Average of 8 tests performed on 4/23/01 and 13 ppm

HC and helium analyzed by the EAC

The Gas Company℠
Energy Transportation Services

Interoffice Memo

TO: Charlie Soares
FROM: Dan Meltzer
DATE: October 18, 2001
SUBJECT: REVISION - PDR gas sample analysis

EAC PROJECT #: TS2001-C013
ACCOUNT #: FG8595022200

OBJECTIVES

Assist Playa del Rey personnel with analyzing various gas samples for hydrocarbon and sulfur content.

FINDINGS

1. Significant amounts of heavy unidentified sulfur compounds were present in the samples collected from Meter 2349, SoCal #2 and #4, V10-Outlet and the Vapor Recovery.
2. All samples contained some inconsequential amounts of air due to sampling with the Tedlar Bags.

RESULTS

See the attached Table 1 for the hydrocarbon and sulfur specific results.

SAMPLE COLLECTION

Samples were collected by Playa del Rey personnel and where then received at the EAC by way of courier on 10/11/01.

ANALYSIS

All samples were analyzed for hydrocarbon (ASTM D1945) and sulfur content (ASTM D5504). Due to the multi-component calibration and duplicative QA/QC procedures, the EAC does not follow SCAQMD Method 307-91 as was requested. However, analytically the two methods are virtually identical.

cc: J. Thompson
L. Brewer

PDR Gas Sample Testing

Date: 10/11/2001
Sample Container Tedlar bag

Project #: TS2001-C013
Acct #: FG8592022200

EAC ID # 10-006-01 10-006-02 10-006-03 10-006-04 10-006-05 10-006-06 10-006-07

HC Component (Mole %)	PDR Main Meter	PDR L - 1167	PDR eter 234	PDR SoCal #4	PDR SoCal #2	PDR V10-Outlet	PDR Vap. Rec.
Methane	87.362	89.978	82.171	73.22	74.991	89.248	84.426
Ethane	2.68	2.638	4.648	6.289	5.909	2.945	3.585
Propane	0.805	0.649	2.52	4.772	4.408	0.88	1.692
i-Butane	0.092	0.062	0.367	0.63	0.517	0.08	0.227
n-Butane	0.186	0.095	0.833	1.552	1.199	0.13	0.594
i-Pentane	0.081	0.025	0.28	0.571	0.423	0.045	0.346
n-Pentane	0.082	0.021	0.302	0.563	0.408	0.036	0.37
C6+	0.241	0.055	1.07	1.404	1.203	0.13	1.16
Carbon Dioxide	1.589	1.115	2.841	7.167	6.547	1.901	3.239
Oxygen	1.484	1.082	1.027	0.752	0.871	0.872	0.823
Nitrogen	5.398	4.28	3.941	3.08	3.524	3.733	3.538
Total	100	100	100	100	100	100	100
BTU	982	985	1099	1167	1131	997	1080
Specific Gravity	0.6356	0.6133	0.7099	0.8112	0.784	0.6247	0.6972

Sulfur Component (ppm)	PDR Main Meter	PDR L - 1167	PDR eter 234	PDR SoCal #4	PDR SoCal #2	PDR V10-Outlet	PDR Vap. Rec.
H2S	0.0296	0.022	0.0121	66.494	64.8587	0.1992	0.6478
COS	0.0522	0.0771	0.0131	0.2978	0.2881	0.0086	ND
MeSH	0.024	0.0157	0.0659	0.3267	0.4287	0.0228	0.0581
EtSH	0.0456	0.0432	0.0675	1.4329	1.4322	0.0298	0.0804
DMS	0.0261	0.0401	ND	ND	0.036	ND	0.0198
CS2	0.431	0.0451	0.04	0.0221	0.0426	ND	0.0357
iPrSH	0.0905	0.0922	0.0361	0.7242	0.651	0.0357	0.0628
nPrSH	0.0726	0.0435	ND	0.0882	ND	ND	ND
tBuSH	0.027	0.0436	0.021	ND	0.0276	ND	ND
sBuSH	0.0256	0.0335	ND	0.5969	1.1774	ND	0.023
iBuSH	0.0236	0.0121	ND	0.0622	0.2889	ND	ND
THT	0.0545	0.0797	0.162	0.2399	0.0748	0.0647	0.0736
unidentified sulfur	0.5022	0.6782	3.0966	17.7066	12.8995	3.7279	4.8582
Total Mercaptans	0.3087	0.2839	0.1905	3.231	4.0057	0.0881	0.2242
Total Sulfides	0.2055	0.264	0.2272	67.0538	65.3002	0.2726	0.777
Total Sulfur	1.0164	1.2261	3.5142	87.9915	82.2053	4.0885	5.8595

SOUTHERN CALIFORNIA GAS COMPANY
C.00-05-010 through C.00-05-012
DATA REQUEST OF GRASSROOTS COALITION

Question 12: Any compositional data of native gas, cushion gas, buffer gas. Please provide any and all data, information of mixing of injected gas and buffer, native gas.

Response 12: SoCalGas was unable to locate any such records.

SOCALGAS Incidents

2 separate events

PrevDoc | NextDoc

GOVERNOR'S OFFICE OF EMERGENCY SERVICES
Hazardous Material Spill Update
CONTROL#: 03-1765 NRC# 641136

NOTIFY DATE/TIME:	RECEIVED BY:	CITY/OP. AREA:
04/02/2003 / 1207	OCCURANCE DATE: 04/02/2003	Playa Del Rey/Los Angeles County

1.a. PERSON NOTIFYING GOVERNOR'S OES:

AGENCY: NRC

1.b. PERSON REPORTING SPILL (If different from above):

AGENCY:

SUBSTANCE TYPE:

a. SUBSTANCE:	b. QTY: *Amount*	*Measure*	c. TYPE:	d. OTHER:
1.Natural Gas	unknown	Unknown	OTHER	natural gas
2.				
3.				
4.				

SITUATION UPDATE: John Thompson, So Cal Gas, 04/04/03 1141hours; 4 Brls of condensate. Vented 2 million cubic feet of gas. Clean up is progressing.

FAX NOTIFICATION LIST: AA/CUPA, DFG-OSPR, DOG, DTSC, RWQCB, US EPA, USFWS
ADMINISTERING AGENCY: L. A. County Fire Prevention
SECONDARY AGENCY:
OTHER NOTIFIED:

Created by: Warning Center on: 04/04/2003 11:40:34 AM Last Modified by: Warning Center on: 04/04/2003 11:41:39 AM
* * * * * * * * * * * * * End of Form * * * * * * * * * * * * *

Winkler, Bill
From: Campion, Jim
Sent: Wednesday, April 02, 2003 4:00 PM
To: Winkler, Bill
Subject: RE: S.C. Gas Co. Spill

please do.

200 houses were covered with oil.
this is pretty important, much more so than the usual junk notifications that we get about refineries.

Jim Campion
Technical Services Manager
Division of Oil, Gas, and Geothermal Resources
801 K Street, MS 20-20
Sacramento, CA 95814
Phone (916) 323-1779
FAX (916) 323- 0424

-----Original Message-----
From: Winkler, Bill
Sent: Wednesday, April 02, 2003 3:58 PM
To: Campion, Jim
Subject: RE: S.C. Gas Co. Spill

If you want I can call over to the State Warning Center and check.

-----Original Message-----
From: **Campion, Jim**
Sent: Wednesday, April 02, 2003 3:55 PM
To: Winkler, Bill
Subject: FW: S.C. Gas Co. Spill

spill at gas storage field.

SCG failed to notify OES? and us.

Is there any way to verify that OES was not called?

Jim Campion
Technical Services Manager
Division of Oil, Gas, and Geothermal Resources
801 K Street, MS 20-20
Sacramento, CA 95814
Phone (916) 323-1779
FAX (916) 323- 0424

-----Original Message-----
From: Curtis, Dave
Sent: Wednesday, April 02, 2003 3:51 PM
To: Campion, Jim
Subject: S.C. Gas Co. Spill

Jim, FYI - we heard on the radio this afternoon that S.C. Gas has an incident today out in Playa del Rey which covered about two blocks with oil. The company had not called us and we had no fax from OES.

McCullough finally got in contact with John Peterson and John Thompson and the details are:

At 0610, a 1" supply line failed at the gas plant. An automatic shut-down then occurred, but an automatic valve on the main line failed and the entire line was vented into the air. There was an estimated 3 to 4 bbls of condensate which covered approximately 200 homes with an oil mist. The line finished venting at 0635. Cleanup is in progress. L.A. County Hazmat and AQMD were called and were/are on site. We are (nine hours late) sending Rich Loverne out to get more details and pictures. The operator did not know if OES was called and did not think that we needed to be notified.

clers for a ... to advance to the finals ... e House of Blues, Las Vegas.

B1

Lomita, who was among the first to die in combat in Iraq, was officially made a United States citizen Wednes- ... Gutierre... ster family in Lomita was pleas...

"I'm proud, because that's what he ... new country. He also hoped it would send him to college.

MARINE/A12

Outside

	High	Low
Inland	65	49
Beaches	65	49

Surf: 4-6 feet Weather A16

Findit

109th year/Number 93
Torrance, California

0 17923 00001 3

Gas-oil mist spews over Playa del Rey neighborhood

A member of the cleanup crew power-washes a sidewalk in Playa del Rey. "When we came out to take a look, we found our whole terrace was covered with oil," said resident Tracy Keith.

BRAD GRAVERSON/ DAILY BREEZE

By Lee Peterson and Jeremiah Marquez
DAILY BREEZE

An early morning leak at a natural gas storage complex in Playa del Rey on Wednesday spewed a messy mist of crude oil over a local neighborhood, coating cars, streets and homes with brown residue.

A mechanical valve failure at the Southern California Gas Co. site triggered a 25-minute venting of gas mixed with some accumulated oil starting about 6:10 a.m.

Many residents in the upscale area were awakened by the loud spraying sound, which one said sounded like sandblasting outside her window.

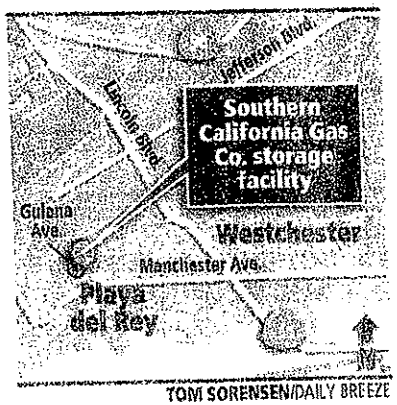
Given the sounds and the heavy stench of petroleum, one woman feared it was a terrorist attack on a plane from nearby LAX.

When residents went outside, they found oily brown droplets all over walls, vehicles and prized rose bushes. At least a dozen homes on 79th Street, apparently the most affected area, were heavily sprayed.

The first thing Stefanie Glassberg noticed was the smell. But what ultimately concerned her most was not her lungs, but her house's brand-new paint job.

"I just started bawling this morning.

MIST/A11



TOM SORENSEN/DAILY BREEZE

Boxe... to he... attac...

By Toby Eck...
COPLEY NEWS SE...

WASHIN... Wednesday ... wartime sp... passenger ...

The move... in the Hous... Mica, R-Fla... rorists wie... biggest cha...

Boxer an... would intro... fund resea... anti-missil... Departmen... ly $80 billi... sidering fo... domestic c...

"We have ... with techn... tary aircra... work."

The mo...

Daily Breeze 4-3-03

MIST: Resident is concerned for her children's health

FROM PAGE A1

I was freaking out, but I've got to put the whole thing in perspective. I don't know what else I can do," Glassberg said.

While residents found a sticky layer of oil pasting their property and a stench of natural gas and petroleum in the air, the Los Angeles City Fire Department reported there were no injuries from the incident.

The Gas Co. brought in a private hazardous waste cleanup firm to close off 79th Street and start working on the homes' exteriors, and immediately offered auto detailing in the neighborhood.

Tracy Keith, who lives about 100 yards from the plant, said the noise jolted her and her husband out of sleep.

'Covered with oil'

"When we came out to take a look, we found our whole terrace was covered with oil," Keith said.

She's worried about the possible long-term health effects on her children, and also some upcoming events.

"We're supposed to have an Easter egg hunt in two weeks. But now I'm not so sure. I don't want my 2 year old looking for Easter eggs in oil," Keith said.

The storage facility at 8141 Gulana Ave. is used to put natural gas a mile deep into the earth, where it is left in a natural rock formation, said Gas Co. spokesman Peter Hidalgo.

The venting of the gas and oil was the result of a safety mechanism that was triggered when a compressor broke down. Crude oil, in the transport pipes to act as a lubricant, was mixed in with the leaking natural gas.

It probably looked like a geyser, said Hidalgo, who added that the crude oil spew went on for about seven minutes of the total leak.

Material was wafted by a breeze into a nearby neighborhood, speckling properties with brown oil, he said.

Hidalgo said the utility will do whatever is necessary to clean up the homes and cars. Vehicles can be brought to the facility on Gulana, or residents can take the cars to their own detailers, and then be reimbursed by the company.

First such incident

Hidalgo said this is the first such incident in the facility's 60-year history.

John McClellan, who lives two blocks away on Berger Avenue, was outside when the leak started.

"All of a sudden, I see this black smoke shooting up into the air near the facility, maybe 100 or so feet into the air," McClellan said. "I could smell an unusual type of petroleum odor and I could hear a loud gushing sound."

Mary Houchin didn't think about the natural gas storage facility when she heard the noise, her first thought was that it was a terrorist strike on an airplane.

BRAD GRAVERSON/DAILY BREEZE

At homes on 79th Street, flowers and landscaping were splattered by oily brown droplets. So were walls of the houses and vehicles.

Marina del Rey:

Admiralty Way leak now said to be gas condensate, not refined oil as earlier believed by Gas Co.

BY CINDY FRAZIER

An oily substance that spilled from a natural gas pipeline onto eastbound Admiralty Way east of Palawan Way in Marina del Rey Tuesday, March 30th, was natural gas condensate — not refined oil, as previously believed, according to Peter Hidalgo, a spokesman for the Southern California Gas Company.

The substance was dark and sticky like oil, but smelled like natural gas, according to witnesses.

Initial concerns about flammability drew county fire officials to the site, near the Harbor House Restaurant.

Gas company officials originally said the substance was refined oil from a company pipeline underground.

Natural gas condensate is a naturally occurring substance consisting of liquid hydrocarbons and is common to natural gas pipelines, Hidalgo said.

"It [the substance] was not as thick as oil," Hidalgo said.

The pipeline that leaked is a former oil well line from the days when there were many active oil wells in the area — which were in place into the 1960s.

"The line is used to flow gas on an as-needed basis and is little-used," Hidalgo said.

Records on file with the state Division of Oil, Gas and Geothermal Resources indicate the well is still active, but has been used as a pressure-monitoring well for the Gas Company natural gas reservoir in Playa del Rey since 1982, Hidalgo said.

Corrosion in the pipeline is believed to have been responsible for the leakage.

The substance has been cleaned up, and the line has been patched.

"No contamination reached any waters," Hidalgo said.

Gas Company officials are now considering abandoning the pipeline, which is seldom used, Hidalgo said.

The line is used to monitor pressure in the natural gas reservoir, located one mile below the surface.

The Gas Company is assuming responsibility for the leak and the repair work, including repaving the roadway, he said.

Santa Monica:

Pavley chairs hydrogen alternative fuels panel

Local State Assemblywoman Fran Pavley has been selected to chair the Assembly Select Committee on Hydrogen and Other Alternative Fuels.

Pavley's 41st Assembly District includes Santa Monica.

"Hydrogen holds great promise for helping to clean up our air and reduce dependence on foreign oil," Pavley said.

Hydrogen "utilizes the energy of a reaction between hydrogen and oxygen, which is converted directly into electrical energy power for a vehicle.

"The only by-products are heat, water and possibly trace elements of nitrogen oxides that are naturally occurring in our atmosphere," Pavley said.

Last month, Pavley chaired a hearing of the Select Committee on Air and Water Quality. She said she wanted to learn more about how Governor Arnold Schwarzenegger's administration plans to move forward on air and water quality issues.

The governor has proposed adding 200 hydrogen stations by the year 2010, which provide drogen fuel and generate elec ity.

The stations would be loc alongside California's interst highway system.

However, there is no agre ment on how quickly vehicle powered by hydrogen could put to widespread and comm cial use, Pavley said.

"It's clear that hydrogen a other alternative-fueled vehic could be viable options that lower demand and the prices imported oil," Pavley said.

"Even today, people are t ing in their cars for the popu gas-electric hybrids that are creasingly being seen on our highways."

Pavley said these hybrid cles average more than 50 m per gallon.

"We need to be careful n over-promise what we can d in the next few years, but Ca nia has always been on the ting edge of technological a vances," Pavley said.

DEPARTMENT OF CONSERVATION
STATE OF CALIFORNIA

DIVISION OF OIL,
GAS & GEOTHERMAL
RESOURCES

801 K STREET
MS 20-20
SACRAMENTO
CALIFORNIA
95814

PHONE
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FAX
916/323-0424

TDD
916/324-2555

INTERNET
consrv.ca.gov

GRAY DAVIS
GOVERNOR

May 2, 2003

Ms. Patricia McPherson
Grassroots Coalition
11924 W. Washington Boulevard
Los Angeles, CA 90006

Dear Ms. McPherson:

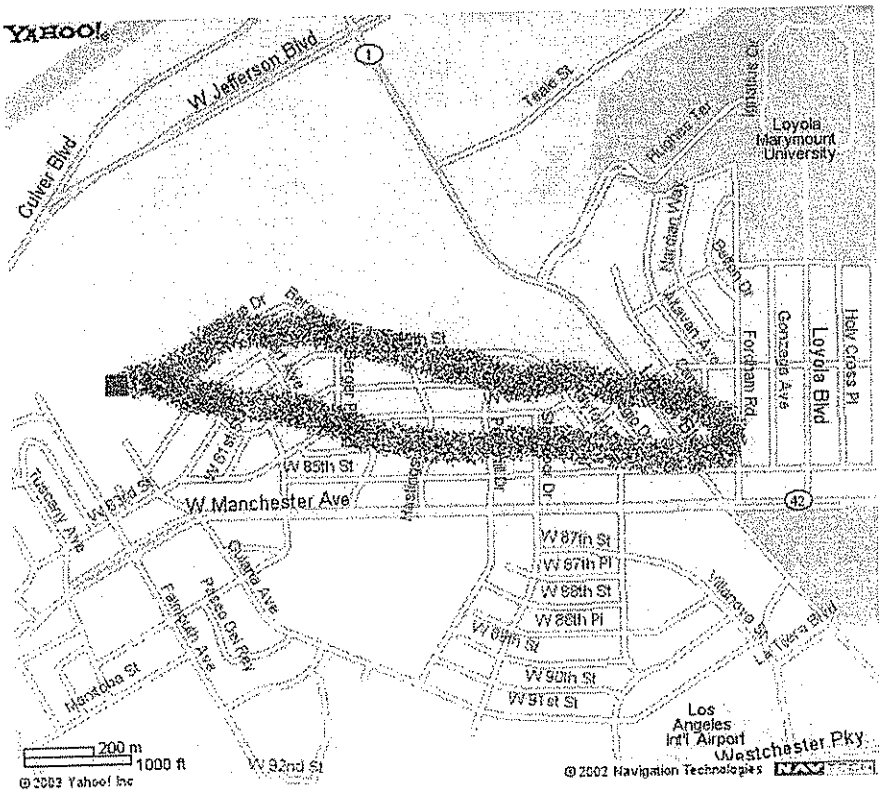
On April 10, 2003, the Division of Oil, Gas, and Geothermal Resources responded to your request for information regarding an occurrence at the Southern California Gas Company's Playa del Rey gas storage operation. In addition to providing several documents, you were advised that the incident was still under investigation by the Division. Division staff have prepared a report on that investigation, which is provided to you as an enclosure to this letter.

Yours truly,

K. P. Henderson
Chief Deputy

Enclosure

Vent Stack – where the oil and gas were vented to the air.



Extent of natural gas/oil mist plume.

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF LOS ANGELES

JOSEPH STADISH and LYN STADISH,

Plaintiffs,

vs.

SOUTHERN CALIFORNIA GAS COMPANY,

Defendant.

No. BC 126952

Deposition of MEHMET R. TEK, Ph.D., taken on behalf of Defendant, at 233 Wilshire Boulevard, Suite 550, Santa Monica, California, beginning at 1:10 p.m. and ending at 7:07 p.m. On Friday, March 25, 2000, before JOHN F. BIEHL, Certified Shorthand Reporter No. 5859.

APPEARANCES:

For Plaintiffs:

LAW OFFICES of AMY ARDELL
BY: IAN HERZOG
233 Wilshire Boulevard
Suite 550
Santa Monica, California 90401
(310) 458-3511

DANIELS, FINE, ISRAEL & SCHONBUCH, LLP
Attorneys at Law
1801 Century Park East
Ninth Floor
Los Angeles, California 90067
(310) 556-7900
(No appearance made.)

For Defendant:

LATHAM & WATKINS
Attorneys at Law
BY: KIRK WILKINSON
633 West Fifth Street
Suite 550
Los Angeles, California 90071
(213) 485-1234

Also Present:

BARRY VARANESE, Videographer

Q This is what's supposed to happen as part of the process?

A As part of the data.

Q Yes. But the water is supposed to be segregated from the gas through the separation process?

A Yeah, no question about it.

Q These measurements are of water being discharged to a sewer, do you know that?

A I imagine -- I accept that.

Q Well, do you know where this water is stored at the station?

A At some tank.

Q And do you know what emissions factors there are for that tank?

A I have seen lots of data that that tank leaked very seriously, a certain episode that I may also -- we may have to dig out and find out, but I have -- I have a clear recollection. Let's see if I can find it. Well, perhaps this may help.

MR. HERZOG: What's the question, please?

THE WITNESS: There's a location of that --

MR. HERZOG: I'm sorry, Dr. Tek.

What's the question, please?

MR. WILKINSON: Well, I asked him if he knew what the emissions from that tank were and he started

referring to some data about the tank and started searching for it.

THE WITNESS: Somewhere in the records there's an episode where a tank -- a tank which was a rather large collector, gasketed and vapor blanketed leaked approximately a million cubic feet and -- for 29 hours or more, there's some testimony to that effect, and that emitted the gas -- the vapor phase to the atmosphere, hydrocarbons, which contained benzene to go with.

BY MR. WILKINSON:

Q Do you know what tank that was?

A One of the main collection tanks. If you show me the flow sheet, maybe I can locate it. I -- even the big aerial -- aerial picture of the facility. I think it's one of the tanks that are right in front of the block in line with the prevailing winds to the Stadish home.

Q Do you know when this event occurred?

A I -- I have asked and I was told that it occurred in the 1993-plus time frame where -- the -- she lived there.

Q Do you know what type of operation the tank was in when this took place?

A I don't understand the question. What do you mean the type of operation?

Q Was the tank operating at the time?

A I presume so. Is there any reason why a tank shouldn't be operating any time?

Q I don't know.

A I need --

Q I'm asking you about the event that you recall.

A I'm --

Q How do you recall an estimate of a million cubic feet being leaked from that tank?

A Or more.

Q In what period?

A 29 hours or more, and that's -- that's what I heard from the record.

Q Do you know why that leak occurred?

A Oh, with -- with so much hydrogensulfide the gaskets probably corroded, the equipment is old. And it's been my experience, and I have had some 40-plus years in storage experience, all storage fields, compressor stations, gathering system, valves, they all leak, that's why we have a designation accepted by our government that's called LUFG, lost and unaccounted for gas. When the gas leaks, so goes the --

Q Do you know why the leak occurred on that occasion?

A Gasket failed, probably.

SOCAL Internal Docs

SCCAL Internal
Docs

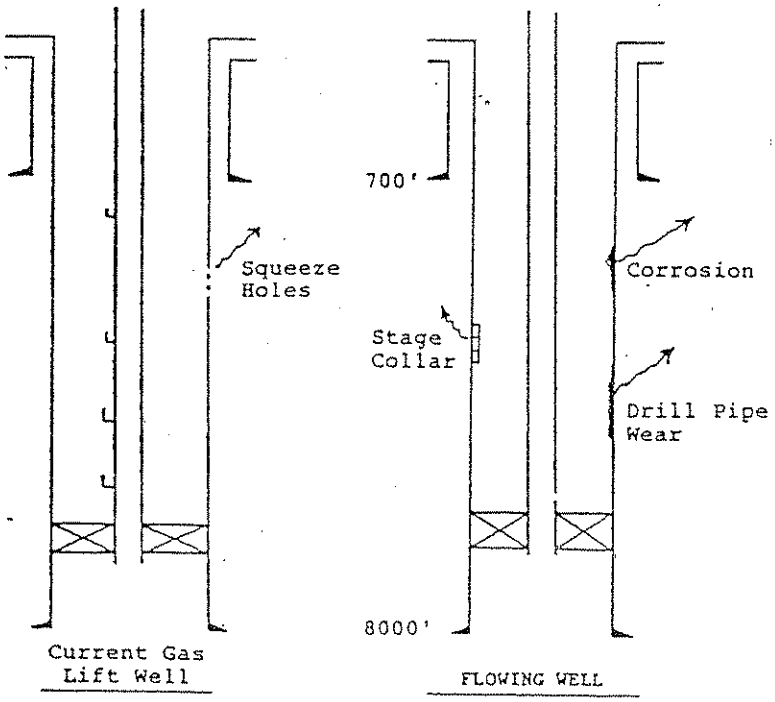
SOURCE GAS

CASING LEAKS

EXHIBIT I

CASING LEAKS: TYPE 1

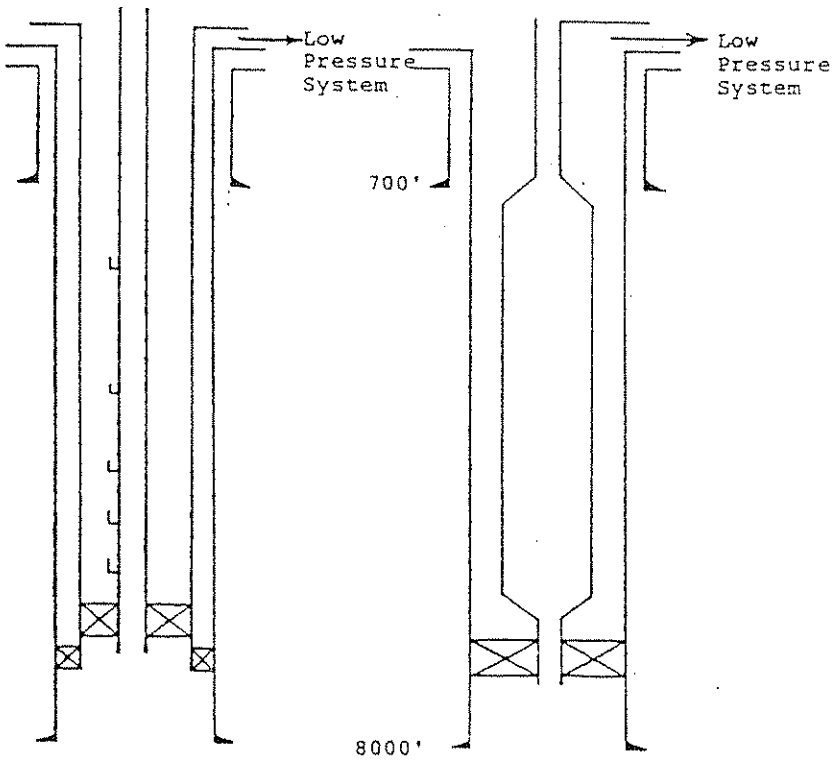
Types 1 → 5



PROBLEM:

Casing leaks that allow high pressure gas into low pressure, shallow zones.

KEEP IN MIND THAT THERE ARE OVER 100 WELLS BREACHING THE FORMATION TO SUCH HAVING ACCESS TO ALL ZONES TO SURFACE.



PROPOSED

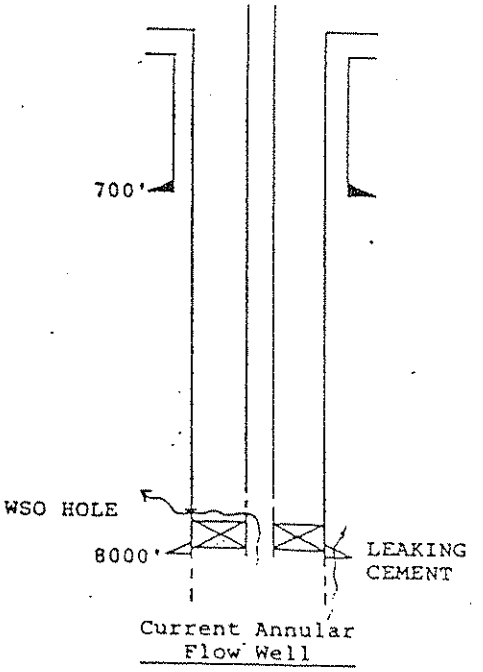
SOLUTION:

Use innerstrings and/or tubing to confine all high gas pressure. Keep innerstring or tubing annulus pressure lower than that required to force gas into acquifer sand at shoe of surface casing by venting gas to atmosphere or to low pressure system. Withdrawal wells' deliverability can be kept high by using large tubing.

JWT:hs
2/9/84

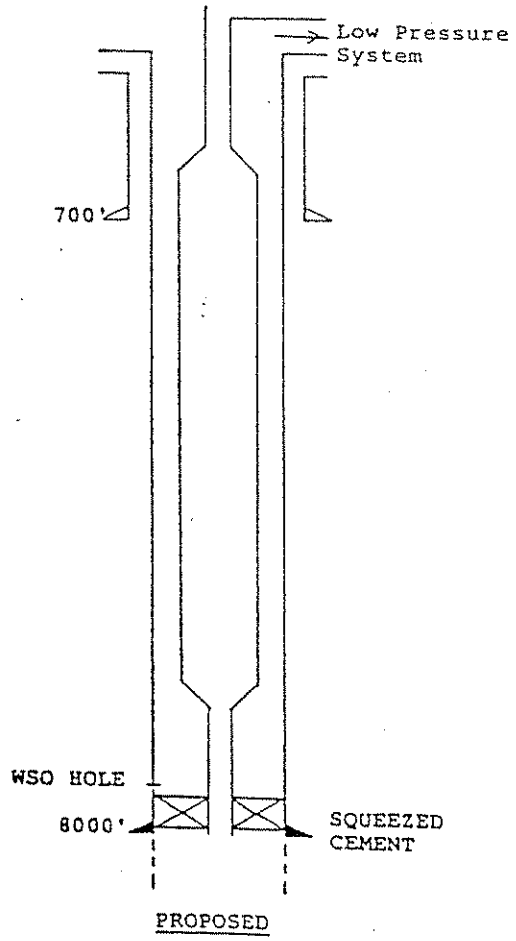
EXHIBIT I

CASING SHOE LEAKS: TYPE 2



PROBLEM:
Casing shoe leaks due to poor, deteriorated cement or to leakage through WSO holes in active or abandoned wells.

active or Abandoned wells



SOLUTION, ACTIVE WELLS:
Squeeze cement into shoe area. Place tubing packer below WSO holes where possible.

ALTERNATE SOLUTION, ACTIVE WELLS:
Do not repair if leak is into 7th zone but no higher. Collect all free gas from the 7th zone by activating more collection wells.

SOLUTION, ABANDONED WELLS:
Collect all free gas from overlying zones. Repair work not possible.

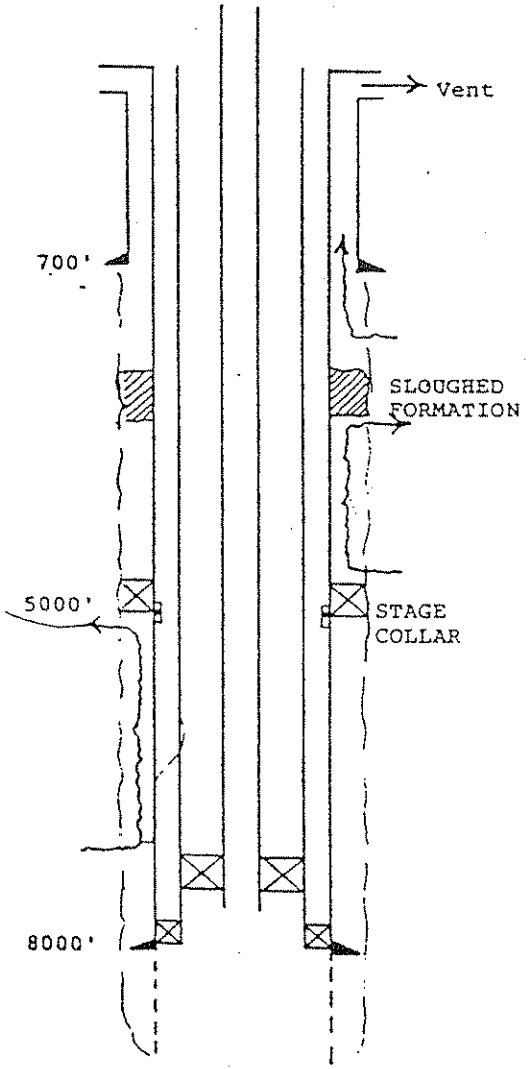
collect all free gas from overlying zone. Repair work not possible.

JWT:hs
2/9/84

EXHIBIT I

UNCEMENTED WELLBORE LEAKS: TYPE 3

FEW WELLS HAVE ANY CEMENT ABOVE 2000'.



CURRENT AND FUTURE WELL

Formation –

PROBLEM:
All wells have some uncemented segments. Few wells have any cement above 2000'. Formation sloughing may have filled in some of these wellbores but most remain the most permeable upward path for gas migration.

SOLUTION:
Noise and TDT monitor active wells to find areas of increasing activity. Continually produce shallow zones. Vent to atmosphere all gas coming from surface casing shoe aquifer.

sloughing may have filled in some of these wellbores but MOST REMAIN THE MOST PERMEABLE UPWARD PATH FOR GAS MIGRATION.

Solution: ....

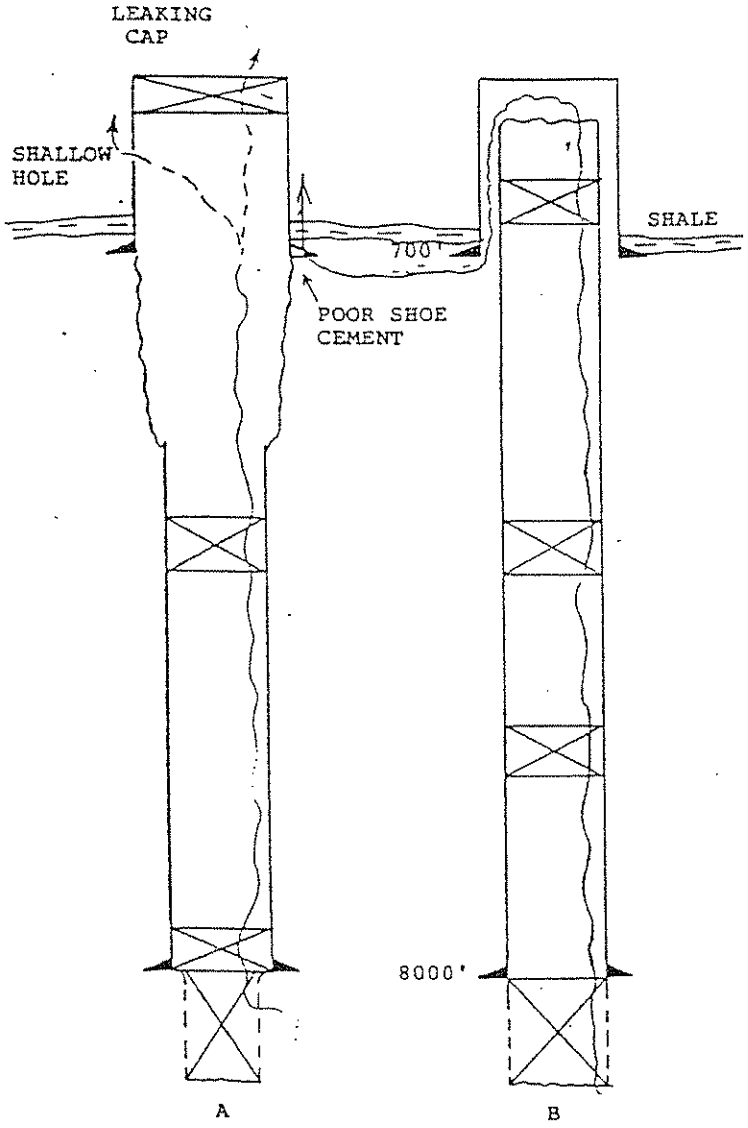
CONTINUALLY PRODUCE SHALLOW ZONES.

#VENT TO ATMOSPHERE ALL GAS COMING FROM SURFACE CASING SHOE AQUIFER. * CONTAINS

JWT:hs
2/9/84

EXHIBIT I

ABANDONMENT PLUG LEAKS: TYPE 4



EXISTING ABANDONED WELL TYPES

NUMEROUS PROBLEMS →

- Hopscotching of gas
- Gas build up squeezes into shallow aquifer sands
- Direct repair impossible - can't find or under Bldg.
- VENTING GAS is TOXIC

PROBLEM, TYPE A ABANDONMENT:
Cement plugs inside casing allow some gas to migrate upwards. Because its casing was cut off below the surface string, water will continue to fill casing as gas leaks out. Leak will therefore be sporadic and low rate.

PROBLEM, TYPE B ABANDONMENT:
Cement plugs inside casing allow some gas to migrate upwards. Because the casing stub is cut off within 100' of surface, the entire surface casing fills with gas. No liquid enters the well. The gas leak unloads fluid from the well and the rate increases with time. Eventually all of the fluid unloads and the leak rate stabilizes at a near constant daily rate.

PROBLEMS, BOTH TYPE ABANDONMENTS:

1. Casing cap, surface casing and casing shoe cement competent. Gas will build up inside surface casing and force its way into shallow aquifer sand. Gas will surface at a non-leaking well that has the following problems.
2. Casing cap not competent. Gas will surface near well.
3. Surface casing or shoe cement not competent. Gas will spread over large area as it rises to surface lethargically.

SOLUTION, PROBLEM 1:
Direct repair of leaking well not possible because source well is unknown. Other wells where gas appears are continually vented to surface.

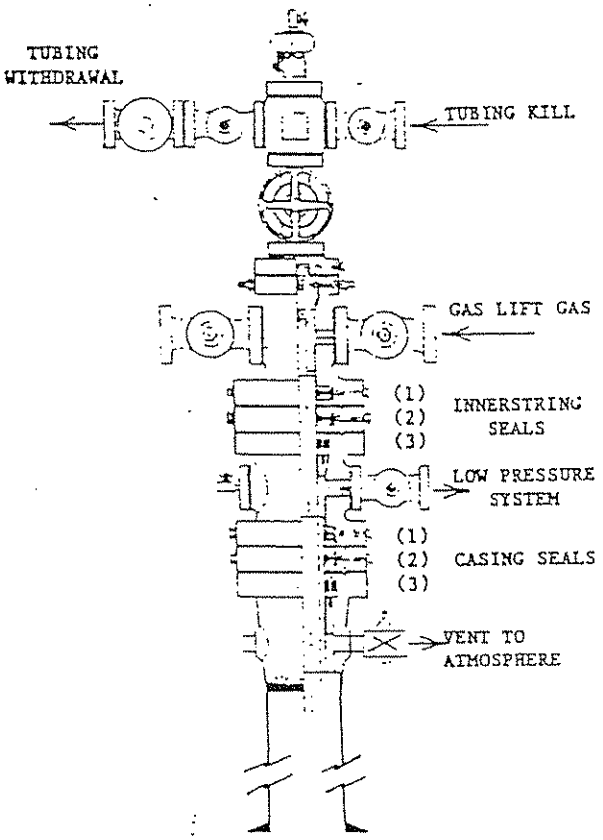
SOLUTION, PROBLEM 2:
Unearth well and recap or place collection funnel over it. Rig work not required. Vent all gas to atmosphere.

SOLUTION, PROBLEM 3:
Unearth well, move in rig, attempt to enter and repair old casing. Produce gas through casing into low pressure system. Vent surface annulus to atmosphere.

JWT:hs
2/9/84

EXHIBIT I

WELLHEAD LEAKS: TYPE 5



CURRENT AND PROPOSED WELLHEAD FOR WELLS WITH INNERSTRINGS

PROBLEM:
Wellhead seal leaks allow high pressure gas to leak into the innerstring, tubing or surface casing annulus. Gas then enters shallow zones at the surface casing shoe or through casing holes.

SOLUTION:
Keep all annular pressures below that required to force gas into shallow zones either by connecting them to low pressure system or venting them to atmosphere. Install new wellheads with triple seals (as illustrated) on wells with obsolete equipment when other well work is performing or when wellhead is leaking badly.

(1) Inject sealant to energize seal in head

(2) Inject sealant to energize seal in sealing flange

(3) Set down weight on slips to energize seal

JWT:hs
2/9/84

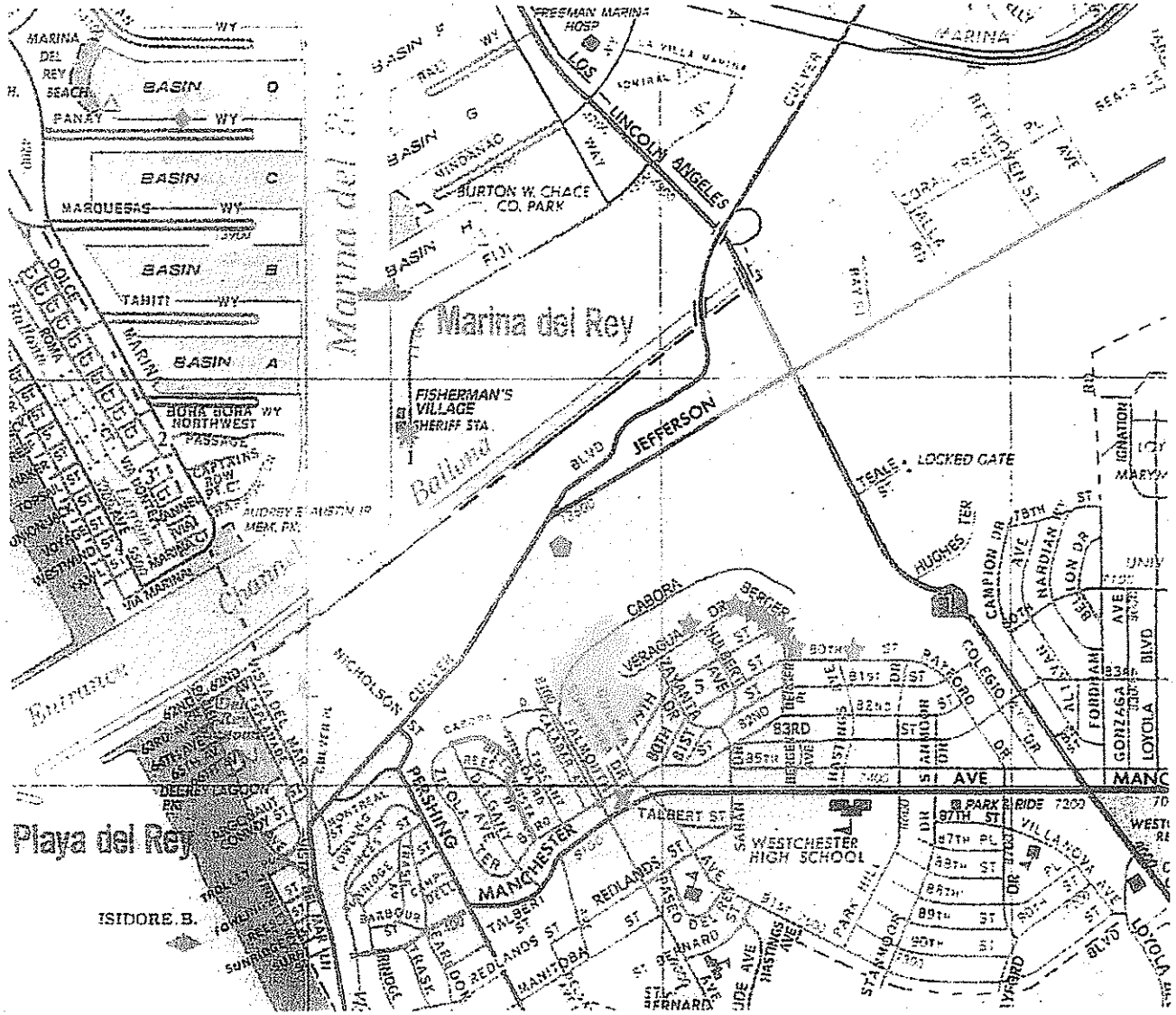
PROBLEM:
GAS THEN ENTERS SHALLOW ZONES AT THE SURFACE CASING SHOE or casing holes.

SOLUTION:
VENTING TO ATMOSPHERE IS TOXIC (PROP. 65)

M

Playa del Rey 851 Application and Complaint Case

Approximate Locations of Facilities and Complaints



Legend

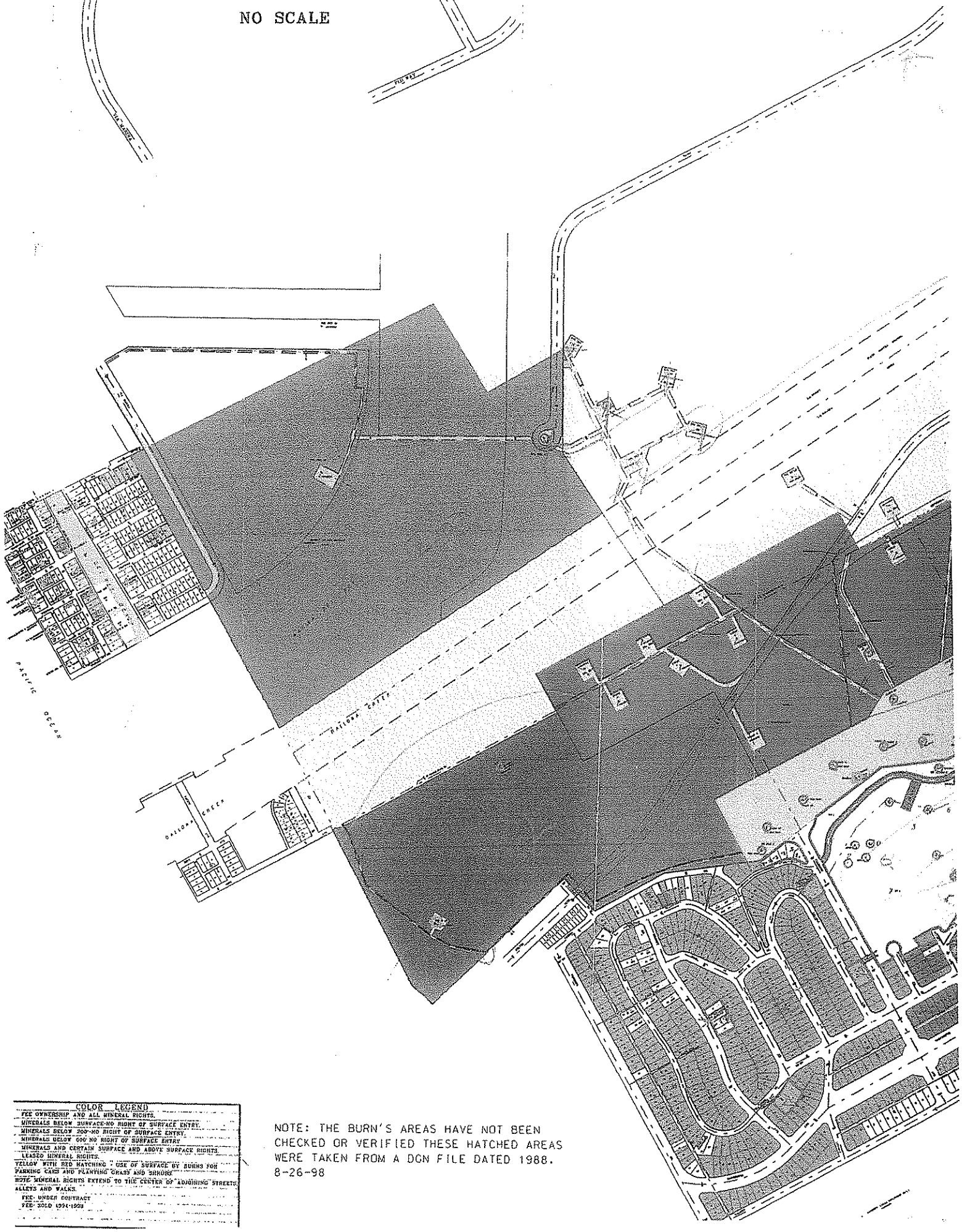
- SCG Facility
- Gas Storage
- Playa Vista
- Odor, health and cancer complaints as a result of emissions from the gas facility
- H_2S cloud exposure, health complaint
- Cancer, health complaints as a result of emissions from a well
- Subsidence complaint
- Odor, respiratory complaints from emissions in the wetlands
- Reported cancer cluster on Billowvista
- Problematic wells
  1. Playa del Rey 18
  2. Townsite 2
  3. Townsite 3
  4. Block 11
  5. Big Ben 1

1000 ft

N

SOURCE: Automobile Club of Southern California 1997 and MHA

NO SCALE



COLOR LEGEND
FEE OWNERSHIP AND ALL MINERAL RIGHTS.
MINERALS BELOW SURFACE-NO RIGHT OF SURFACE ENTRY.
MINERALS BELOW 200'-NO RIGHT OF SURFACE ENTRY.
MINERALS BELOW 500' NO RIGHT OF SURFACE ENTRY
MINERALS AND CERTAIN SURFACE AND ABOVE SURFACE RIGHTS. LEASED MINERAL RIGHTS.
YELLOW WITH RED HATCHING - USE OF SURFACE BY BURNS FOR PARKING CARS AND PLANTING GRASS AND SHRUBS
NOTE MINERAL RIGHTS EXTEND TO THE CENTER OF ADJOINING STREETS ALLEYS AND WALKS.
FEE- UNDER CONTRACT
FEE- SOLD 1994-1998

NOTE: THE BURN'S AREAS HAVE NOT BEEN CHECKED OR VERIFIED THESE HATCHED AREAS WERE TAKEN FROM A DGN FILE DATED 1988.
8-26-98

4

GR 69

INTEROFFICE CORRESPONDENCE

gas COMPANY

B. F. J.

TO Mr. P. S. Magruder, Jr. FROM B. F. Jones DATE August 16, 1974

SUBJECT Playa del Rey Casing Leak in Well 12-1

On Friday, August 9, 1974, John Melton reported to me that Jim Burks' people were working on a possible gas leak in the 13-1 block. John said that the problem was in the vicinity of the Well 12-1 and that they were making bar holes around the well and over the pipelines in the area. John said that he had reviewed the surface casing pressures on six wells in the area and that all but one registered zero. One well had a casing pressure in the range of 50 psi. On Monday, August 12, 1974, John Melton went by Playa del Rey on his way to Goleta. While at Playa del Rey he briefly checked on the leakage problem and reported to me that he thought the leak was from a pipeline leading from the Well 12-1. He reported that the well had been shut-in on Thursday, August 8, 1974, and that the casing pressure had been dropping since shut-in and at that time was at a pressure of 130 psi. John thought that the pressure was leaking through the kill line valve. John surmised that there was a leak in the kill line that was allowing the pressure to bleed down. Monday afternoon, Bob Hazel found that the casing pressure had dropped down to 13 psi after the wellhead valve had been closed. This placed two block valves between the well and the pipeline and gave strong indication that the leak was in the well casing Bob Hazel then ran a temperature survey on the well. On Tuesday, August 13, 1974, Bob Hazel reported his findings to me. He told me that he had found a two degree deviation from the normal gradient between 700-900 feet in the well. He found the fluid level in the tubing to be at approximately 3600 feet and pointed out that the mid-point of the formation was at a depth of 6518 feet. He pointed out that this fluid level was probably sufficient to balance formation pressure, thus explaining why the well was dead. Bob explained to me that the well had generally been on continuous oil production and consequently the casing and surrounding rock was at a high temperature. This high temperature due to fluid production would have quickly masked any cooling due to gas migration from the casing. Bob informed me that the field operators had said "it seemed to take an unusual amount of helper gas injected into the casing to unload this well". He said this condition had existed for a couple of months. At this time, Tuesday afternoon, I called Art Olson and told him we thought that the Well 12-1 might have a casing leak in it between a depth of 700-800 feet, but that we couldn't confirm it at this time. I explained that our concern was that gas might have leaked for at least a couple of months from the well and if that gas found a permeable path, such as a utility trench, it might have moved a considerable distance from the well. I described to Art how Frank Whipple's people had used the portable flame ionization units in an attempt to detect gas spread here in Montebello when we had the Mulholland well casing leak. I told Art that this might be a prudent course of action at this time at Playa del Rey.

2

er that afternoon, John Brady called me and told me about the gas ey were finding in bar holes around this well and close to adjacent houses and asked what I thought we could do from a reservoir engineering standpoint to determine where the leak was in the well. I told John that since the well had only 13 psi on the casing at this time, the leakage for all practical purposes had stopped. He said that even though the pressure was down and the leakage rate greatly reduced there would still be some leakage from the well and he wanted all of the pressure off of the well so that there would be no leakage at all from the casing. I told him I thought we would have to kill the well in order to accomplish this and said that I thought it would be very difficult to find the precise location of the leak with the well dead. He asked if I thought it would help to pressure the well back up again in order to run some sort of survey to pinpoint the leak. I said that I thought that would help and I thought we should run a surface recording temperature survey so that we would not have to log the entire well, pull the temperature recording element and read the chart. I called John Melton at Goleta, discussed the problem with him, and we decided that it would be quicker to run a sound log rather than a temperature survey. John told me at this time that they could bleed the gas from the casing to atmosphere in the trap area through the kill line. John then called Jim Burks and asked him to bleed the casing to the atmosphere in that way. At that time Jim Burks suggested to John that we use nitrogen to pressure the casing rather than natural gas. It sounded like a good idea and we agreed to do that. On Tuesday evening, the residents of one near-by house were evacuated due to the high concentration of gas under their house.

At 11 a.m., Wednesday morning, the casing was pressured with nitrogen under John Melton's direction. At noon John reported to me that he had pressured the casing to 510 psi and that it fell off to 475 psi in 10 minutes. John said that he thought part of the pressure drop might be due to fluid being forced back into the formation. John also reported that the Triangle Service people were having difficulty getting their logging tool into the well. The nitrogen pressure was held on the well until 3:15 p.m. before it was bled off. During the four hours that the casing was under nitrogen pressure, the pressure dropped from 500 psi to 310 psi.

John Brady called me late Wednesday afternoon and told me that the day had been a debacle, that pressuring the casing with nitrogen had caused leakage into the ground which had pushed the gas present in the ground closer to the houses thereby increasing the danger to the surrounding area. John Brady said that the sound log gave no clear indication as to where the leak was and that we knew no more at this time than we did at the start of the day. John Brady also said that he had seen weekly surface pressure charts which showed a drop in casing pressure during the week of June 3 through June 10. He thought that this should be an indication that the well was leaking. John Melton had pointed out that by itself the drop in casing pressure would not necessarily indicate a leak in the casing. John Melton had explained that this could be due to a rise in fluid level in the casing or to bleed off through a valve into a low pressure pipeline. In retrospect, the drop in casing pressure combined with comments from the field

GR

operators that excessive helper gas was required to unload the well, together with dead vegetation in the vicinity of the well, should have led to a much earlier recognition of the casing leak.

John Brady told me that he wanted all pressure taken off of the well casing and the casing kept flat. I told him that we would make arrangements to kill the well on Thursday, August 15, 1974.

A 300-barrel tank was moved to the location Thursday morning, August 15, 1974. Mud was mixed and pumped into the well using Halliburton pumping equipment. All well fluids were displaced and the hole filled with mud by 1:00 p.m., August 15, 1974. Mud was then circulated through the well and into the open Baker tank for several hours to insure that all gas was removed from the wellbore.

RECOMMENDATIONS:

1. Two immediate additional measures for the early detection of casing leaks should be put into effect. First, at Playa del Rey the gas storage technician should review pressures of fluid producing wells (those wells similar to Del Rey 12-1) weekly and bring any pressure irregularities to the attention of a reservoir engineer.

   Secondly, at both Playa del Rey and Aliso Canyon, annular pressures should be collected monthly by Division personnel. These data should then be plotted on an individual well basis by the gas storage technician. The gas storage technician should review the pressure trends and bring to the attention of a reservoir engineer any rising pressure trends or irregularities in pressure trends. This type of data is currently being kept up to date at Goleta, East Whittier and Montebello.

2. The well Del Rey 12-1 should be left shut-in and filled with fluid until the end of the year. During the time that this well is shut-in, the wells Kelly 1, Merrill 1 and Colly 10 should be recycled in an attempt to pick up the production lost from the well Del Rey 12-1. Gas has been injected into the wells Kelly 1 and Colly 10 but no attempt has been made to produce fluid from these wells for several years. The well Merrill 1 has been idle for a few years. If these wells can pick up the production from the Well 12-1, it would seem reasonable to abandon 12-1 rather than to repair it. Recent production data indicates that Del Rey 12-1 produces about 40 barrels of oil per day. We estimate that repair of this well would cost approximately $30,000 and take three weeks. If a safety valve system were to be installed, an additional $10,000 would be required.

T:eo
cc: Mr. J. L. Melton

CR 66

INTEROFFICE CORRESPONDENCE

SOUTHERN CALIFORNIA gas COMPANY

See Below FROM Dave Zuniga / E. S. Sinclair DATE August 25, 1987

SUBJECT Proposal to Return Well SoCal 4 to Service

J. P. Anand
J. H. Joslin
J. Rheinheimer
J. F. Tierney
R. Weibel

History

Well SoCal 4 is a liquid removal well which bottoms towards the southeast side of the storage field. This well plays a very important role in fluid removals because of its strategic location which is a result of a strong water drive from the eastside of the field.

SoCal 4 has been shut-in since September, 1984, because of producing H_2S concentration of above 2000 ppm in the gas stream. Different batch treatments were attempted but without any success, partly because the well was not able to produce long enough. At that time, employees were not trained to work around wells with H_2S levels as high as the ones which were recorded at SoCal 4.

Recently, all PDR employees who might be required to work around H_2S producing wells and who might be exposed to H_2S in other areas, were trained by Secorp to respond to H_2S environments. The main areas covered were: How to identify H_2S, general response if H_2S is identified, how to properly use monitoring equipment, and how to properly use escape and or self-contained respiratory equipment.

Action Plan - To Return Well to Service on Monday 9/14/87

1. Take H_2S reads on tubing and casing prior to putting well on production - Station (Presently, H_2S reads on tubing and casing show zero ppm).

2. Put well on production and take H_2S reading according to the following schedule. Wear fresh air mask while taking reads for the first 24 hours - Station

   a. Take H_2S reads every two hours for the first 8 hours after putting well on production.

   b. Take H_2S reads once a shift (every 8 hours) for the next three days.

   c. Take H_2S reads once every 24 hours for the next five days.

If H_2S reads should exceed 6000 ppm, shut well in and treat (see item 3), if not, revert to once a month reads.

Attending:

E. Brannon, Division of Oil and Gas
C. M. Goldwasser
J.W. Gourley
D. Lande, Division of Oil and Gas
L.L. Langer
P.S. Magruder, Jr.
K.M. Taira
R.E. Wallace

Temperature surveys are conducted quarterly in the Playa Del Rey and Montebello fields, and semi-annually in the East Whittier field. Any abnormalities are checked using either a noise log or RA tracer survey. Weekly surveys of the annular pressure between the casing and injection/production tubing are conducted. Bar-hole surveys around active wells are performed monthly and semi-annually around abandoned wells.

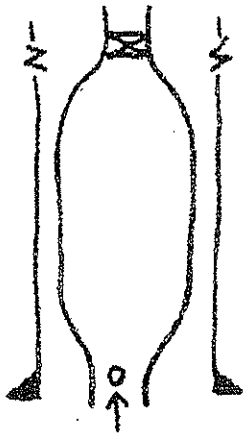
All safety valves are tested semi-annually. Don Lande requested that the Division of Oil and Gas be notifed prior to these tests so that we can be present, if desired.

A change in the frequency that Southern California Gas must run Helium tests was discussed. A formal request for change will be submitted.

Southern California Gas would like the Division of Oil and Gas to review a list of wells that they will send to us which outlines those wells considered to be critical. Any changes will be discussed at a later date.

Southern California Gas stated that they are reluctant to totally abandon any well because they can use old wells as observation wells. Additionally if an old well begins to leak gas, it can be easily repaired.

A new 5½" tubing and safety valve configuration was discussed (refer to diagram). The safety valve which makes it easier to service. The annulus between the tubing and casing will be full of treated water to maintain an internal hydrostatic head. A reduction in casing shoe leaks may result from this new arrangement.



Southern California Gas Co. requested tentative approval of a change to #9, in the Playa del Rey approval letter. A formal written request will be submitted soon.

It was noted that safety valves, clay plugging problems and produced sand causes a reduction in deliverability with passing time in the Playa del Rey field.

East Whittier

Southern California Gas Co. and Chevron U.S.A., Inc. are negotiating an agreement which would allow the Gas Co. to reclaim gas lost from their Montebello storage area to Chevron's lease, after Chevron's production cost are covered. Union Oil Company sold 3 wells to the Gas Co. for observation wells. These wells will be used to monitor gas escaping the storage area into Union's lease to the south. Most of these losses will be reduced this summer by blowing down the reservoir during low demand periods.

Montebello

There is gas communication between the 8th and 7th zones in the Montebello field, although it is somewhat restricted. It was noted by the Gas Company that a difference of as much as 700psi exists between the two zones. A discussion about whether the 7th zone should be officially included in the storage project occurred. It was decided that since the Gas Company does not actually inject or withdraw from the 7th zone that it would not be included at this time.

Anytime a gas storage reservoir is substantially drawn down the Gas Company significantly increases surveillance of their wells. It has been found that the draw down causes strain on the cement-casing-formation bond. Microannualar leaks have developed. This year 13 billion cubic feet of gas was withdrawn from the storage zone which is about what the zones estimated capacity is. Several small gas leaks have appeared. One in Burke Community 3 necessitated the evacuation of two families and demolition of a covered patio. A cap to rectify the problem will be installed on the well. (See attachment). Another well, Braun 7, which is located on the grounds of the Montebello City Hall developed a leak also. A drill rig is moving on the well to do the repairs. The Division of Oil and Gas will be furnished an in-house report on the problems in Montebello this year.

It was noted that the substantial draw down this year will allow the Gas Company to do a re-evaluation of their storage capacity.

W.E. Brannon

INTEROFFICE CORRESPONDENCE

SOUTHERN CALIFORNIA gas COMPANY

11/2/ Ben Don Will

ORIGINAL SIGNED BY J. A. CORDANO, JR.

TO Mr. N. D. Stevenson FROM J. A. Cordano, Jr. DATE October 30, 1978

SUBJECT Corrosion in Wellhead Piping of Well 13-1 at Playa del Rey

Here is a report by John Stanley in response to your query as to the cause of corrosion in the wellhead piping. The corrosion can be effectively reduced by a piping design similar to that used at Honor Rancho and Aliso Canyon storage fields. The new design, worked up by Warren Schlicking, has been reviewed and is considered an effective design to retard corrosion.

This type of corrosion is believed to be induced by the presence of CO_2 and acidic brine solutions in contact with the steel piping at high velocities, which causes an erosion corrosion type of attack. Changes in piping metallurgy could effectively reduce further corrosion; however, such changes would prove costly. Heat treatment (normalizing and stress relief) of conventional carbon steel piping materials is not believed to be an effective method to retard the corrosion rate.

JGS/js

cc: J. J. Alilovich
L. J. Fast
J. D. Hampton
P. S. Magruder

ENGINEERING REPORT

Corrosion of Wellhead Piping

Well 13-1, Playa del Rey

J. G. Stanley

10/23/78

INTRODUCTION

A leak in a weld seam joining a reducer coupling to a horizontal pipe run was found in the wellhead piping of Well 13-1. Sectioning through the pipe at a tee location and at the reducer (leak) location revealed the leak to be caused by corrosion. This report discusses the causes of corrosion and methods to retard the occurrence of such corrosion in the future.

CONCLUSIONS

1. The cause of the major corrosion which led to leakage is believed to be the interaction of CO_2, water and acidic chloride salts ($CaCl_2$) to produce an acidic solution in contact with the steel piping. This corrosion was accelerated by high velocity impingement, which causes erosion of any protective film on the pipe. Further acceleration by galvanic interaction at the involved weld seam is also believed a contributing factor to the corrosion observed.

2. It is believed that corrosion initiated during withdrawal and remained active during injection and shutdown.

3. The use of inhibitors or more corrosion resistant piping materials can minimize the corrosion rate but are costly.

4. A change in piping design to minimize erosion can also effectively reduce the corrosion.

RECOMMENDATIONS

1. If the piping is to be used for injection only, no action is believed warranted other than repiping with standard carbon steel materials and visually inspecting the christmas tree valving for corrosion.

2. If the piping for this well, and others like it, is to be used for both withdrawal and injection (primarily injection) as was done in the past, redesign of the piping to more closely simulate the design currently used for withdrawal wells is recommended -- use of bull plug tees, wide radius ells, and preferably no reducers.

DISCUSSION

Well 13-1 is primarily used as an injection well and had not been operated since 1974. The exact date of the last rework was not obtained, but it was indicated that rework was done 10 to 15 years prior. No information was available to determine the last date that the well was used for withdrawal. However, it was indicated by base personnel that the well was used sparingly for withdrawal sometime after the last rework and prior to 1974.

Deep pitting was observed around the weld seam from the four o'clock position to the eight o'clock position where the leak occurred. Two large deep pits in the tee under the flange connection at the four to five o'clock and seven to eight o'clock

positions were also observed. General light to moderate pitting between the five and seven o'clock positions was observed, and several moderately heavy pits were also observed in the upper quadrants of the tee.

The position and appearance of the pitting are indicative of an erosion/corrosion condition initiated during withdrawal. This type of corrosion is relatively common in CO_2 bearing gas wells which produce sufficient quantities of liquid water. Generally the partial pressure of CO_2 must be in excess of 15 psi, but corrosion has been experienced at partial pressures as low as seven psi. To compound the corrosivity of this system, the water produced in this well contains high chloride contents, much of which is leached from the calcium chloride muds used during construction of the well. Both CO_2 and the calcium chloride salts, when combined with water at the pressures of withdrawal, produce an acidic solution which is highly corrosive to carbon steel.

Corrosion during injection can only take place if some of the brine deposited during withdrawal remains in place in the piping. The pressure of injection again dissolves CO_2 into the brine creating the same conditions as those which occur during withdrawal.

The through-wall corrosion at the weld is believed to have resulted from corrosion occurring during withdrawal, injection, and when the well was inoperative. It is postulated that some of the brine obtained during withdrawal settled in corrosion pits created

during operation (withdrawal and injection). A galvanic couple is created by differences in grain structure and chemistry caused by welding. The galvanic couple in contact with the brine electrolyte then causes rapid deterioration of the small anodic weld area. This type of galvanic attack also occurs during operation.

Since the observed corrosion initiates during withdrawal, corrosion of an injection well can be eliminated if that well is never used for withdrawal. If the well is to be used for both withdrawal and injection, corrosion can be curtailed by lowering withdrawal pressure such that the partial pressure of CO_2 is less than seven psi. Also, piping designs which minimize erosion (our current withdrawal well designs) can effectively reduce the corrosion rate.

Other methods which can be used to reduce corrosion are the use of inhibitors and the use of more corrosion resistant materials in contact with the corrosive fluids. Both of these methods are believed costly. Also, they may not prove as effective in reducing the corrosion rate as can be achieved with design changes which minimize erosion.

JGS/js
Engineering Job Q-78-39

Interoffice Memorandum

Pacific Enterprises

PRIVILEGED AND CONFIDENTIAL
ATTORNEY-CLIENT
COMMUNICATION
ATTORNEY WORK PRODUCT

Date: February 14, 1991

Subject: Abandonment of Troxel Well - Playa del Rey

From: N. J. Provost

To: R. D. Phillips

SoCalGas currently operates the Troxel Well in the Playa del Rey Field. You have asked for a legal opinion outlining SoCalGas' potential liabilities if the planned abandonment of such well is implemented.

As I understand the facts, currently due to production from such well, the bottom hole pressure in the producing zone is less than hydrostatic pressure. However, following abandonment it is expected that the pressure in the producing zone will return to the hydrostatic pressure, producing a water-drive mechanism which, in theory (no one knows for sure), might produce hydrocarbons (and/or water?) through adjacent wells previously abandoned by third parties. Based on thirty year's experience SoCalGas is now convinced that a fault -- effectively preventing migration -- separates the Troxell Well from SoCalGas' other Playa del Rey operations, so that SoCalGas' other Playa del Rey operations will have no impact on this portion of the Field. Therefore, any possible hydrocarbons or water escaping at surface locations will occur solely through wells that are not "properly abandoned," as by definition, a "properly abandoned" well effectively seals off hydrocarbons and water. My understanding is that SoCalGas has never owned or operated any well in this area other than the Troxel Well (and has no specific information on their abandonment). No known leakage is occurring currently at any abandoned well location. Finally, this memo is based on the assumption that the build up to hydrostatic pressure is purely a natural phenomena, and the existence of the Troxel Well is currently "artificially" preventing such natural occurrence (as all other production has been abandoned on the Troxel Well side of the fault).

Since the early days of the oil industry the various oil-producing states have enacted legislation requiring the "proper abandonment" of wells no longer capable of producing oil and gas in paying quantities. See generally, Annot., "Duty and Liability as to Plugging Oil or Gas Well Abandoned or Taken Out of Production," 50 ALR 3d 240 (1973).

In California the obligation to "properly abandon" is established in California Public Resources Code, and specifically in §3208, which states in part:

> "A well is properly abandoned when it has been shown, to the satisfaction of the [State Oil and Gas Supervisor], that all proper steps have been taken to isolate all oil-bearing or gas-bearing strata encountered in the well, and to protect underground or surface water suitable for irrigation or farm or domestic purposes from the infiltration or addition of any detrimental substance and to prevent subsequent damage to life, health, property, and other resources."

See also §3228 requiring "isolation" of oil-bearing or gas-bearing strata and "every effort and endeavor to protect" water from pollution. Under certain circumstances related to future construction of overlaying structures (§3208.1) or "hazardous wells" (§3250 et seq.), the Supervisor can require "reabandonment," but this does not apply to an operator which has "properly abandoned" the well (it applies to the surface owner). Completing an abandonment contrary to the methods agreed upon constitutes "sufficient grounds for the [Supervisor's] disapproval of the abandonment" (§3232).

Unfortunately, there are no California cases interpreting these statutes which shed further light on the facts related to the Troxel Well. The phrase "subsequent damage to life, health, property, and other resources" has not been discussed in any California abandonment case. In fact, the existing California cases seemed to be limited to determining whether or not abandonment has, in fact, occurred. See e.g., Banks v. Calstar Petroleum Co. 82 CA2d 789 (1947).

Relevant cases outside California are also sparse, but based on an examination of the limited materials available, it appears that the following legal principles should apply:

1. There must be a causal connection between the damage claimed and the abandonment well in question. Shell Petroleum Corp. v. Blubaugh, 102 P2d 163 (Okla.

1940) and Shell Petroleum Corp. v. Blubaugh, 185 P2d 959 (Okla. 1947) (two related cases) (these cases involved ground and surface damage which was not shown to be caused by abandoned Shell wells, as opposed to other abandoned wells or other sources).

2. Compliance with the abandonment requirements of the governing authority may act to insulate the abandoning party against subsequent claims of liability. Salmon Corporation v. Forest Oil Corporation 536 P 2d 909 (Okla. 1975) (this case involved whether wells previously abandoned met the applicable governmental rules so to bar a subsequent party conducting secondary recovery operations from recouping the cost of "reabandonment" necessary to permit such secondary recovery, as well as questions as to whether normal industry practices were followed by the respective parties).

3. If the party abandoning the well knows of circumstances that may require additional actions to assure a "proper abandonment," a question of fact exists as to whether "proper abandonment" has occurred related to the specific circumstances. Curry v. Ingram, 397 SW2d 484 (Tex. App. 1965) (this case involved pre-existing "shot holes" (created by another party for which the land owner had previously been paid damages) which could not be readily "found" on agricultural land, thus raising a question as to whether the abandonment procedure (including reinjection of salt water at high pressures which may have migrated into "shot holes") was adequate under the circumstances).

Such principles appear to be consistent with the California statutory scheme outlined above (including various protections for "proper abandonments" approved by the Supervisor).

Applying such principles to the abandonment of the Troxel Well:

1. Abandonment of the Troxel Well does not "cause" the pressure to increase. Although abandonment of such well "allows" such pressure to rise to natural hydrostatic pressure levels, there is ordinarily no obligation to continue to produce where there is no economic justification for continuance. If all wells are "properly abandoned," hydrostatic pressure

will not cause hydrocarbons or water to be produced through any well. If another well (other than the Troxel Well) has not been "properly abandoned," that is the "cause" of any production, not SoCalGas' abandonment. (As noted above, I have assumed for purposes of this memo that a fault effectively seals, and will prevent, any migration of hydrocarbons or water from SoCalGas other operations in the Playa del Rey Field.)

2. Presumably SoCalGas will work closely with the Supervisor in obtaining his approval of the abandonment of the Troxell Well.

3. Even though SoCalGas' expects the pressure to rise and postulates that another well may not be "properly abandoned," this is a mere possibility, which will not occur if all other parties have previously "properly abandoned" their wells. Thus, such "possibility" should have no impact on the matter so long as nothing SoCalGas does in the process of abandonment increases the likelihood that such possibility will occur for reasons other than a natural rise in pressure.

In my view the most important protection for SoCalGas is to work closely with the Supervisor, so that his approval is as broad, knowing and comprehensive as possible. From a legal point of view, SoCalGas should definitely "gold plate" this abandonment and comply "willingly" with what is suggested by the Supervisor -- whatever the cost.

NJP:gl

cc: W. A. Dorland
L. E. LoBaugh

INTEROFFICE CORRESPONDENCE

TO Jim Montgomery FROM J. A. Thompson DATE 11/20/91

SUBJECT Big Ben Barhole & Well Surveillance Status

This memo documents our conversation last week.

Storage Operations(R. A. Skultety) indicated in an October 31st meeting here at PDR, that barholes should be surveyed at least once every two weeks. You indicated your preference for once per week surveys.

I will continue to obtain gas samples for Barhole H (or others if sufficient concentrations are found) and send them to the Test Center for hydrocarbon and helium analysis.

It is requested that your personnel immediately and verbally inform me of the results of their weekly barhole inspection. This will aid me in obtaining gas samples as the presence of the barhole gas is so sporadic.

In general, the only barholes to exhibit gas are in the first "line" around the cellar. Therefore, public safety is not being compromised.

Samples taken recently are essentially pure methane with no helium content:

DATE TAKEN	BARHOLE	%GAS	%METHANE	%OTHER hydrocarbon	HELIUM, PPM*
1/11/91	12	62	93	7	133
	13	45	99	1	188
	14	47	99	1	153
8/23/91	H	10	100	0	47
9/4/91	H	23	100	0	<7
9/25/91	H	3	100	0	<7
9/26/91	H	7	100	0	<7
10/1/91	H	14	100	0	<7
10/11/91	H	25	100	0	<7
10/17/91	H	11	100	0	<7

*PPM valves adjusted to 100% combustibles

These later samples resemble the same gas which is exiting barholes at Del Rey 10(see attached). This has been occurring for many years and is attributed to a shallow gas sand leaking to the surface via

the path of the wellbore. It is unknown why this same type of non-storage zone gas would now be venting itself at Big Ben wellsite, beginning in January of 1991, if it had not been detected before. One theory could be that a Big Ben shoe leak actually occurred, and has since been eliminated with the well being killed, but that the event established a conduit for the shallow gas sand to communicate to surface.

I will continue to work with Storage Operations to investigate this situation and keep you informed of any needed remedial work.

JAT/dh/bbrhle.doc

cc: R. L. Adamczyk
N. W. Buss
E. Covington
K. Jones
M. D. Middleton
R. D. Phillips
M. Sanchez
R. A. Skultety
P. D. Yu

The Gas Company

Engineering Analysis Center

Interoffice Memo

TO: Larry J. Sasadeusz
FROM: Dan Meltzer
DATE: February 29, 2000
SUBJECT: Natural gas Benzene content in and around the Playa del Rey storage facility

OBJECTIVE: To measure the current level of Benzene in the gas in and around the Playa del Rey storage facility and compare it to historical data.

RESULTS

- Average Benzene levels in the natural gas stream collected from the transmission lines entering and exiting the Playa del Rey storage facility during the test period ranged from 15 to 20 ppm. These values constitute the vast majority of gas in the Southern California Gas Company system serving the South Bay area.

- Average Benzene levels in the natural gas stream collected from the low pressure system feeding into the Distribution network around the Playa del Rey storage facility during the test period were 223 ppm and ranged from 191 ppm to 247 ppm.

- The average Benzene level in the natural gas stream collected from residential customer meters in the immediate area surrounding the Playa del Rey storage facility during the test period was 50 ppm and ranged from 21 ppm to 94 ppm.

DATE: March 22, 2000
TO: J. Mansdorfer
FROM: J. A. Thompson
SUBJECT: Subsurface gas well leaks at PDR

The following is a summary of the results of my research of the Playa Del Rey well files. Referenced attachments are in **(bold)**.

1. Well #29-1 1959 Discovered stage collar leak at 723' during routine temperature survey. Well worked over to install casing bowl. **(1)**

2. Big Ben #1 1964 Discovered production casing leak at 150'. Well worked over to install casing bowl. **(1)**

3. Blackline #1 1969 Discovered casing leak at 1064'. Repaired with casing patch. **(1)**

4. Socal #4 1971 Found leak at 3216' during routine temperature survey. Well worked over to squeeze cement for repairs. **(1)**

5. Well #12-1 1974 Surface seepage discovered. Leak at 481' was repaired with casing bowl installation. **(1) (2)**

6. Socal #3 1975 Found leaks at 3300' during routine temperature surveys. Well worked over and repaired with cement squeezes **(1) (3)**

7. Well #24-2 1975 Surface seepage discovered. Leak at 191' was repaired with casing bowl installation. **(1)**

8. Pomoc #1 1975 Found leak at 2815' during routine temperature survey. Well worked over to squeeze cement for repairs. **(1)**

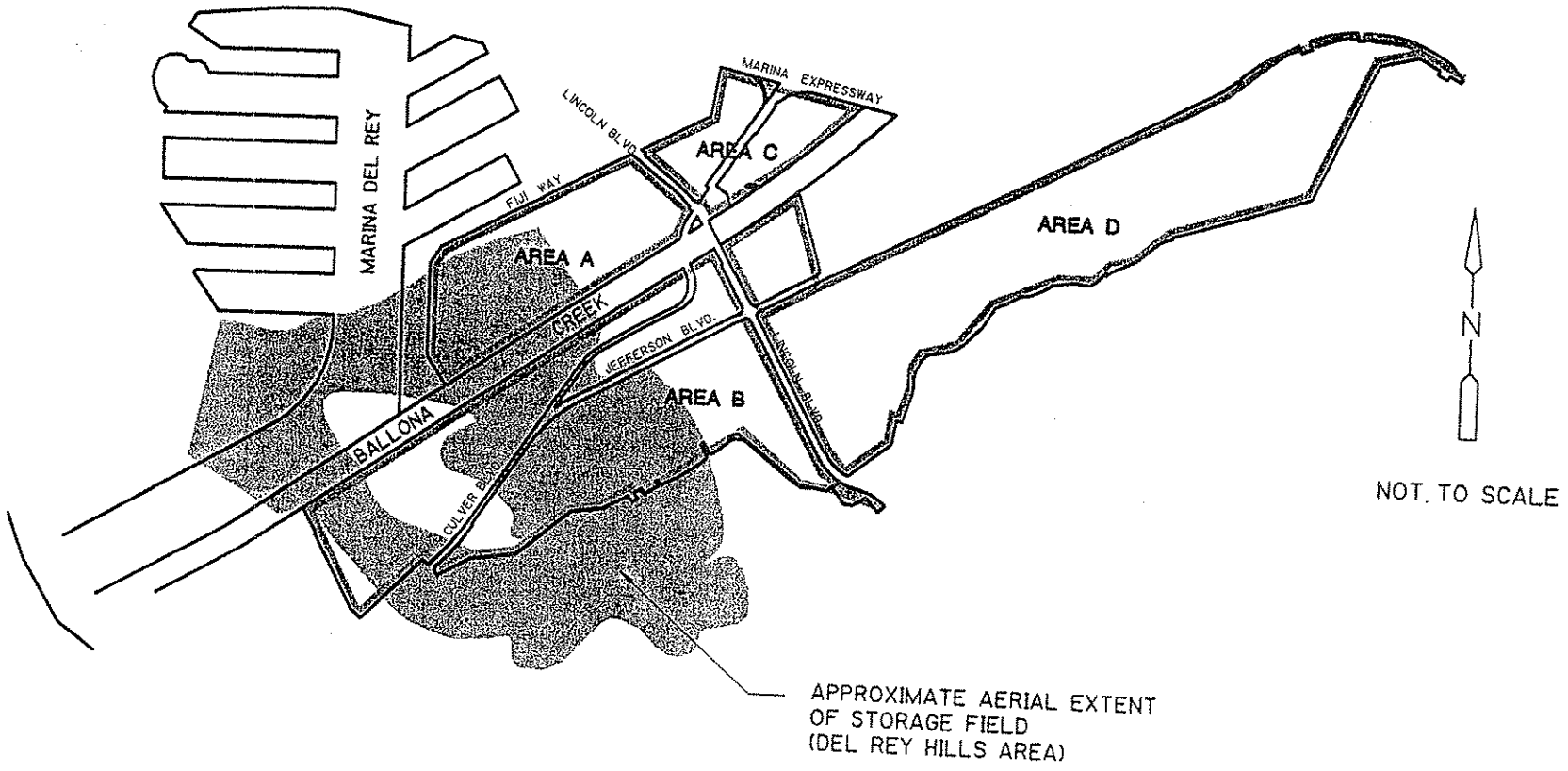
9. Socal #3 1978 Wireline work revealed holes at 2109'. Installed inner casing. **(3)**

10. Well #12-1 1979 Temperature survey revealed leak at 210'. Casing patch installed. **(4)**

11. Blackline #1 1986 Casing patch failure detected from routine temperature survey. Inner casing string installed. **(5)**

12. Joyce #1 1987 Casing gas identified as storage gas. Noise log detects hole at 750'. **(6)**

13. Big Ben #1 1991 Surface seepage discovered. Well abandoned. **(7)**



Source: Southern California Gas Company

SAMPLE AND ANALYSIS OF GAS
FROM SOUTHERN CALIFORNIA GAS COMPANY PLAYA DEL REY STORAGE FIELD

Playa Vista and Playa del Rey Gas Storage Reservoir

CDM
environmental engineers, scientists,

PUC Reports

Complaint Case Facts and Findings
(Playa Del Rey Storage Field)

By

Consumer Protection and Safety Division

August 20, 2002
Revised on November 18, 2004

Table of Contents

I. Introduction

This report presents some of the data that Consumer Protection and Safety Division (CPSD) has gathered from the investigation of the Complaint Case (C.00-05-010) proceedings. On May 11, 2000, three residents of Playa Del Rey area filed similar complaints against SoCalGas, C.00-05-010, C.00-05-011 and C.00-05-012, respectively. In addition, Grassroots Coalition and several other residents of Playa del Rey (PDR) and Marina del Rey joined the complaints. Although the complaints were filed separately and individually, they shared a common a concern that SoCalGas is operating its Playa Del Rey gas storage facility unsafely, in a manner hazardous to the health and safety of nearby homeowners. Specifically, the complainants alleged the storage reservoir was leaking, resulting in dangerous toxic pollution from venting and leaking gas, atmospheric contamination, noxious odors, and a leaking abandoned well . Each complainant asked the CPUC to conduct an investigation of the SoCalGas Storage facilities in Playa Del Rey.

SoCalGas filed a motion to dismiss these cases or consolidate the cases. Although the Commission denied the motion to dismiss the cases, but the motion to consolidate was granted and the three complaints were consolidated under Rule 55 of the Commission's Rules of Practice and Procedure. These three cases are now treated as one case under C.00-05-010.

CPSD investigations focused on all the allegations. During the course of these investigations, CPSD conducted laboratory analysis (Isotopic Analysis) of field samples from leaking abandoned well. CPSD also requested and reviewed large volume of data from SoCalGas and Grassroots Coalition. After review of all available data provided to CPSD, the findings were used to determine the merit of the allegations and consequently resolved some of the allegations. The remaining unresolved allegations have been classified into two issues: **(1) Any evidence of PDR storage gas and/ or Thermogenic gas within SoCalGas mineral rights migrating to the surface, (2) Any evidence that the PDR Gas Treatment and/ or PDR Gas Storage facilities are contributing to local**

residents' exposure to carcinogenic toxins. This report focuses on some of the data CPSD has collected, implications of our findings to date, and recommendations for resolving the two remaining allegations.

II. Discussions of Facts and Findings

One must remember that the following facts and findings do not definitively explain or answer the allegations. However, this information, individually or cumulatively, indicate that there might be potential problems that warrant further investigation. The type of investigation or study scope must consider the available data, along with how to integrate that data into a full reservoir study and a Health Risk Assessment (HRA) that provides definitive results that lead to resolution of the two outstanding allegations. It is important to note facts and findings presented below do not indicate any wrong doing on the part of SoCalGas. Instead, they simply reflect the existence of potential hazards compounded by lack of definitive test results or data gaps. The following facts are discussed below:

(a) Evidence of three types of natural gas in PDR
(b) 133 PPM Helium in a natural gas sample from a bar hole near Big Ben well
(c) 22 PPM Helium from a shallow probe by John Sepich & Assoc.,
(d) Greater than 800 PPM Helium from groundwater samples
(e) ETI report indicated Thermogenic gas components detected in shallow subsurface geologic units and H2S detected in soil gas samples
(f) Previous reservoir inventory analysis
(g) 50,000 PPM gas detected at Troxel Well and known migration loss to well
(h) Potential problems with validity of some SoCalGas data.

City docs

A. Three types of natural gas in PDR

There is evidence of surface detection of three types of natural gas in PDR namely: Biogenic gas, Native PDR Thermogenic gas and Storage Reservoir

Thermogenic gas. Biogenic gas is commonly known as Swamp gas. Its chemical and physical characteristics are mostly Methane gas, formed by bacteria action in shallow surface. It has ***no*** Helium, Ethane, Butane or other heavier hydrocarbon. Biogenic gas is non jurisdictional. In contrast, Native PDR Thermogenic gas (native PDR gas) and Storage Reservoir Thermogenic gas (Storage gas)are formed by decomposition of prehistoric fossils under high temperature and pressure in deep and intermediate geological zones. Thermogenic gases have, Methane, Ethane, Helium and other hydrocarbons. Both native themogenic and storage reservoir thermogenic gases have some identical physical and chemical characteristicscontain varying amounts of Helium, Ethane, Methane and other hydrocarbons. Unfortunately, these identical characteristics make it difficult to differentiate Native PDR gas from Storage Reservoir gas. However, experts like Dr. Arehart (Department of Geological Sciences, University of Nevada) have discovered some subtle differences such as the difference in Helium content and the age of the Helium. There are evidence from various gas sample tests and isotopic analysis that show each of these three gases emanating to the ground surface at various locations at one time or another. The presence of Ethane, Methane, Helium and other hydrocarbons are one of the key considerations in determining if a sample is Biogenic or Thermogenic. Once it is determined that a sample is Thermogenic, then the Helium and the concentration present in that sample determines if it's Native PDR gas (1-15 PPM Helium) or Storage Reservoir gas (15-450 PPM Helium). However, commingling of these gases, alteration of physical and chemical properties by some external factors, and filtration of some gas constituents (possibly by groundwater or aquifer) obscure the minor differences and complicates the chemical speciation. *Please see Appendix # A*

B. 133 PPM Helium from bar hole samples near Big Ben Well

SoCalGas internal office memorandum, dated November 20, 1991 revealed that gas samples collected from bar-holes around Big Ben Well contained 30,000 PPM to 620,000 PPM natural gas and these samples contained 133 PPM to 188 PPM

Helium. A close examination of the memo revealed that three samples were collected on 1/11/91, at bar-holes # 12, 13 & 14. Isotopic analysis of these samples indicated with high probability the signature of Storage Reservoir gas (meaning that the gas migrated from Storage Reservoir). In addition, the memo did not indicate any more sampling at these bar-holes or subsequent remedial action. On 8/23/91 and subsequent dates, samples were collected from bar-hole H instead of bar-holes 12, 13 & 14. The isotopic analyses of the new samples did not reveal the storage gas signature and subsequent discussion on the memo ignored the initial sample data, its significance and if there was any remedial action. *Please see Appendix # B*

C. 22 PPM. Helium from a shallow probe sample by John Sepich and Associate.

Isotech Laboratory performed an isotopic analysis of a gas sample submitted by Sepich & Associates on 3/25/99. Sepich and Associates was working for Playa Vista developers (developers of residential and business properties around the PDR.Storage field. The isotopic analysis report indicates the gas sample was collected from Playa Vista Project Area-D. The analysis report also revealed presence of Ethane and 22 PPM Helium in the gas sample. The significance of this isotopic analysis report is the presence Storage Reservoir gas or Native PDR gas signature and the location where the gas sample was collected (Area – D of Playa Vista Project). My opinion is that the probability of Storage Reservoir gas sample from PDR area containing Ethane and 22 PPM Helium is greater than 50 percent (>50%). Furthermore, the location where the sample was collected should be of major concern. Please see Appendix # C

D. 100 PPM–1000 PPM Helium from groundwater samples collected and analyzed by Exploration Technologies, Inc (ETI)

City of Los Angeles Building and Safety Department retained ETI to conduct test, analyze and provide advice on Playa Vista project. Groundwater samples were collected in 2000 from Playa Vista Project Area, and dissolved

gases were extracted and analyzed by ETI in addition to other scientific sampling and testing. Several groundwater samples revealed presence of high Helium concentrations and methane dissolved in the groundwater. The origin of this Helium in the groundwater is not clear. However, some people have postulated that the groundwater absorbs or strips the Helium from the Storage Reservoir gas or Native PDR gas as it migrates through the aquifer to the ground surface. Hence, Thermogenic gas is detected in soil-gas without Helium. Although, this postulation seems plausible, I have not seen any scientific paper on this absorption theory and the kinetics. *Please see Appendix # D*

E. Dr Victor Jones of ETI detected Thermogenic gas components at the surface and detected H2S in soil gas during his investigation in 2000.

ETI conducted an extensive soil gas investigation in Playa Vista area for the City of Los Angeles in 2000. The isotopic analysis report of the samples collected revealed presence of Methane, Ethane, Helium, H2S, Toluene and other volatile organic compounds (voc). The presence of numerous Thermogenic gas components in the shallow soil gas samples analyzed indicates a deeper source for this gas.

F. Previous Reservoir Inventory Verification Analysis by SCG indicated gas migration loss (8/22/80)

A Reservoir Inventory Verification Analysis conducted by Theodoros Georgakopoulos on August 22, 1980, for SoCalGas indicated gas migration loss. The migration pathways to the Townsite area (separate geologic zone) is unknown. The report estimated storage reservoir gas loss between January 1961 and December 1979 to be 0.10 B.c.f. Subsequent reports estimated the gas loss to have decreased. *Please see Appendixt # F*

G. Presence of Methane gas around Troxel Well.

As part of Energy Division (ED) initial preliminary investigation, ED retained MHA, who subcontracted Giroux & Associates to conduct site investigations at the Troxel and Lor Mar well site locations in 2001. These recent studies found very high methane concentrations (greater than 50,000 ppm) at the Troxel site and low methane concentrations (1 to 6 ppm) at the Lor Mar site.

Although high methane levels at Troxel dissipated over time, low methane levels persisted through the end of the 32 days study period. This indicates a possible source of methane at this location. Methane concentrations also fluctuated during the study period, indicating that external factors (atmospheric pressure, tidal influences, gas storage reservoir operations) may be affecting data measurements. However, a soil gas survey study requested by the Commission and conducted by SoCalGas' consultant, TRC concluded that there were no measurable concentrations of volatile or combustible compounds encountered in the soil gas. Also, the study detected presence of Hydrogen Sulfide and the source was unknown. But recent sampling by Energy Division's CEQA team reported measurable concentrations volatile hydrocarbons.

H. Validity of SoCalGas Data.

Data collected by SoCalGas may be flawed. Procedures used by SoCalGas to collect gas samples at the Troxel did not follow standard gas collection and sample handling procedures established by Federal Environmental Protection Agency and other trade associations. A plastic sheet was used to accumulate enough gas to collect samples for analysis. Samples were collected in plastic bottles. Since plastic is permeable to many gases, and may also absorb some hydrocarbon based gases, test results would not fully characterize gas emitted from the well.

Although bar hole testing is acceptable for Department of Oil Gas & Geothermal Resources leak detection requirement, it does not follow standard procedures established

for soil gas investigations. Soil is disturbed and compacted when the bar is driven into the ground. This could interfere with movement of some soil gas. Therefore, low levels of methane may not be detected and concentrations reported may not be valid.

III. Recommendations

A review of the aforementioned facts and findings suggest the existence of a potential safety hazard. Since the available geological data does not definitively support or disprove the existence of safety hazard in and around the storage reservoir, further investigation and study is needed. It is important and recommended that CPSD conduct (1) comprehensive reservoir study and (2) Health Risk Assessment (HRA) (HRA that is not limited to 'for sale lots" and integrate some of the data gathered from the CEQA study). The basis for this recommendation are in response to allegations of hazards to public health and Safety, potential ratepayer liability, lack of definitive results from available data and mandate from General Order 58-A, section 22. We recommend a reservoir study that will include but not limited to:

1) Construction of a 3-dimensional geologic computer model (Earth Vision or equivalent) using existing data (wells records, soil gas investigations, geo-technical borings, geophysical data, environmental borings, site contamination data, groundwater data, etc) to fully integrate and visually display geologic data (strata and discontinuities) and other subsurface information (gas and groundwater locations) at the storage field.

2) Drill a minimum of three shallow well observation wells to describe the stratigraphic conditions (visual and geophysical logging) in geologic deposits above 1000 feet elevation in order to define potential gas storage zones and migration pathways, and to collect gas samples from depths below biogenic sources.

3) Collect and analyze (isotopic and chemical analysis) the gas in geologic deposits from these wells, focusing on depths below

minus 500 feet elevation (below sea level), in order to determine the origin and genesis of the gas.

4) Integrate the results from items 1, 2 and 3 above to develop a logical, defensible subsurface model that explains the surface and subsurface gas detections and the potential pathways for gas to reach the surface environment.

5) Retain an expert to perform Helium Ratio Analysis.

Shallow Subsurface Conditions Associated With Twelve Abandoned Well Sites: Southern California Gas Company 851 Lot Sale Application

Technical Report: Summary of Magnetometer Survey Data and Portions of Previous Southern California Gas Company Site Remediation Reports

and

Technical Review Report: Review of Site Conditions for 12 Abandoned Wells Southern California Gas Company 851 Lot Sale Application Playa del Rey Natural Gas Storage Field Los Angeles, California

Application Number 99-05-029

AUGUST 2002

Prepared for:

California Public Utilities Commission
Energy Division, Analysis Branch
505 Van Ness Avenue
San Francisco, CA 94102

and

MHA Environmental Consulting, Inc.
4 West Fourth Avenue, Suite 303
San Mateo, CA 94402

Prepared by:

Wilson Geosciences, Inc.
1910 Pinecrest Drive
Altadena, CA 91001

and

Innovateur International, Inc.
P.O. Box 377
Pasadena, CA 91102

MHA was retained to review the 851 Application, to review the Proponent's Environmental Assessment (PEA), and to prepare an environmental document under CEQA. MHA developed an interdisciplinary team to address the environmental issues. Wilson Geosciences Inc. (WGI) and Innovateur International (Innovateur) were selected to conduct technical studies addressing specific aspects of the subsurface conditions at the subject sale lots as part of a comprehensive technical review program.

This document presents a summary of subsurface conditions (both physical and environmental) based on SCG data reviewed to date. The reports are based on independent field investigations (magnetometer study) and records provided by SCG. It is assumed those records and data provided by SCG are accurate and correct. In some cases (see Innovateur, 2002) pages or technical appendices were missing from reports reviewed. There may be additional data available from SCG or others (such as the California Department of Oil, Gas, and Geothermal Resources) that could provide additional information about the environmental conditions at the sale lots.

Technical reviews conducted for these reports are the initial phase of a larger technical data review program undertaken as part of the CEQA process. This technical data review program was developed to evaluate the physical and environmental and subsurface conditions for the lots considered in the SCG 851 lot sale application. The overall technical data review program was designed to provide reports for each study component.

PLAYA DEL REY GAS STORAGE FIELD BACKGROUND

The Innovateur report addresses the conditions on the 12 sale lots that contain abandoned wells. The twelve study wells were drilled and developed for oil production in the 1930's. Although most were abandoned in the 1930s and 1940s, ten of the twelve wells (all but the Champ 1 and O&M 1) were reentered in the mid-1950s. The ten wells were converted to fluid removal and/or observation wells associated with the gas storage field.

All reentered wells were subsequently abandoned in the early 1990s with the intention of selling the adjoining lots. ENV America Incorporated (ENV) was retained by SCG as the environmental engineering consultant for site investigation and remedial cleanup work at these well locations. All twelve well sites were investigated and remedial actions implemented to prepare the lots for sale. ENV's procedures for investigating and remediating well sites were determined by the amount of remediation required (i.e., were there surface equipment or structures still present that required removal) and the regulations in existence at the time of remediation.

SUMMARY OF GENERAL FINDINGS

General findings from the two attached reports (WGI, 2002 and Innovateur, 2002) are summarized below. These findings are based on available data reviewed to date. As additional subsurface data are acquired and additional agency and SCG records are reviewed, the general findings presented below, and discussed in the attached reports, should be re-evaluated.

Physical Subsurface Conditions

ENV reports indicated that all surface and subsurface structures (e.g., concrete, piping) were removed from the well sites and that contaminated soil (within the prescribed limits) was removed and properly disposed of at a licensed facility. There are many details in the

Preface

This preface serves as transmittal of two deliverable reports prepared under the terms of the MHA Environmental Consulting, Inc. (MHA) contract with the California Public Utilities Commission (CPUC) for environmental review of the Southern California Gas Company (SCG) proposed 851 Lot Sale in the vicinity of the Playa del Rey Gas Storage Facility. The reports are:

- "Shallow Subsurface Conditions Associated with Twelve Abandoned Well Sites" (Wilson Geo Sciences Inc., 2002), and
- "Review of Site Conditions for 12 Abandoned Wells" (Innovateur International, 2002)

These reports were completed as part of the technical data review program developed by MHA for environmental review of the proposed project under the California Environmental Quality Act (CEQA). Both reports are attached and briefly summarized below. These reports are the first deliverables of the larger technical data review program and should be reviewed together when evaluating shallow subsurface conditions beneath each sale lot. This preface provides an overview of the report findings, which are briefly summarized below:

- Sale lots may still have soil contamination
- The abandoned wells may leak again in the future
- Further geologic analysis of the lots is required

PROJECT BACKGROUND

Southern California Gas Company (SCG) submitted an 851 Application (Number 99-05-029) to the CPUC to sell surplus lots in the vicinity of the SCG Playa del Rey Natural Gas Storage Facility in the City of Los Angeles, California. SCG submitted the 851 Application on May 12, 1999, proposing the sale of 36 existing lots in two different areas of the City of Los Angeles:

- 34 existing lots in the Playa del Rey area
- 2 existing lots in the Marina del Rey area

There are abandoned oil and gas wells on twelve of these sale lots with additional abandoned wells on lots adjacent to the sale lots. The twelve study wells are:

Merrill 1	Samarkand 1
SCG 13-1	Troxel 1
Hisey 1	Champ 1
Lor-Mar 1	O&M 1
Joyce 1	SCG 29-2
SCG 23-1	SCG 29-1

TECHNICAL REVIEW REPORT

Review of Site Conditions for 12 Abandoned Wells
Southern California Gas Company
851 Lot Sale Application
Playa del Rey Natural Gas Storage Field
Los Angeles, California

Application Number 99-05-029

Prepared for:

California Public Utilities Commission
Energy Division, Analysis Branch
505 Van Ness Avenue
San Francisco, CA 94102

and

MHA Environmental Consulting, Inc.
4 West Fourth Avenue, Suite 303
San Mateo, California 94402

August 2002

Prepared by:

Innovateur International, Inc.
P.O. Box 377
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(626) 292-1244

The attached summary report addresses twelve specific well sites (Merrill 1, SCG 13-1, Hisey 1, Lor-Mar 1, Joyce 1, SCG 23-1, Samarkand 1, Troxel 1, Champ 1, O&M 1, SCG 29-2, and SCG 29-1) at the Southern California Gas Company (SCG) operated Playa del Rey Natural Gas Storage Field, located in Los Angeles, California. This report, dated August 2002, was prepared under the direct supervision of a California Certified Hydrogeologist.

The report presents a summary of well related data provided by SCG. Analytical data presented in this report were prepared for SCG by ENV America, Incorporated (ENV) in Irvine, California. Well files reviewed for this report were provided by SCG. While *Innovateur International, Incorporated (Innovateur)* believes the accuracy and reliability of these data, *Innovateur* cannot and does not accept responsibility for the quality of the laboratory and other data used in this report.

ENV staff conducted investigative field-work, sample collection, sample custody activities, and site remedial actions under the direction of SCG. *Innovateur* assumes no responsibility for actual field and sampling operations conducted by ENV personnel or their representatives.

It is assumed that all available data relating to environmental and well conditions was provided by SCG for this review. *Innovateur* assumes no responsibility for evaluating possible site conditions that are not reflected in the data received and reviewed for this study.

Since our findings are based upon the field work and laboratory analyses of others, as well as data records submitted by SCG, the statements presented herein are professional judgments and opinions. These opinions have been derived in accordance with current standards of practice, and no warranty is expressed or implied.

If you have any questions regarding my oversight and participation of this study, please contact me at (626) 292-1244.

Brent Miyazaki, C.HG. (#HG 178)
Innovateur International, Inc.

CERTIFIED HYDROGEOLOGIST
Brent Miyazaki
No. HG 178
4/04
STATE OF CALIFORNIA

Since groundwater was not evaluated, it is not known if possible contaminants are present in groundwater underlying respective well sites. Therefore, the potential for these possible contaminants to reach the surface cannot be determined.

Well Records

Thirty percent of the sale lot wells experienced casing problems and leaks. Four sale lot wells (Lor-Mar 1, Joyce 1, Troxel 1, and SCG 29-1) exhibited various types of leaks. Casing leaks were identified in each of these wells while they were active. Some wells had multiple leak detections (Joyce 1, Troxel 1 and SCG 29-1). A leak in the Troxel well casing was also detected following abandonment. Table 1, Well History Summary, provides general information on each well. A detailed summary of well records for each sale lot well is attached in Appendix A.

H_2S was documented in at least one sale lot well (Joyce 1), indicating significant H_2S levels in the storage zone. H_2S concentrations ranged from 40 parts per million (ppmv) to 1,160 ppmv. The California Air Resources Board (CARB) State Ambient Air Quality Standard for H_2S is 30 parts per billion (ppbv) or 0.030 ppmv for any consecutive 60 minute period (CARB 1999a) or 0.060 ppmv during any consecutive 3 minute period (*Regulation 9-2-301 Limitations on Hydrogen Sulfide,* CARB 1999b).

Data suggest that Troxel 1 is connected to the main SCG gas storage reservoir. Helium concentrations in the Troxel ranged from 18 to 88 ppm. Following well abandonment in 1993, SCG detected thermogenic gas leaking from the casing.

Table 4 provides a summary of pertinent information on wells and site remedial actions. Details are discussed in this report or included in attached appendices.

General Findings

The following findings summarize concerns identified during review of well files and site remediation reports for each of the twelve wells located on proposed sale lots. These conclusions are based on the information and reports provided. They are subject to revision if additional data become available.

1. Hydrogen sulfide (H_2S) is present in the storage zone at some locations (40 ppm to 160 ppm in Joyce 1), and H_2S may represent a potential hazard at these sites if it migrates through either man-made (wells) or natural (geologic) pathways and accumulates in near surface geologic units. If H_2S is present in shallow geologic units and migrates into structures for human occupancy (houses), a potential human health hazard could result.

   Soil gas testing for H_2S at sale lot sites may be warranted prior to completing future CEQA analysis.

2. Remaining hydrocarbon compounds, based on TRPH or TPH, are present in soil at some former well sites (see discussion on Troxel 1 and Samarkand 1 below).

   The full extent of remaining hydrocarbon contamination may not be known.

3. Sites were not fully characterized for volatile organic compounds (VOCs) when soil samples were tested in the field using only a PID.

   - VOCs detected in soil samples collected at some well sites (Merrill 1, SCG 13-1, Hisey 1, Lor-Mar 1, and Joyce 1) were not tested to determine specific compounds even though VOCs were present at moderate to high concentrations (PID measurements) at these locations.

Table 4. Well History Summary

Well Name	Year Drilled	Abandoned/ Reabandoned	Potential Leaks Year	Potential Leaks Depth (ft)	Site Investigation & Remediation	Highest OVM (ppm)	Excavation (feet) Length	Excavation (feet) Width	Excavation (feet) Depth	Tons Removed	Cement in Excavation
Merrill 1	1935	1942 / 1992			1992	511 @ 15'			25	100	yes
SCG 13-1	1935	1992			1992	2,500 @ 5'			20		yes
Hisey 1	1935	1939 / 1992			1992	320 @ 3'	30	25	15		no
Lor-Mar 1	1935	1936 / 1992	1980	720	1992	380 @ 15'			18	100	yes
Joyce 1	1935	1936 / 1993	1987	750	1993	not recorded	44	41	11		no
			1988	2,244 & 2,315							
SCG 23-1	1935	1940 / 1993			1993	not recorded			11		yes
Samarkand 1	1939	1992			1993	not recorded			34		yes
Troxel 1	1930	1993 / 1994	1983	680; 1,600 to 1,800; & 1,800 to 1,900	1994 to 1996	not recorded			13	1,430	yes
			1993	in plugged well							
Champ 1	1935	1937 / 1958			1998	77 @ 12'			unknown	unknown	unknown
O&M 1	1935	1936 / 1956			1998	102 @ 5.5'			unknown	unknown	unknown
SCG 29-2	1936	1994			1999	not detected			19	45.6	yes
SCG 29-1	1935	1941 / 1995	1959	723	2000	not detected			12		no
			1981	2,178							

- VOC vapor concentration measurements for soil samples collected during remedial activities at well sites were made using a PID, but not recorded for 4 wells.
- Based on results from other sites, indications in two site remediation reports (SCG 29-1 and SCG 29-2) that no VOCs were detected in soil samples field tested at these sites using a PID are suspect.

Additional testing for soil gas at well sites and adjacent lots is needed to further characterize the possible presence and extent of VOCs at these locations.

4. According to SCG records (well file), the environmental site investigation for the Champ 1 was conducted at the wrong location. Well location information provided to ENV was incorrect.

   Since the site investigation assumed an incorrect well location, environmental conditions at the Champ 1 well site may not be known.

5. Three wells (Joyce 1, Troxel 1, SCG 29-1) had multiple leaks detected and repaired, which may represent possible gas migration hazards on these lots.

   Further detailed review of all existing data (downhole geophysical logs, test data, and well records) would be prudent to evaluate potential hazards.

6. Three wells (Lor-Mar 1, Joyce 1, SCG 29-1) exhibited casing leaks at approximately the same depth, which could indicate external factors (geologic) contributing to casing problems.

   In order to determine if external (possibly geologic) conditions affected the physical condition (leaks) of casing in all three wells, further evaluation and correlation of data for these three wells is necessary.

7. Leaking gas detected in Troxel 1 was described as "biogenic" despite presence of helium and ethane, which are indicators of either thermogenic or storage gas.

   A soil-gas survey at this site should be conducted to collect important data needed to define subsurface gas conditions at this site.

8. Both intentional and accidental "sidetracking" (inclined drilling away from the existing well bore) in five sale lot wells (Lor-Mar 1, Joyce 1, Hisey 1, SCG 29-1, and O&M 1) could contribute to additional potential well leak risks.

   Further evaluation of data from these wells may be needed to determine if potential risks exist at these locations.

9. Records indicate the Joyce 1 had several problems (poor cement seal on 13-3/8" surface casing, side-tracking, multiple casing leaks, H_2S in well) that could increase potential gas migration risks and hazards at this location.

   Since it appears that high H_2S concentrations are present in the storage zone at this location, further evaluation of data and records for this well are important in delineating existing conditions that may represent potential hazards.

10. Remaining contamination at the Troxel 1 site may represent a potential environmental hazard. A study conducted at the Troxel 1 site by Giroux & Associates (2001) found "oil contamination" during probe installation. Extremely high methane levels (exceeding 50,000 ppm) in soil were also measured at this site.

Existing subsurface conditions at the Troxel site indicates that environmental conditions at this site may not be fully characterized.

11. When the Champ 1 was re-abandoned in 1958, problems were encountered during plugging operations. Records indicate that workers were unable to clean-out casing below 1,085 feet. During re-abandonment operations, a new hole was inadvertently drilled from a depth of 1,084 to 2,281 feet.

    It is not known if this abandoned well meets current local and state regulatory guidelines and requirements.

12. Geologic logs prepared when the Troxel 1 was originally drilled (November 1930 to January 1931) indicate that multiple oil-bearing sands were present above the primary producing horizons (current gas storage zone). The shallowest of these oil-bearing zones was encountered at intermediate depths (interval from 3,525 to 4,195 feet) below surface.

    The potential for fluid migration (oil or gas) from these oil-bearing zones to shallower geologic horizons was not evaluated in this study.

As indicated above, existing data provided by SCG suggests the potential for remaining low level soil contamination and past subsurface gas migration at some sites. At one well site (Troxel 1), high methane concentrations were detected in the ground. It is not known if an actual hazard exists at these sites. Further investigation is warranted to determine the level of potential risk associated with these sites.

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Rita Boppana, Complainant, vs. Southern California Gas Company, Defendant.	Case 00-05-010 (Filed May 11, 2000)
And Related Matters.	Case 00-05-011 (Filed May 11, 2000) Case 00-05-012 (Filed May 11, 2000)

THE PLAYA DEL REY GAS STORAGE FACILITY GAS MIGRATION HAZARDS; AND THE DUTIES IMPOSED TO MONITOR AND MITIGATE THESE DANGEROUS CONDITIONS

March 24, 2007

By: **Patricia McPherson, President**
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I. EXECUTIVE SUMMARY OF THE PLAYA DEL REY GAS STORAGE FACILITY GAS MIGRATION HAZARDS:

A. FOR MANY YEARS SOCALGAS HAS KNOWN OF THE EXACT MANNER IN WHICH GAS LEAKS INTO THE NEAR-SURFACE SOILS, AQUIFERS AND INTO THE AIR AT PDR:

In an engineering report prepared by Rick Lorio, Associate Petroleum Engineer of Underground Storage for Southern California Gas Company ("SOCALGAS"), the manner in which gas leaks to the surface at Playa Del Rey ("PDR") is described in detail (see Exhibit 1). This engineering analysis report was prepared, and is dated April 25, 1985. Extensive additional engineering reports and measurement data prepared by SOCALGAS reveal that large quantities of gas migrate upward into the surface casings of the old well bores at PDR. These surface casings were initially drilled and cemented to the rock formation at a typical depth of 700 feet below the surface. This is illustrated in the Exhibit 1 Attachments that diagram the well casings, and the paths of gas migration.

Effectively, the surface casings – and the annular volumes that exist between the main casing and the surface casings – serve as collection "containers" for the upward migrating gases, as illustrated in Exhibit 1. SOCALGAS has monitored the gas pressures and the gas composition in these surface casings continuously over many years. These data reveal the central defects existing in the old well bores, in allowing gas to migrate into the near-surface soils and aquifers.

Exhibit 1 identifies these defects, and describes what mitigation measures need to be taken. In summary, these are described in the report as follows (emphasis added):

> Problem:
>
> All wells have some uncemented segments. Few wells have any cement above 2000. Formation sloughing may have filled in some of these wellbores but most remain the most permeable upward path for gas migration.

Solution:

Noise and TDT monitor active wells to find areas of increasing activity. Continually produce shallow zones. Vent to atmosphere all gas coming from surface casing shoe aquifer.

This description is provided in Exhibit 1 under the caption "Uncemented Wellbore Leaks: Type 3." Under the caption "Casing Shoe Leaks: Type 2," the following is described:

Problem:

Casing shoe leaks due to poor, deteriorated cement or to leakage through wso holes in active or abandoned wells.

Solution, Abandoned Wells:

Collect all free gas from overlying zones. Repair work not possible.

In summary, the "Solutions" set forth above by SOCALGAS include:

1. "Continually produce shallow zones."

2. "Collect all free gas from overlying zones."

Under the caption "Abandonment Plug Leaks: Type 4," two types of abandonment are described:

Problem, Type A Abandonment:

Cement plugs inside casing allow some gas to migrate upwards. Because its casing was cut off below the surface string, water will continue to fill casing as gas leaks out. Leak will therefore be sporadic and low rate.

Problem, Type B Abandonment:

Cement plugs inside casing allow some gas to migrate upwards. Because the casing stub is cut off within 100' of surface, the entire surface casing fills with gas. No liquid enters the well. The gas leak unloads fluid from the well and the rate increases with time. Eventually all of the fluid unloads and the leak rate stabilizes at a near constant daily rate.

Problems, Both Type Abandonments:

1. Casing cap, surface casing and casing shoe cement competent. Gas will build up inside-surface casing and force its way into shallow aquifer sand. Gas will surface at a non-leaking well that has the following problems.

2. Casing cap not competent. Gas will surface near well.

3. Surface casing or shoe cement not competent. Gas will spread over large area as it rises to surface lethargically.

Solution, Problem 1:

Direct repair of leaking well not possible because source well is unknown. Other wells where gas appears are continually vented to surface.

Solution, Problem 2:

Unearth well and recap or place collection funnel over it. Rig work not required. Vent all gas to atmosphere.

Solution, Problem 3:

Unearth well, move in rig, attempt to enter and repair old casing. Produce gas through casing into low pressure system. Vent surface annulus to atmosphere.

In summary, the "Problems" and "Solutions" identified under the caption "Abandonment Plug Leaks: Type 4" reveal the true nature of how the abandoned wells at PDR cause the near-surface aquifers to be continually recharged with the leaking gas:

1. "Gas will build up inside surface casing and force its way into shallow aquifer sand."

2. ". . . the [leak] rate increases with time . . . and the leak rate stabilizes at a near constant daily rate."

3. "Gas will spread over large area as it rises to the surface lethargically."

The central issue addressed by SOCALGAS in the above topic is the manner in which "gas will surface at a non-leaking well." This issue was addressed, and corroborated the above finds, in a report prepared by Babson and Sheppard, petroleum engineers, dated July 23, 1985. Their findings included the following (emphasis added):

1. "Leakage of natural gas from underground gas storage reservoirs is not unusual."

2. "The sustained high pressures at which such projects frequently operate tend to develop pockets or channels of gas saturation which are outside the confines of the normal storage reservoir."

3. "The Storage Reservoir is particularly susceptible to occurrences of this nature because of the large number of oil wells drilled into the field's reservoirs prior to initiation of the storage operations." [Exhibit 2 is attached herein to identify the oil wells that were drilled into the PDR Storage Reservoir prior to initiation of the storage operations.]

4. "Each of those wellbores provides a potential channel for the uncontrolled migration of fluid."

5. "Gas could migrate from the storage reservoir through one wellbore to an upper formation, then through a second wellbore to yet higher formation.

6. "Such upward flows could be expected to occur naturally over time even without the presence of the storage operation."

7. "Gas remaining in depleted, abandoned reservoirs will naturally tend to seek a route to a site of lower-pressure – a shallower formation."

8. "It could even be driven toward the available flow channels by the entry of edgewater into the reservoir seeking to replace the depleted hydrocarbon saturation.

9. "The Gas Company's storage project tends to emphasize this potential for upward migration because of the high pressures necessary for its operation."

SOCALGAS has long recognized these problems at PDR, including by way of entering into contractual agreements that purport to allow "storage" of their gas as close to the surface as 500 feet. Namely, quoting from the SOCALGAS report described above:

- "Gas will build up inside surface casing and force its way into shallow aquifer sand."

- "Gas will spread over large area as it rises to surface lethargically."

The corresponding language in contractual legal documents filed with the Los Angeles County Recorders Office by SOCALGAS typically reads as follows:

- FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, HUGHES TOOL COMPANY, a corporation organized under the laws of the State of Delaware, hereby conveys to SOUTHERN CALIFORNIA GAS COMPANY, a corporation, the exclusive right to use subsurface mineral, oil and/or gas zones for injecting, storing and withdrawing natural gas (whether produced from such or other property) therein and therefrom and for repressuring the same; but with no right to use the surface or to carry on such operation except between a depth of -500 feet to -7000 feet from the surface thereof in the following described property:

- Hughes Tool Company hereby convenants and agrees to prohibit exploration for mineral, oil, gas or other hydrocarbons between depths of -500 feet to -7000 feet from the surface of the above described property.

Clearly, the "exclusive right to use subsurface mineral, oil and/or gas zones for injecting, storing and withdrawing natural gas (whether produced from such or other property) therein and therefrom and for repressuring the same," would be inclusive of the shallower migration zones described in the Babson and Sheppard report quoted above.

Furthermore, the geographic extent of the property [viz., "the following described property:"], as described in the documents recorded with the County Recorder's Office, establish the true boundaries over which SOCALGAS has direct legal responsibility regarding gas leaking to the surface. These boundaries need to be carefully identified regarding the legal issues that are to be addressed regarding this proceeding.

In summary, the legal analysis regarding SOCALGAS responsibilities relating to the leaking gases at PDR must consider the above foundational material critical in this determination. The above factual foundation is essential in establishing the true nature of the legal undertaking of SOCALGAS in operating an underground gas storage field in a partially depleted oilfield under high pressure, where a large number of oil wells were drilled into the field's reservoirs prior to initiation of the storage operation. The controlling legal issues regarding this undertaking will be discussed below.

B. SOCALGAS DEVELOPED PROCEDURES FOR MONITORING AND COLLECTING LEAKING GASES, BUT FAILED TO IMPLEMENT THESE PROCEDURES AT PDR:

In a document prepared by SOCALGAS titled, "Gas Inventory Monitoring, Verification, and Reporting Procedures," (see Exhibit 3), the following procedures are

described for the monitoring and collection of the leaking gases, as detailed in the Rick Lorio report titled, "The Playa Del Rey Monitoring Program," (see Exhibit 1), under the caption Non-Storage Zone Wells, at page 5 of 18, the following is described (emphasis added):

> Non-storage zone wells monitored include both Company wells and wells owned by others in overlying and underlying zones and in other fields within two miles of the storage reservoir boundary, where applicable. These wells are categorized as follows:
>
> i. Pressure observation wells are located in overlying and underlying permeable formations, or adjacent to the storage reservoir but across assumed confining boundaries, such as faults, permeability pinchouts, below the gas-liquid contact or beyond the spill point of the storage zone's confining structure. Although normally static, these wells may have artificial lift mechanisms for removal of gas and fluids.
>
> ii. Gas collection wells are located where known gas migration from the storage zone is intercepted and collected. These wells are normally equipped with operating artificial lift mechanisms so that both liquids and gas can be produced, causing a pressure sink in the reservoir near the wellbore.
>
> iii. In some fields, shallow water observation wells have been drilled into aquifer zones existing in the first permeable sand above the shoe of the surface casing. These wells are closed in at the surface and gas concentrations in the wellbore are measured weekly.

It is important to recognize that Rick Lorio addressed these same issues with the following relevant language (see previous discussion herein) (emphasis added):

> • "Gas will build up inside surface casing and force its way into shallow aquifer sand."

Clearly, the monitoring and collection procedures highlighted above are critical in dealing with shoe leaks occurring at the bottom of the surface casing, located at a typical depth of 700 feet, as illustrated in Exhibit 1. Succinctly, these procedures are described as follows (emphasis added):

". . . shallow water observation wells have been drilled into aquifer zones existing in the first permeable sand above the shoe of the surface casing."

At PDR there are permeable sands extending to a depth of at least 500 feet. Accordingly, it is critical that the cement shoes on the active and abandoned wells at PDR be evaluated for integrity using the shallow water observation wells design procedure developed by SOCALGAS. In particular, Rick Lorio of SOCALGAS, in Exhibit 1, warns that if the surface casing or shoe cement is not competent "gas will spread over large area as it rises to surface lethargically."

More importantly, is the high pressure gas that has been extensively measured by third parties in the "50 Foot Gravel," which is a shallow sand and gravel aquifer that overlies the legal boundaries that SOCALGAS claims to have the contractual legal authority to store gas as close to the surface as 500 feet. However, SOCALGAS has consistently denied any legal responsibility over this pressurized gas, and has failed to monitor or collect these gases at PDR in their efforts to shirk their responsibility for the leaking gases.

In a document prepared by the Consumer Protection and Safety Division of the California Public Utilities Commission, dated August 20, 2002 and revised on November 18, 2004 titled, "Complaint Case Facts and Findings (Playa Del Rey Storage Field)" the following facts and findings were set forth:

- Three Types of Natural Gas in PDR:

  "There is evidence of surface detection of three types of natural gas in PDR, namely: Biogenic gas, Native PDR Thermogenic gas and Storage Reservoir Thermogenic gas."

- 133 PPM Helium from Bar-Hole Samples near Big Ben Well:

"SoCalGas internal office memorandum, dated November 20, 1991 revealed that gas samples collected from bar-holes around Big Ben Well contained 30,000 PPM to 620,000 PPM natural gas and these samples contained 133 PPM to 188 PPM Helium. A close examination of the memo reveled that three samples were collected on 1/11/91, at bar-holes #12, 13 & 14. Isotopic analysis of these samples indicated with high probability the signature of Storage Reservoir gas (meaning that the gas migrated from Storage Reservoir). In addition, the memo did not indicate any more sampling at these bar-holes or subsequent remedial action. On 8/23/91 and subsequent dates, samples were collected from bar-hole H instead of bar-holes 12, 13 & 14. The isotopic analyses of the new samples did not reveal the storage gas signature and subsequent discussion on the memo ignored the initial sample data, its significance and if there was any remedial action."

- 22 PPM Helium from a Shallow Probe Sample by John Sepich and Associates:

"Isotech Laboratory performed an isotopic analysis of a gas sample submitted by Sepich & Associates on 3/25/99. Sepich and Associates was working for Playa Vista developers (developers of residential and business properties around the PDR Storage field. The isotopic analysis report indicates the gas sample was collected from Playa Vista Project Area-D. The analysis report also revealed presence of Ethane and 22 PPM Helium in the gas sample. The significance of this isotopic analysis report is the presence Storage Reservoir gas or Native PDR gas signature and the location where the gas sample was collected (Area-D of Playa Vista Project). My opinion is that the probability of Storage Reservoir gas sample from PDR area containing Ethane and 22 PPM Helium is greater than 50 percent (>50%). Furthermore, the location where the sample was collected should be of major concern" (emphasis added).

- 100 PPM-1000 PPM Helium from Groundwater Samples Collected and Analyzed by Exploration Technologies, Inc. (ETI):

"City of Los Angeles Building and Safety Department retained ETI to conduct test, analyze and provide advice on Playa Vista project. Groundwater samples were

collected in 2000 from Playa Vista Project Area, and dissolved gases were extracted and analyzed by ETI in addition to other scientific sampling and testing. Several groundwater samples revealed presence of high Helium concentrations and Methane dissolved in the groundwater. The origin of this Helium in the groundwater is not clear. However, some people have postulated that the groundwater absorbs or strips the Helium from the Storage Reservoir gas or Native PDR gas as it migrates through the aquifer to the ground surface. Hence, Thermogenic gas is detected in soil-gas without Helium. Although this postulation seems plausible, I have not seen any scientific paper on this absorption theory and the kinetics."

- Dr. Victor Jones of ETI detected Thermogenic gas components at the Surface and detected H2S in Soil Gas during his investigation in 2000:

"ETI conducted an extensive soil gas investigation in Playa Vista area for the City of Los Angeles in 2000. The isotopic analysis report of the samples collected revealed presence of Methane, Ethane, Helium, H2S, Toluene and other volatile organic compounds (voc). The presence of numerous Thermogenic gas components in the shallow soil gas samples analyzed indicates a deeper source for this gas."

- Previous Reservoir Inventory Verification Analysis by SCG indicated gas migration loss (8/22/80):

"A Reservoir Inventory Verification Analysis conducted by Theodoros Georgakopoulos on August 22, 1980 for SoCalGas indicated gas migration loss. The migration pathways to the Townsite area (separate geologic zone) is unknown. The report estimated storage reservoir gas loss between January 1961 and December 1979 to be 0.10 B.c.f. Subsequent reports estimated the gas loss to have decreased."

- Presence of Methane gas around Troxel Well:

"As part of Energy Division (ED) initial preliminary investigation, ED retained MHA, who subcontracted Giroux & Associates to conduct site investigations at the Troxel and Lor Mar well site locations in 2001. These recent studies found very high methane concentrations

(greater than 50,000 ppm) at the Troxel site and low methane concentrations (1 to 6 ppm) at the Lor Mar site" (emphasis added).

Investigation reports, including reports prepared on behalf of SOCALGAS, reveal the common occurrence of gas leaking to the surface at the location of the surface casing. Namely, leaking from the annular space, and volume, existing between the surface casing and the primary oilwell casing. This is especially true for the many abandoned wells that were found to be leaking gas to the surface, and required reabandonment. These include wells Troxel, Townsite 2, Block 11 and others. This would reveal the urgent need to carefully evaluate the shoe leak and cement conditions at each of the abandoned wells within the PDR field, using the procedures previously described herein, as developed by SOCALGAS.

Regarding operational wells, SOCALGAS has been monitoring the surface casing volumes for gas pressures, rate of pressure build-up, gas constituents – including Helium, and other leakage conditions for many years. These data are very important regarding identifying the manner in which gas is migrating up the wellbores, and entering the aquifer zones at the shoe leak locations.

The above report by the Consumer Protection and Safety Division of the PUC has not included these important field measurement data gathered by SOCALGAS over many years. It is important to note that these data, including Helium counts, have been used by SOCALGAS to determine the extent of storage gas leakage into the geologically connected permeable reservoirs that surround the PDR "primary" gas storage area.

This migration of storage gas into the surrounding geologically connected reservoirs has been continuously ongoing since the primary storage reservoir pressure was raised above 750 pounds per square inch, beginning in the early 1940's. This storage gas has commingled with

the billions of cubic feet of native gas that has existed within PDR oilfield, before its conversion to an underground storage facility.

For the foregoing reasons, the gas samples that have been collected from the oilwell surface casings, from surface seeps, and from dissolved and free gases in the 50 Foot Gravel zone, contain a mixture of storage gas (including Helium), Native gas, and Carcinogens that are carried to the surface by the upward migrating gases.

It is important to note that the surface casings, and the gas pressure build-up therein are routinely vented to the atmosphere in accordance with the "Solutions" recommended by Rick Lorio, in the report discussed above. Namely these included (emphasis added):

> "Vent to atmosphere all gas coming from surface casing shoe aquifer,"

Accordingly, this intentional venting of gas to the atmosphere – in which the gas has been confirmed to contain carcinogens – is of great concern. Many of these wells are located in close proximity to homes and apartments in the PDR area, and such venting presents a serious health hazard.

C. SOCALGAS HAS CATEGORICALLY DENIED ANY VERTICAL GAS MIGRATION AT PDR, CLAIMING THAT THE FIELD ACTS AS A CLOSED CONTAINER, AND DENIES ANY RESPONSIBILITY FOR THE FOREGOING DESCRIBED CONDITIONS:

The first attempt that SOCALGAS made to deny responsibility was to hire Dr. Kaplan, a geochemist, to evaluate the surface gas seeps for chemical composition. His results in the 1992 and 1993 time period were proclaimed by SOCALGAS, including in the newspapers, to prove that the surface gas seeps at PDR were biogenic gas (commonly described as swamp

gas). These findings were later totally discredited by the soil gas investigations carried out by Exploration Technologies, Inc. (ETI) of Houston, Texas on behalf of the City of Los Angeles.

As summarized above by the Consumer Protection and Safety Division, of the California Public Utilities Commission, the surface seeps were determined to be thermogenic in gas composition, and originating from a deep source (viz., not swamp gas). Furthermore, the so-called John Sepich probe – that extended to a depth of 20 feet, for the first time – revealed significant levels of helium in the seeping gases (viz., 22 ppm helium from his 20-foot deep soil gas probe).

A much more detailed analysis of the seeping gases was performed by Victor Jones of ETI, in which his findings are summarized above in the identified Consumer Protection and Safety Division report. His gas samples were collected using, for the first time, much deeper soil gas probes that extended into the "50 Foot Gravel," with samples collected from depths exceeding 50 feet.

Water samples were also collected from these much deeper sampling depths, and analyzed for the dissolved gas chemical compositions. These samples further confirmed the thermogenic character of the seeping gases, in that they contained methane, ethane, helium, H2S, toluene (a carcinogen) and other volatile organic compounds (VOC's) consisting of propane, butane and xylenes. These gases are especially characteristic of thermogenic oilfield gas. These compositions are also typical of those gases leaking from the abandoned wellheads, that have required reabandonment throughout the PDR field.

Most noteworthy of the deep soil gas samples (viz., below 50 feet) collected by Victor Jones of ETI were the very high helium count levels of between 100 ppm and 1000 ppm, as reported in the Consumer Protection and Safety Division.

A further attempt was made by SOCALGAS to conceal the true dangers of the leaking abandoned wells by claiming that the wellhead leaks were biogenic gas, and not having anything to do with their storage operations. However, the true chemical analysis of the leaking cases contained methane, ethane, propane, butane and other higher order hydrocarbons, entirely consistent with thermogenic gas, that was leaking from a deep source.

Furthermore, senior technical personnel from SOCALGAS have proclaimed before City of Los Angeles hearings on the PDR field, that there is no vertical gas migration out of the field, and the storage reservoir acts as a closed container. It is important to note that the PDR facility operates under a Conditional Use Permit ("CUP") issued by the City of Los Angeles. An important condition of this CUP is as follows:

> "That the underground gas pressure shall be kept sufficiently low so that there will be no escape of gases into the air above the ground."

All of the above described factual issues relate directly to the "Scoping Memo" dated March 7, 2005 which stated the issues that are in controversy regarding the subject adversary proceeding:

> "If the SoCalGas Playa Del Rey gas storage facility is venting or leaking gas or depositing carcinogens into the air or soil to the detriment of the health or safety of the neighboring community" (emphasis added).

The above factual framework is essential in identifying the legal duties imposed upon SOCALGAS as a consequence of undertaking a gas storage operation in the partially depleted oilfield of Playa Del Rey.

D. SOCALGAS HAS THE DUTY TO MONITOR AND PROTECT AGAINST THE GAS MIGRATION HAZARDS AT THE PDR FACILITY BECAUSE THEY UNDERTOOK TO OPERATE A GAS STORAGE FACILITY IN A PARTIALLY DEPLETED OILFIELD, CONTAINING MANY PREVIOUSLY DRILLED WELLS; CREATING A KNOWN DANGEROUS CONDITION:

The controlling principle of law imposed upon SOCALGAS regarding the PDR facility is set forth in Restatement Second of Torts Section 321:

> §321. Duty to Act When Prior Conduct is Found to be Dangerous
>
> (1) If the actor does an act, and subsequently realizes or should realize that it has created an unreasonable risk of causing physical harm to another, he is under a duty to exercise reasonable care to prevent the risk from taking effect.
>
> (2) The rule stated in Subsection (1) applies even though at the time of the act the actor has no reason to believe that it will involve such a risk.

Within the meaning of "actor" regarding the PDR facility would be the "act" of undertaking a gas storage operation in the partially depleted Playa Del Rey oilfield by SOCALGAS.

SOCALGAS subsequently realized, or should have realized, that the many old oilwells drilled into Playa Del Rey oilfield – before they began their operations – would serve as conduits for both storage gas and native oilfield gas to escape and migrate to the surface.

There was a duty imposed to exercise reasonable care to prevent the risk from taking effect. In fact, SOCALGAS developed written policies and procedures (viz., as described above) to monitor and mitigate against the risks created by the upward migration of gases into shallow zones. However, these policies and procedures were not implemented at the PDR

facility. They are believed to have been implemented at other underground gas storage facilities operated by SOCALGAS, at least in part.

Accordingly, the appropriate standard of care to be employed at the PDR facility is established by these written policies and procedures. In summary, these include:

1. Monitoring of both Company wells and wells owned by others in overlying and underlying zones and in other fields within two miles of the storage reservoir boundary.
2. Drill shallow water observation wells into the aquifer zones existing in the permeable sand zones above the shoe of the surface casing.
3. Locate pressure observation wells in overlying and underlying permeable formations, or adjacent to the boundaries, such as faults, permeability pinchouts, below the gas-liquid contact or beyond the spill point of the storage zone's confining structure.
4. Install artificial lift mechanisms for removal of gas and fluids, within the above described offending areas.

For the foregoing reasons, it is essential to establish the legal boundaries of the true extent of the storage reservoir. SOCALGAS claims to have storage rights provided presumably by the relevant documents on file with the Los Angeles County Recorder's Office. These documents need to be carefully identified, primarily to establish the true "legal" boundaries of the PDR facility.

The established boundaries of the PDR facility would then allow determining the monitoring program needed within "two miles of the storage reservoir boundary," as described in paragraph (1) above.

In summary, the PDR facility must conform to an appropriate standard of care, commensurate with the extreme hazards posed by storing billions of cubic feet of flammable and explosive gas under a highly urbanized residential community. This extreme hazard is exacerbated by the hundreds of old oilwells that were drilled into the Playa Del Rey oilfield, many years before the gas storage operations began, thereby severely compromising the rock formations sealing capacity.

Furthermore, it is a well known characteristic of all gas storage fields that the gas leakage losses are directly proportional to the reservoir pressure. The Babson and Sheppard Report, discussed above, identified this hazard in the following way:

> "The Gas Company's storage project tends to emphasize this potential for upward migration because of the high pressures necessary for its operation."

SOCALGAS studies have confirmed that the primary storage area of the PDR field begins to leak when the reservoir is pressurized above 750 pounds per square inch. In contrast, the primary storage reservoir pressure frequently reaches 1700 pounds per square inch, more than double the pressure that precipitates the gas leakage

E. SOCALGAS IS RESPONSIBLE FOR THE LEAKING GAS CONDITIONS AT PLAYA DEL REY BECAUSE THEY EXERCISED EXCLUSIVE CONTROL OVER THE OLD OILWELLS, AND THE DANGEROUS CONDITIONS CREATED BY THEIR DETERIORATED CONDITIONS:

SOCALGAS acquired exclusive control over hundreds of old oilwells that had been drilled, and many of them abandoned, prior to SOCALGAS undertaking gas storage operations

in the PDR field. As previously discussed, the Rick Lorio Report itemized the central defects in these old wells, including:

1. All wells have some uncemented segments. Few wells have any cement above 2000 feet. . . . but most remain the most permeable upward path for gas migration.

2. Casing shoe leaks due to poor deteriorated cement or to leakage through water shut-off holes in active or abandoned wells.

3. Surface casing and surface casing shoe cement (viz., at a typical depth of 700 feet) are not competent. Gas will build up inside surface casing and force its way into shallow aquifer sand.

4. Gas will surface at a non-leaking well, including at wells where the surface casing or shoe cement is not competent. Gas will spread over large area as it rises to surface lethargically.

Surface casing leaks, especially in old abandoned wells, have been documented repeatedly at PDR over many years. The issues raised in paragraph 4, above, are especially important regarding the degree of care and soil gas monitoring necessary to identify which of the old wells are truly leaking. Namely, gas will surface at a non-leaking well. Accordingly, even if the well is reabandoned at the location where the gas is surfacing, this will not cure the leaking well problems.

This problem is especially serious at PDR because of the very extensive sand and gravel permeable zone that was laid down over geologic time by the original river channel flow of the Los Angeles River. This shallow, highly permeable zone, is commonly known as the "50 Foot Gravel." However, other permeable zones exist extending to a depth of approximately 600 feet.

In fact, the surface casing depth requirements (viz., typically 700 feet) are dictated by State of California law, mandating that the surface casing be protective of the fresh water zones

overlying the oilfield. Namely, the very conditions described in the Rick Lorio Report identify violations of State Law:

> "Gas will build up inside surface casing and force its way into shallow aquifer sand."

In short, the sealing integrity of the old surface casings, especially including the cement shoe at a typical depth of 700 feet, is pivotal regarding the operations and maintenance of the PDR field.

Historical drilling records reveal serious problems with achieving a competent cement seal when the surface casing was being cemented to the surrounding rock formation. This was especially serious for the Townlot Wells that were closer to the Pacific Ocean beach. The drill hole would often collapse during the drilling operation, preventing a proper cement squeeze at the shoe location of the surface casing.

Furthermore, saltwater intrusion from the nearby Pacific Ocean is also highly corrosive to the steel surface casing, and is known to cause significant deterioration of the concrete shoe materials.

These wells were drilled in the 1920's and 1930's, as identified herein in Exhibit 2. Certainly, when they were drilled in this early time period, there was no contemplation that the oilfield would ever be used for storing high pressure. The technology for storing natural gas in a partially depleted oilfield had not yet been invented in the 1920's/1930's. Also, the technology for performing well completions and cementing operations were still within their infancy.

The history of the oilwell acquisitions by SOCALGAS at PDR were largely dictated by the large volumes of storage gas that were leaking out of the primary storage area. Once the

storage pressure was raised above 750 pounds per square inch, storage gas began leaking into oilwells operated by Union Oil Company. Initially, Union Oil Company and SOCALGAS entered into an agreement regarding how much SOCALGAS would pay Union Oil Company for the return of the lost gas, plus any additional native gas produced by Union Oil from their wells. Eventually, all right title and interest to these wells were conveyed to SOCALGAS, with legal title conveyed pursuant to documents on file with the Los Angeles County Recorder's Office.

It was also discovered by SOCALGAS that storage gas was leaking into the area known as the Townlot Wells, and migrating as far north as the Troxel well location. For this reason, SOCALGAS acquired all legal interests to these wells, as documented in records on file with the Los Angeles County Recorder's Office.

For the foregoing reasons, SOCALGAS has a direct legal ownership interest in these wells. The mere abandonment of these wells does not extinguish the responsibility of SOCALGAS over the proper monitoring and the maintaining of these wells in a safe condition.

The basic public policy of California is that every person is responsible for an injury, to property or person, caused by his or her lack of ordinary care or skill in the management of his or her property. See Civil Code Section 1714(a), and the numerous Appellate and Supreme Court decisions that have interpreted its application to ownership interests, such as are involved herein.

It is important to recognize that the surface casings of the abandoned wells extend into the surface rights area located above 500 feet. Rick Lorio points out in his report, as discussed above, the gas migration hazards created by this condition:

1. Because the casing stub is cut off within 100 feet of the surface, the entire surface casing fills with gas.

2. The gas leak unloads fluid from the well and the rate increases with time.

3. Eventually all of the fluid unloads and the leak rate stabilizes at a near constant daily rate.

These facts establish that there is an ongoing trespass to the surface property ownership interests, especially since the gas is leaking at a depth of approximately 100 feet. Furthermore, as described by Rick Lorio, the gas will spread over large areas as it rises to the surface lethargically. Accordingly, there are violations of trespass laws on adjoining surface properties as well.

These violations would also constitute nuisance because of the explosive and carcinogenic character of the migrating gases.

The Public Utility Code mandates by statute that all utility property be maintained in a safe condition. Accordingly, the legal ownership of the above-described wells by SOCALGAS imposes an obligation upon them to properly monitor and mitigate the hazards associated with these wells, as described above.

Furthermore, there is a need to provide proper warning to the surface owners regarding the need to take preventative measures to protect themselves and their property from the above-described leaking gases.

II. THE QUESTION BEING SUBMITTED TO THE COMMISSION, WHICH WAS "FRAMED" BY SOCALGAS, MAKES NO LOGICAL OR LEGAL SENSE IN THE CONTEXT OF THE TRUE FACTUAL ISSUES, AS SET FORTH ABOVE:

A. THE LEGAL ARGUMENTS ADVANCED BY SOCALGAS ARE MISPLACED, AND LACK FOUNDATION:

The specific question that has been "framed" by SOCALGAS, and not agreed to in that context by Grassroots Coalition, for submittal to the Commission by briefs is as follows:

> "Does SOCALGAS have responsibility for any non? storage and non? pipeline gas that migrates through an area where SOCALGAS owns the mineral rights but does not use SOCALGAS? active or abandoned wells as a conduit to migrate to the surface or from one underground reservoir or zone to another?"

Even if any scientific or legal sense can be made of this convoluted description, it still is objectionable because it lacks foundation regarding the issues relevant to this adversary proceeding.

As previously stated, the "Scoping Memo" identifies the relevant issues as follows:

> "If the SoCalGas Playa Del Rey gas storage facility is venting or leaking gas or depositing carcinogens into the air or soil to the detriment of the health or safety of the neighboring community" (emphasis added).

Section I. of this report has addressed the factual foundation upon which this Scoping Memo addresses. The question posed above, as framed by SOCALGAS, goes far afield of this Scoping Memo by creating its own technical jargon.

First of all, it is not possible to scientifically define the term "non storage gas," and SOCALGAS has made no attempt to define this term. Fundamentally, when the natural gas is injected into the partially depleted PDR oilfield by SOCALGAS under extremely high pressures, this gas commingles with the native oilfield gases existing in the reservoir. Furthermore, these high-pressure conditions cause the commingled gases to migrate into numerous geologically connected oilfield reservoirs that contain even larger quantities of native gases. This multiple commingling constitutes the gases that become available to migrate up the old well bores and faults, as described in the SOCALGAS Rick Lorio report detailed above. This would also be the nature of the venting or leaking gases set forth in the Scoping Memo.

Secondly, even if there were so-called "non storage" and/or "non pipeline" gas migrating through the mineral rights territory of SOCALGAS, this gas would become commingled with the storage gas and the native gases, already commingled in mineral rights territories of SOCALGAS. In short, once the hypothetical gas migration occurred, it would automatically lose whatever unique identity it was presumed to have.

SOCALGAS has failed to give any clue as to how this identity is to be carried out scientifically.

Thirdly, the issue as framed by SOCALGAS, expressly excludes a determination by the Commission of responsibility for gas that migrates and uses SOCALGAS active or abandoned wells. As set forth in Part I. of this report, the central gas migration hazards at the PDR facility are the active or abandoned wells serving as conduits for the commingled gases to reach the surface, and into the near-surface permeable zones, including freshwater aquifers.

Accordingly, any determination of the responsibility issues, as framed by SOCALGAS, would be meaningless within the context of the Scoping Memo.

B. SOCALGAS HAS MISUNDERSTOOD THE STANDARD OF CARE IMPOSED UPON THEIR UNDERGROUND GAS STORAGE OPERATIONS AT THE PDR FACILITY:

The fundamental premise of responsibilities imposed by negligence law, is the duty to act reasonably under the circumstances. This is established by determining the standard of care required. Conduct falling below this standard of care, can be found to be negligent conduct. The appropriate responsibilities, under the instant set of facts, are established by this standard of care.

Accordingly, it is meaningless herein to focus upon the single issue of mineral rights and/or storage. Although these become one aspect of the overall issues, they, in themselves,

misdirect attention away from the central issues identified in the Scoping Memo. The totality of contractual documents, and their specific languages need to be evaluated.

The Conditional Use Permit issued by the City of Los Angeles, and the contractual obligations imposed upon SOCALGAS regarding the prohibition of operating the gas storage facility at pressures that would cause gases to leak into the air, must be considered in establishing SOCALGAS responsibilities.

Various California Administrative Codes prohibit the leakage of gas from surface casings into adjoining permeable aquifers, and must be considered in determining SOCALGAS responsibilities. Violations of the Regulations could be deemed negligence per se under a negligence standard of care legal responsibility analysis.

SOCALGAS has ignored these central issues in their legal analysis. In addition, they have ignored any legal issues related to strict liability. An entire body of law exists related to operating an abnormally dangerous activity, in which responsibility, or legal liability is imposed irrespective of the degree of care that is used in carrying out the operation. Namely, liability can be imposed even if SOCALGAS was able to show that they operated the PDR facility with utmost care.

The test to be used for determining if the PDR facility constitutes an abnormally dangerous activity is set forth in Restatement Second of Torts § 520:

> In determining whether an activity is abnormally dangerous, the following factors are to be considered:
>
> (a) existence of a high degree of risk of some harm to the person, land or chattels of others;
>
> (b) likelihood that the harm that results from it will be great;
>
> (c) inability to eliminate the risk by the exercise of reasonable care;

(d) extent to which the activity is not a matter of common usage;

(e) inappropriateness of the activity to the place where it is carried on; and

(f) extent to which its value to the community is outweighed by its dangerous attributes.

Central to this evaluation are items (d) and (e). Regarding (d), the extent to which the activity of storing gas under high pressure in a partially depleted oilfield, in an urban setting, is certainly an activity that is not a matter of common usage. Regarding (e), the above-described activity is certainly an inappropriate activity to be carried out in a high-density residential location.

Regarding item (c), the "inability to eliminate the risk by the exercise of reasonable care," is pivotal and central to this entire adversary proceeding, SOCALGAS has attempted to frame the legal issues in a context that would require them to make as few changes as possible to their current practices and procedures. The upshot of this nonaction by SOCALGAS to deal with the true gas migration hazards at the PDR facility would be the strong inference that there is an inability to eliminate the risk by the exercise of reasonable care.

In summary, the nonaction by SOCALGAS to deal with these gas migration hazards – during this adversary proceeding – is tantamount to "inviting" a strict liability level of responsibility upon SOCALGAS.

CONCLUSIONS

There is a paramount need for SOCALGAS to set forth the specific policies and procedures that will allow proper monitoring and mitigation of the gas migration hazards at the PDR facility.

These policies and procedures should use as a primary framework the "Gas Inventory Monitoring, Verification, and Reporting Procedures" set forth in Exhibit 3 herein. Particular focus should be upon the shallow monitoring wells, and the gas collection wells detailed above in Section I. of this report.

In addition, these policies and procedures should focus on the surface casing leaks, including shoe leaks, that are enumerated in the SOCALGAS Rick Lorio Report, detailed above in Section I. of this report. This needs to include both active and abandoned wells.

Finally, a determination of responsibility by the Commission of the statement of issues as framed by SOCALGAS (see above) would be of no value in resolving the central issues of this Adversary Proceeding, as articulated in the Scoping Memo, as described above. In addition, to the extent that SOCALGAS is requesting the Commission to make a determination of legal ownership interests, including property rights involving the oil and gas mineral rights and/or storage, these property right determinations are under the jurisdiction of the Superior Court.

DATED: February 26, 2007

Respectfully submitted,

By: _____

Patricia McPherson
President, Grassroots Coalition

EXHIBIT 1

THE PLAYA DEL REY

MONITORING PROGRAM

Rick Lorio
Associate Petroleum Engineer
Underground Storage
Southern California Gas Co.
April 25, 1985

TABLE OF CONTENTS

APPENDICES

I. Storage Zone Problems

A. Possible source of gas migration to surface

There are at least five different possible sources of gas to the surface at Playa del Rey:

1. Casing leaks due to tubing/drill pipe wear, corrosion, stage collars, squeeze holes or metal failure.

2. Casing shoe leaks in active and abandoned wells.

3. Leaks from lower to upper zones outside the casing through uncemented or poorly cemented well bore in either active or abandoned wells.

4. Abandonment plug leaks inside the casings of abandoned wells.

5. Wellhead seal leaks.

B. Three incidents of shallow casing leaks at Playa del Rey

Since Playa del Rey was converted to gas storage in 1942 for the war effort, there have been three incidents of shallow casing leaks. Two of these leaks had surface shows of gas and oil: 12-1 and 24-2, respectively.

1. In 1964, a casing leak was reported in Big Ben at about 150'. Repaired leak in 6-5/8" casing with Baash Ross casing bowl to 269'. The leak was determined to be at a depth of 269'.

2. On August 9, 1974, a gas leak was reported in the 13-1 block. The well 12-1 was determined to have a casing leak at between 700 and 800 feet. Bar hole surveys around the well and over the pipelines in the area indicated gas was appearing at the surface. The well was killed on August 15, 1974. From this time on, no gas was injected into the 13-1 block.

3. On April 30, 1975 at about 11:00 a.m., oil and gas surfaced on the east side of cellar wall. The well was producing through a leak in 7" casing at an unknown depth. They found corrosion in the

casing from 108' - 157'. Six weeks later well was returned to service. Currently, this well has an Otis subsurface safety valve located at 92'.

II. Overview of Field

A. Introduction

Playa del Rey oil field is about eleven miles west of Los Angeles, between Venice and Playa del Rey. Wildcatting was carried on in the vicinity of Playa del Rey for over eight years before the field was finally discovered. Drilling activities in the vicinity of Playa del Rey date back to May 14, 1921, at which time Del Rey 1 was spudded. This well was drilled to depth of 2785' without encountering any oil or gas showings, and was abandoned because of mechanical problems.

The first well drilled into the storage zone was on August 2, 1929. The Ohio Oil Company spudded the "Recreation Gun Club" 1. This well was drilled to a depth deeper than 6200'. A poorly sorted conglomerate, showing gas and oil, from 6114 to 6199 was discovered. While preparing to run a "water witch" to determine the nature and point of entry of the fluid, the well suddenly came in December 18, 1929, and flowed through the casing at an estimated rate of 2500 barrels of oil and 1,500,000 cubic feet of gas per day with the oil having an API of 21.6°.

On August 4, 1942, the Commission decided that Playa del Rey appeared feasible for Underground Storage from an engineering and economic standpoint. The goverment decided that Union Oil Company of California was to act as the operating contractor for Defense Plants Corporation, and the Southern California Gas Company as the gas utility to store and withdraw gas. From that time, the storage zone has increased from a field deliverability of approximately 10 MMcf/hr to about 25 MMcf/hr. Currently, Southern California Gas Company has 72 active wells in Playa del Rey.

B. Well Lists

There are 72 active wells in this field. These wells are divided into four groups:

1.	Injection/withdrawal wells Storage wells	28
2.	Flowing wells migration Return	2
3.	Pumping wells:	10
	a. Fluid removal b. Pressure relief	
4.	Observation wells	32

These wells comprise the Playa del Rey storage operation.

C. Storage Areas

There are five distinct areas in the Playa del Rey storage field. Each of these areas has distinct operating functions.

1. 13-1 Fault Block
2. 24-1 Fault Block
3. Del Rey Main Area
4. Del Rey Gas Cap
5. Venice Townlot area

13-1 Fault Block

The 13-1 fault block has not been used for injection/withdrawal operations since 1974 when a shallow leak at well 12-1 brought gas to the surface at nearby houses. This block includes wells 12-1, 13-1, Colly 2, Colly 10, Harper, Hisey, Kelly and Merrill. Should this block be determined feasible to return to operations, other factors need to be considered. All of the wells in this block are in a residential area and will require subsurface safety valves with which they are already equipped. These wells have not been operated for some time; and thus the question is whether or not the neighbors will tolerate the increased noise level required to operate these wells.

The 13-1 fault block is geologically connected but not pressure connected. This block is an upthrown fault block, gas can migrate in, but the block holds pressure indicating that gas accumulates.

24-1 Fault Block

This fault block is used in tandem with the main storage area. It has no other purpose other than to remove fluid from this east flank.

Del Rey Main Area

This is the storage zone area. The operating guidelines are to withdraw from low structure wells first and work towards the higher structures. There are twenty-eight injection/withdrawal wells located in this area.

Del Rey Gas Cap

The wells located in this area of the field are primarily used for observation. Two of these wells are also used for gas migration return Del Rey 15 and Del Rey 18.

Venice Townlot Area

The wells in this area have a dual purpose: pressure relief (fluid removal) and gas migration (observation).

Early in the usage of Playa del Rey as a gas storage reservoir, it was discovered that certain oil productive areas, previously considered to be structurally separate deposits were really pressure connected. The areas in question were the Del Rey Gas Cap, Del Rey Hills Area, Del Rey Main Area and the Venice Townlot area. Parts of this reservoir are apparently geologically connected but not pressure connected.

Block 10R, Block 11, Townsite 2, Townsite 3, Townsite 11 and Troxel are located in this part of the field. Troxel, however, is on the other side of a fault block. Helium tests have indicated storage gas production from this area of the field.

III. Monitoring Program

A. Temperature, Noise and Tracer Surveys

All of the wells at Playa del Rey with the exception of tire pumping wells have temperature surveys are run on a quarterly basis. These surveys provide the information needed to determine well leaks. When a well leaks, the expanding gas from the leak cools both the pipe and surrounding formation. On a temperature survey, the leak appears as a cooling anomaly on a temperature survey.

Gas storage technicians run temperature surveys quarterly using company-owned wireline units. If a cooling anomaly appears on the temperature survey, a noise survey is run to verify the leak. If indicated, a radioaoctive tracer survey (R/A) is run which pinpoints the exact location of the leak and provides data necessary to estimate the rate of gas loss. During the 1st five years, only two R/A tracer surveys were run. They were on Big Ben and 12-1. Big Ben had a casing leak at 1065', and well 12-1 had a leak between 168' and 230'.

B. Surface Observation

All active well cellar areas are inspected each month for indications of near surface gas migration by station personnel. Any bubbles are analyzed for hydrocarbon and helium content. The resident reservoir engineer requests the analysis, and reviews and maintains records of the results. If storage gas is forced, the senior petroleum engineer is notified.

Once a month at Playa del Rey, the station personnel survey the four permanent bar holes that are near all active wells with a gas scope or flame ionization unit.

Twice a year, the station surveys the bar holes in the vicinity of abandoned wells with the flame ionization unit to detect any near surface gas migration under the direction of the South Basin Pipeline Superintendent.

Once a year, all storage field pipelines are surveyed using the flame ionization unit to detect any near surface gas migration.

C. Storage Zone

1. Surface pressures in each well are measured and recorded weekly using a calibrated test gauge. The data recorded for each well are:

   Tubing pressure
   Casing pressure
   Annuli pressure
   Safety valve control-line pressure
   Mode of operation

2. A plot of weekly surface casing and innerstring annuli pressures versus time is maintained for each well.

3. Wellhead inspections are performed once a month.

4. Subsurface temperature survey are performed on a quarterly basis.

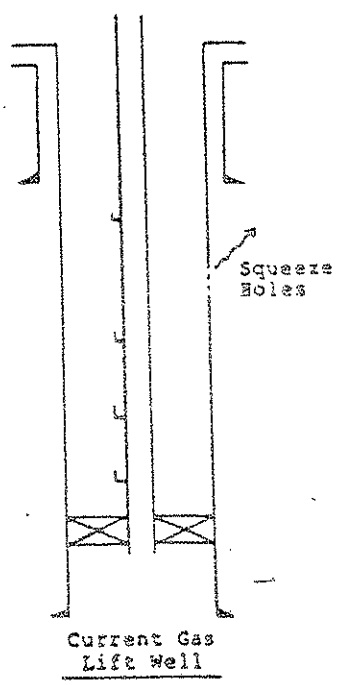
D. Gas Cap Observation Well

Vidor 6 is Playa del Rey's GCOW used to observe gas bubble pressures. This well is not used for injection and is used for withdrawal only for peak load conditions. The surface pressure measurements on the tubing and casing of Vidor 6 is recorded and plotted daily.

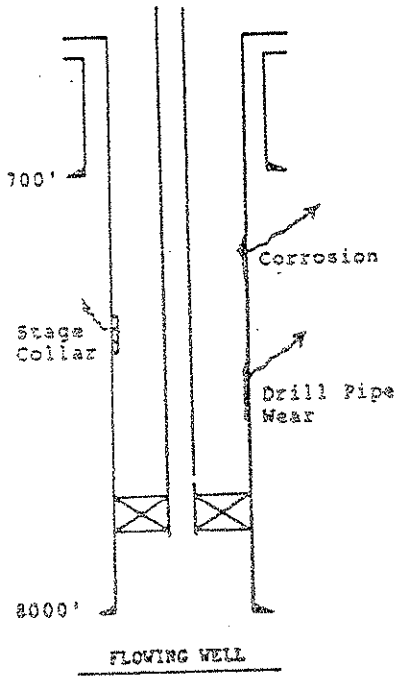
RMM:mm
April 25, 1985

EXHIBIT I

CASING LEAKS: TYPE 1



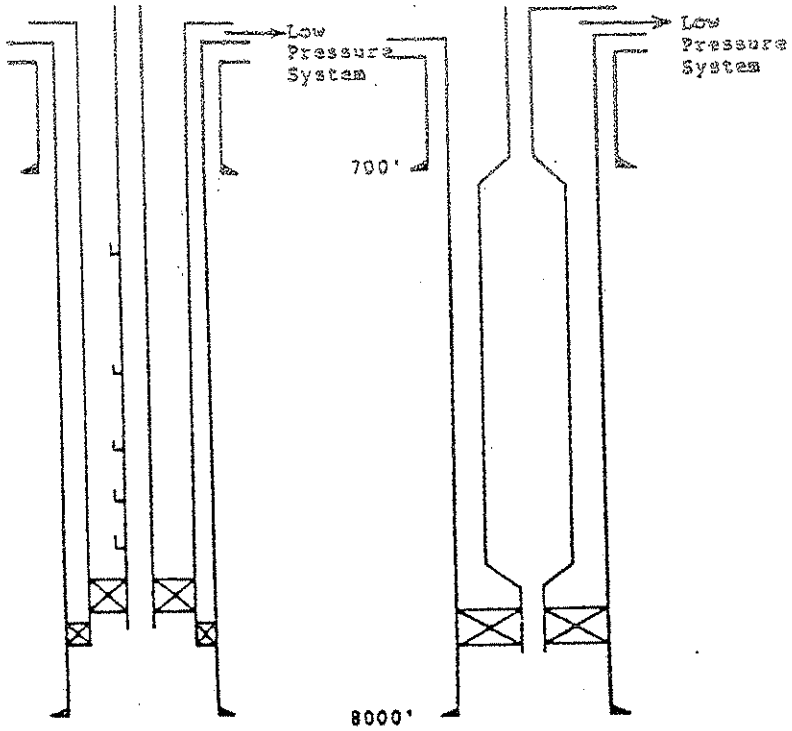
Current Gas Lift Well



FLOWING WELL

PROBLEM:

Casing leaks that allow high pressure gas into low pressure, shallow zones.



PROPOSED

SOLUTION:

Use innerstrings and/or tubing to confine all high gas pressure. Keep innerstring or tubing annulus pressure lower than that required to force gas into acquifer sand at shoe of surface casing by venting gas to atmosphere or to low pressure system. Withdrawal wells' deliverability can be kept high by using large tubing.

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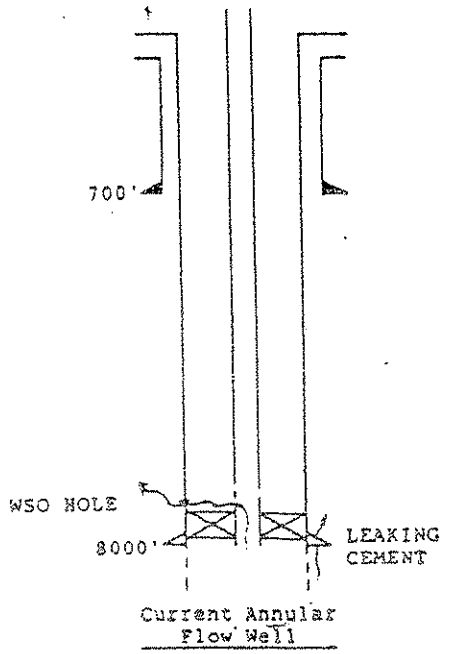
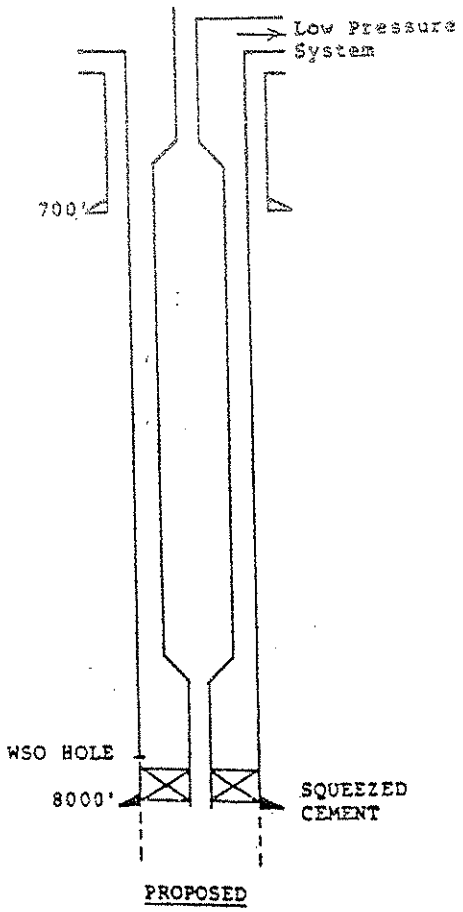
EXHIBIT I

CASING SHOE LEAKS: TYPE 2



PROBLEM:
Casing shoe leaks due to poor, deteriorated cement or to leakage through WSO holes in active or abandoned wells.



SOLUTION, ACTIVE WELLS:
Squeeze cement into shoe area. Place tubing packer below WSO holes where possible.

ALTERNATE SOLUTION, ACTIVE WELLS:
Do not repair if leak is into 7th zone but no higher. Collect all free gas from the 7th zone by activating more collection wells.

SOLUTION, ABANDONED WELLS:
Collect all free gas from overlying zones. Repair work not possible.

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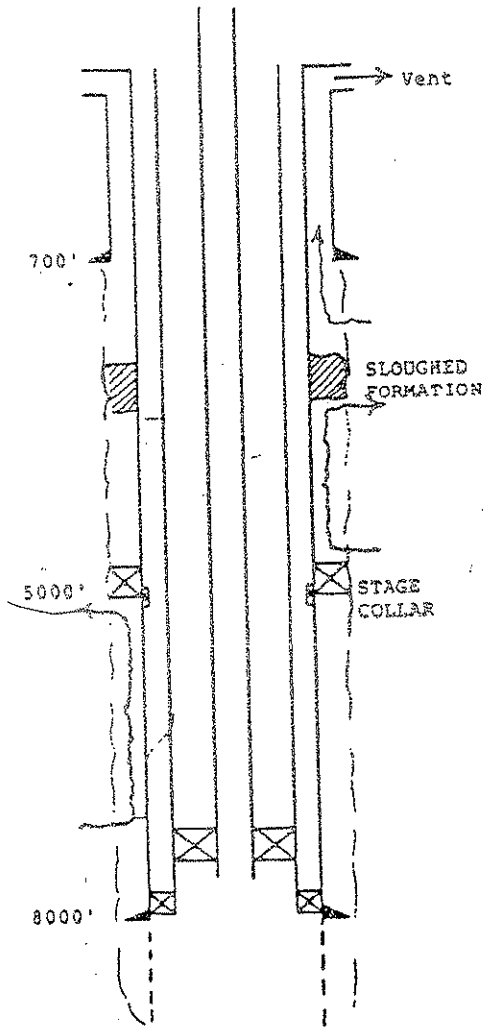
EXHIBIT I

UNCEMENTED WELLBORE LEAKS: TYPE 3



CURRENT AND FUTURE WELL

PROBLEM:
All wells have some uncemented segments. Few wells have any cement above 2000'. Formation sloughing may have filled in some of these wellbores but most remain the most permeable upward path for gas migration.

SOLUTION:
Noise and TDT monitor active wells to find areas of increasing activity. Continually produce shallow zones. Vent to atmosphere all gas coming from surface casing shoe aquifer.

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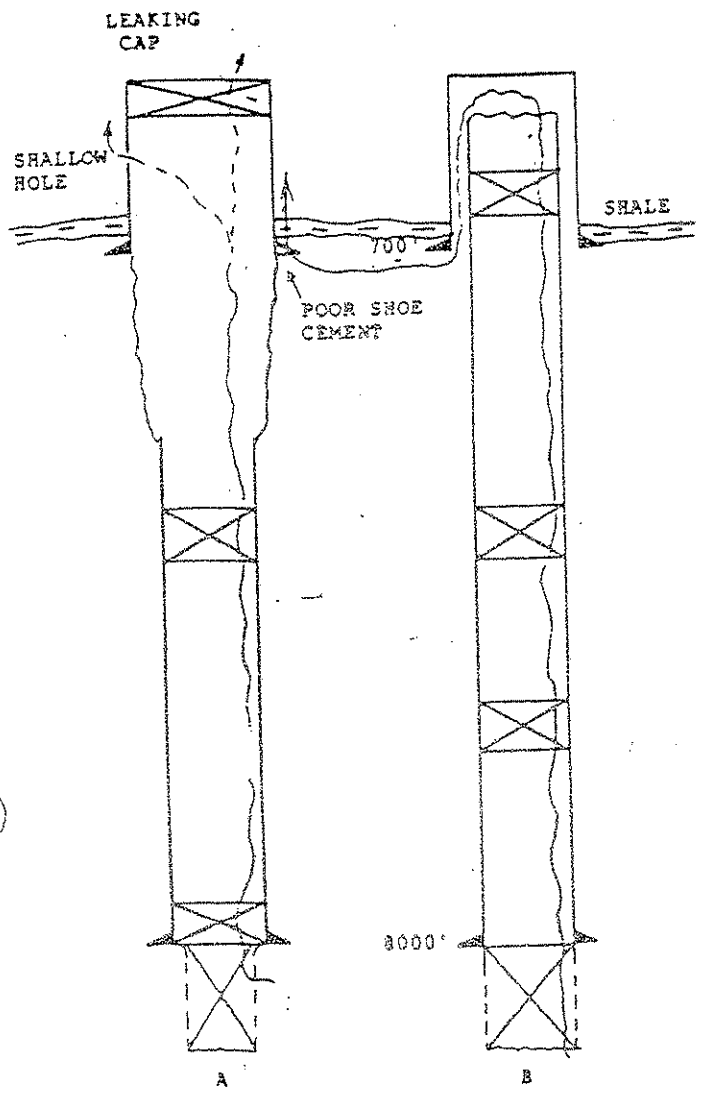
EXHIBIT I

ABANDONMENT PLUG LEAKS: TYPE 4



EXISTING ABANDONED WELL TYPES

PROBLEM, TYPE A ABANDONMENT:
Cement plugs inside casing allow some gas to migrate upwards. Because its casing was cut off below the surface string, water will continue to fill casing as gas leaks out. Leak will therefore be sporadic and low rate.

PROBLEM, TYPE B ABANDONMENT:
Cement plugs inside casing allow some gas to migrate upwards. Because the casing stub is cut off within 100' of surface, the entire surface casing fills with gas. No liquid enters the well. The gas leak unloads fluid from the well and the rate increases with time. Eventually all of the fluid unloads and the leak rate stabilizes at a near constant daily rate.

PROBLEMS, BOTH TYPE ABANDONMENTS:

1. Casing cap, surface casing and casing shoe cement competent. Gas will build up inside surface casing and force its way into shallow aquifer sand. Gas will surface at a non-leaking well that has the following problems.
3. Casing cap not competent. Gas will surface near well.
3. Surface casing or shoe cement not competent. Gas will spread over large area as it rises to surface lethargically.

SOLUTION, PROBLEM 1:
Direct repair of leaking well not possible because source well is unknown. Other wells where gas appears are continually vented to surface.

SOLUTION, PROBLEM 2:
Unearth well and recap or place collection funnel over it. Rig work not required. Vent all gas to atmosphere.

SOLUTION, PROBLEM 3:
Unearth well, move in rig, attempt to enter and repair old casing. Produce gas through casing into low pressure system. Vent surface annulus to atmosphere.

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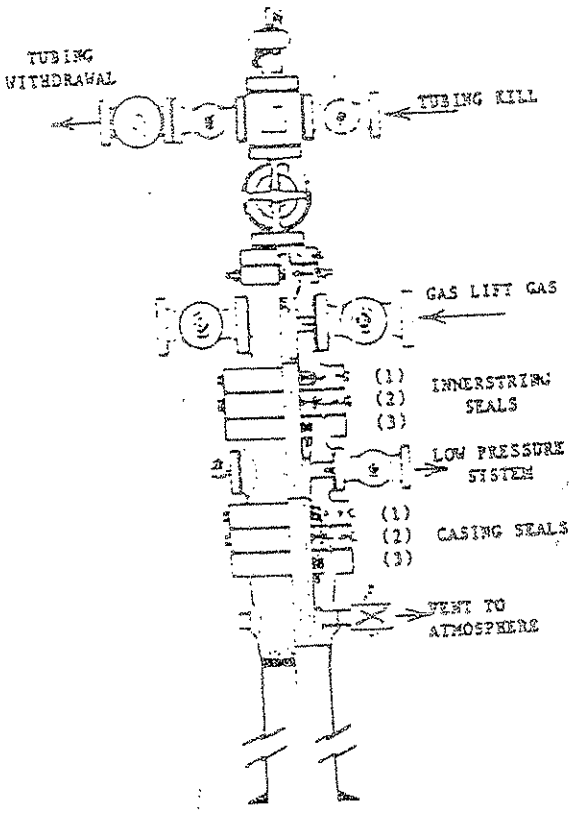
EXHIBIT I

WELLHEAD LEAKS: TYPE 5



CURRENT AND PROPOSED WELLHEAD FOR WELLS WITH INNERSTRINGS

PROBLEM:
Wellhead seal leaks allow high pressure gas to leak into the innerstring, tubing or surface casing annulus. Gas then enters shallow zones at the surface casing shoe or through casing holes.

SOLUTION:
Keep all annular pressures below that required to force gas into shallow zones either by connecting them to low pressure system or venting them to atmosphere. Install new wellheads with triple seals (as illustrated) on wells with obsolete equipment when other well work is performing or when wellhead is leaking badly.

(1) Inject sealant to energize seal in head

(2) Inject sealant to energize seal in sealing flange

(3) Set down weight on slips to energize seal

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EXHIBIT 3

APPENDIX A

GAS INVENTORY MONITORING, VERIFICATION, AND REPORTING PROCEDURES

I. GENERAL

Gas Storage Operations require monitoring and inventory verification for safe long-term management of underground gas storage operations. While no single method can be used to precisely monitor and verify the gas inventory in underground storage reservoirs, the three engineering methods in general use are summarized below. Gas volume verification can be obtained only by combining and analyzing available field data. Based on this analysis, gas volume changes or losses are recognized, estimated and reported.

II. DEFINITIONS

When gas storage operations are initiated in an oil or gas reservoir, there is an initial gas content in the reservoir prior to injection. Initial gas content is generally composed of both free gas and solution gas. Additional gas is added to the initial gas content by injection, and the combination comprises the Total Storage Volume. This volume is categorized as follows:

A. Cushion Gas

The base gas is that quantity of gas which must be in the reservoir to maintain the minimum pressure required to exclude fluids from the gas cap and to provide the energy required to deliver the minimum required rate of gas withdrawal at the end of the withdrawal season.

B. Recoverable Cushion Gas

This is defined as the volume of gas that can be economically recovered from the reservoir below the base gas pressure. This volume varies, depending upon economic conditions.

C. Non-Recoverable "Cushion Gas"

This is the volume of gas left in the reservoir after all recoverable gas volumes are removed and is not considered a part of Total Storage Inventory. This gas is capitalized and depreciated over the life of the project.

D. Working Gas

This volume is defined as the gas content which is held in the reservoir between maximum reservoir pressure and the base gas pressure.

E. Effective Working Gas

This volume is defined as the working gas which is withdrawn and re-injected in a complete injection and withdrawal cycle. Ideally, the effective working gas volume is synonymous with the working gas volume. However, limitations by wells, compression facilities, or gas availability may limit effective working gas volume.

F. Total Storage Inventory

This is the sum of all working and recoverable cushion gas volumes.

III. RESPONSIBILITY

The responsibilities for shut-ins, along with analyzing data, verifying gas inventory, and reporting changes or losses are specified in System Instruction 224.0020.

IV. MONITORING

A. Monitoring of the storage reservoir is required to ensure reservoir integrity and field deliverability. The performance review ensures the reservoir functions according to expectations, and integrity tests verify the gas inventory is present and available for delivery. Effective monitoring requires a thorough understanding of the reservoir system. This system is defined as the reservoir rock and wellbores which respond to pressure changes as a result of gas injection and withdrawal. To better understand the system, see System Instruction 224.0035, *Gas Inventory - Summary of Reservoir System*. A successful monitoring program reduces risk of injury, property damage and gas migration.

B. Monitoring of the reservoir system is conducted in both storage and non-storage zone wells and at surface observation points.

1. Storage Zone Wells

a. Performance reviews utilize information collected during individual well and reservoir tests. Back pressure curve shifts, changes in deliverability and field performance are investigated.

b. Tests are conducted on individual wells to prove both well and reservoir integrity.

i. Surface pressures on each well are measured and recorded weekly using a calibrated test gauge. Pressures measured and recorded include tubing pressure, casing pressure, annuli pressures, and, if applicable, safety valve control line pressure. The mode of well operation (injection, withdrawal or shut-in) at the time of pressure measurement is also recorded. Note that the *C.D.O.G.G.R. (California Division Of Oil Gas and Geothermal Resources)* requires a monthly average casing and tubing pressure recorded and submitted as part of the monthly production report.

ii. A plot of the weekly surface casing and the innerstring annuli pressures versus time is maintained or periodically produced for each well. Hardcopy plots are created, marked and filed when an abnormal pressure is

encountered. A pressure is considered abnormal when it may be large enough to force gas into a normally pressured water sand, either at the surface casing shoe or through any other known casing holes or leak-paths.

iii. When abnormally high annular pressures are detected, diagnostic steps are taken to determine the source of pressure build up. This includes tests to eliminate surface valves and downhole tubing as possible sources of leakage. Zero pressure is abnormal in a well that has had a history of annular pressure and is investigated for the possibility of a closed valve.

iv. All wells with continuing zero pressure readings are checked quarterly for closed valves and noted on the pressure plot. Blowdowns are also noted when they occur.

v. Wellhead inspections are performed on a monthly basis. Any leaks from wellhead flanges and valves are reported and corrected.

vi. Subsurface temperature surveys are conducted on each well in according to the following schedule: semi-annually in La Goleta, Montebello, and Playa del Rey storage fields and annually in the Aliso Canyon, and Honor Rancho Storage fields.

vii. Surveys are done in accordance with System Instruction 224.0025, *Standardized Subsurface Temperature and Pressure Surveys*. Wells that have been killed are not exempt from this requirement and must be surveyed according to the schedule. Results of surveys are reported according to Recommended Method 224.001, *Standardized Daily Well Operations Report.*

viii. Additional surveys will be run without regard to this schedule at the first indication of unusual or abnormal well conditions, i.e., anomalous pressure, surface gas emissions or other indications of well problems.

ix. Wireline retrievable tubing obstructions such as tubing plugs, subsurface safety valves, subsurface chokes or tubing stops are removed once each year to perform a temperature survey of the casing shoe and cap rock seal. Ideally, this is done at high reservoir pressure when shoe leaks are most noticeable on temperature surveys.

Under certain conditions it may not be possible or advisable to remove the wireline retrievable obstruction.

x. Subsurface surveys using wireline conductor cable equipment are made to investigate anomalies discovered by temperature surveys.

xi. Conductor cable surveys include temperature surveys, noise logs, spinner surveys, and radioactive tracer surveys.

xii. In the case of well casing leaks above the shoe, radioactive tracer surveys are typically used to verify the location of gas movement through the leak. In the case of shoe or cap rock leaks, these additional surveys are used to verify that a leak exists and as an aid to qualitatively estimate leakage rate.

c. Reservoir integrity tests include:

i. Gas cap observation wells are used to monitor reservoir pressure. If possible one or more wells completed in the gas cap are selected for observation purposes. These wells are not used for injection and are put on withdrawal only for peak load conditions. Surface pressure measurements on the tubing and casing of each gas cap observation well are made and recorded weekly.

ii. A plot of these pressures versus inventory is kept in the office of the Storage Field Engineer and is updated weekly. Anomalous well pressures or behavior are reported to Storage Engineering Staff.

iii. Reservoir shut-ins are generally on a schedule stated in System Instruction 224.0020 or when determined as necessary by the Storage Field Engineer. The

2. Non-storage Zone Wells

a. Non-storage zone wells monitored include both Company wells and wells owned by others in overlying and underlying zones and in other fields within two miles of the storage reservoir boundary, where applicable. These wells are categorized as follows:

i. Pressure observation wells are located in overlying and underlying permeable formations, or adjacent to the storage reservoir but across assumed confining boundaries, such as faults, permeability pinchouts, below the gas-liquid contact or beyond the spill point of the storage zone's confining structure. Although normally static, these wells may have artificial lift mechanisms for removal of gas and fluids.

ii. Gas collection wells are located where known gas migration from the storage zone is intercepted and collected. These wells are normally equipped with operating artificial lift mechanisms so that both liquids and gas can be produced, causing a pressure sink in the reservoir near the wellbore.

iii. In some fields, shallow water observation wells have been drilled into aquifer zones existing in the first permeable sand above the shoe of the surface casing. These wells are closed in at the surface and gas concentrations in the wellbore are measured weekly.

iv. If gas loss is expected, performance reviews of wells operated by other producers in either overlying zones or in adjacent fields may be made by reviewing production reports from these operators.

v. Performance of Company-owned observation and collection wells are also closely monitored. Wellhead inspections and temperature surveys are performed on the pressure observation wells and the gas collection wells.

vi. Pressure observation wells

a. Surface pressures on all tubing and casing strings are measured weekly using a calibrated test gauge.

b. A plot of pressure versus time for each well is kept by the Storage Field Engineer. Bottom-

hole pressure surveys are run as needed on pressure observation wells.

c. If a substantial increase in reservoir pressure is noted or a significant gas buildup occurs, an attempt is made to produce the well. Produced gas is sampled and analyzed for both hydrocarbon and helium content.

vii. Gas collection wells

a. Surface pressures on all casing strings and safety valve control lines are measured weekly using a calibrated test-gauge. The mode of well operation (producing, shut-in) at the time of pressure measurement is also recorded.

b. A plot of pressure vs. time for each surface casing and innerstring annulus is kept by the Storage Field Engineer.

c. Bottom-hole pressure surveys are run on gas collection wells as needed. These surveys follow a shut-in period to allow pressure stabilization after production. If the well is equipped with a standing valve, the valve is pulled prior to the bottom-hole pressure survey and is reinstalled upon completion of the survey.

d. Production schedules are developed by the Storage Field Engineer. The Storage Field Engineer maintains plots of bottomhole pressure versus time and records of produced gas, oil and water.

viii. Shallow water observation wells

a. Shallow water observation wells are closed-in at the surface and gas concentrations in the wellbore measured periodically.

ix. Surface Observations

a. Active well cellar areas are inspected by station personnel each month for indications of near surface gas migration. The Storage Field Engineer requests the analysis if needed and reviews and maintains records of the results.

b. Region personnel survey the location perimeter of four permanent bar holes near all active wells with a gas scope or flame ionization unit. The surveys are performed monthly at Montebello, quarterly at La Goleta, and semi-annually at Aliso Canyon, East Whittier, Honor Rancho and Playa del Rey.

c. The areas in the vicinity of abandoned wells are examined with a flame ionization unit to detect any near surface gas migration under the direction of the Storage Operations Manager. Surveys are performed semi-annually at Montebello, and annually at Aliso Canyon, East Whittier, Honor Rancho, La Goleta and Playa del Rey.

d. Flame ionization surveys to detect any near surface gas migration are performed on all storage field pipelines under the direction of the Storage Operations Manager. These surveys are performed annually at La Goleta, Montebello, and Playa del Rey and every two years at Aliso Canyon, East Whittier and Honor Rancho.

V. BOTTOM-HOLE PRESSURE DETERMINATION

A. Each of the three major methods used to verify gas storage inventory, as explained in Section V, requires the determination of bottom-hole pressures in the field wells. The method used to determine bottom-hole pressure must be consistent from year to year. The most accurate method to determine bottom-hole pressure is to measure the pressure with a pressure bomb. In certain applications the bottom-hole pressure can be calculated from the shut-in wellhead pressure. For wells completed in the gas cap and having full gas columns, the bottom-hole pressure is calculated from the equation:

$$P_{BHP} = P_{WH} \exp\left(\frac{0.01875 \times SG \times D}{Z_{avg} T_{avg}}\right)$$

Where:

P_{BHP} = Bottom-hole pressure, psia.

P_{WH} = Wellhead pressure, psia.

SG = Gas specific gravity.

D = True vertical depth in feet.

T_{avg} = Average wellbore temperature between surface and bottom-hole, degrees Rankin.

Z_{avg} = Average gas compressibility factor from charts, tables or computer programs (dependent on P_{avg}, T_{avg} and gas gravity).

P_{avg} = Average pressure between surface and bottom-hole, psia or

$$P_{avg} = (P_{BHP} + P_{WH})/2$$

NOTE: The above equation could yield incorrect results if the well exhibits abnormally high surface pressure or high fluid levels.

VI. INVENTORY VERIFICATION – SHUT IN

A. Three primary methods for inventory verification of Gas Storage Fields are referenced and summarized below:

1. Calculation of gas content based on volumetric data and average reservoir pressure; Volumetric Determination is explained in Applied Petroleum Reservoir Engineering; by Craft, B. C. and Hawkins, M. F.; Englewood Cliffs, N.J.: Prentice- Hall, 1959.

2. Calculation of effective gas content using the simple gas material balance, hysteresis curve, and P/Z curve methods; Material Balance is explained in Natural Gas Engineering by Ikoku, C. V.; Tulsa, Oklahoma: Penn Well Publishing, 1980.

3. Verification of storage inventory by comparing measured reservoir pressures with calculated pressures obtained using the single cell material balance or reservoir simulation methods; Numerical Simulation or Reservoir Modeling is explained in *Modern Reservoir Engineering —A Simulation Approach* by *Crichlow, H. B.*; Englewood Cliffs, N.J.: Prentice- Hall, 1977 and the *Intercomp Beta II User Manual*.

B. The most common inventory verification method used in mature gas storage projects that are known to have effective geologic closure is the hysteresis curve or P/Z versus inventory plot. Typically, it is adjusted annually for known gas losses and liquid production. Any shift between points plotted at similar pressures following a shut-in is further investigated.

1. Tracking known gas losses and transfers as they occur assist with inventory verification.

2. Recommended Shut-in time durations for effective reservoir stabilization are listed below

   - Aliso Canyon -14 days
   - Honor Rancho -12 days
   - Goleta- 5 days
   - Montebello -12 days

C. Data collected during a shut-in period includes accurate measurements of reservoir pressure on each available well. Bottom-hole pressures can be calculated from surface pressures or measured directly. Gas gravity is determined using gas samples from individual, representative wells.

D. The Storage Field Engineer chooses the type and frequency of data to be collected during shut-ins.

E. Calculation of gas content based on volumetric data and average reservoir pressure from shut-in.

1. Average reservoir pressures used in this calculation are obtained during shut-in periods required for reservoir pressure stabilization. Reservoir pore volumes available for gas storage are calculated from either geologic information, material balances using production and pressure information obtained during primary field production, or in some cases from pressure and production data obtained during gas storage operations. Elements of these calculations are described below:

2. Average reservoir pressures are calculated in an appropriate way for each storage reservoir. To be reliable, the method for each field should stay consistent for all years. Various methods of calculation include the following:

   a. The average reservoir pressure for Honor Rancho, La Goleta, and Playa del Rey are determined by calculating the arithmetic average of the bottom-hole pressure in the gas cap wells. In these fields the pressure of each well is measured or computed at a specified subsea datum approximately at the midpoint of the zone. The datum and reservoir temperature used for these fields are as follows:

      i. Honor Rancho - 8,300 feet subsea, 190°F

      ii. La Goleta - 4,200 feet subsea, 150°F

      iii. Playa del Rey - 6,100 feet subsea, 210°F

iv. Montebello: An average reservoir pressure is obtained. The pressure points for the average reservoir pressure are generated by converting the bottom-hole pressure to a datum at the top of the 8-2 zone using a reservoir temperature of 187°F.

v. A volumetrically weighted average reservoir pressure is used for Aliso Canyon. The pressures in this field is computed at a specified subsea depth approximately at the midpoint of the zone. The datum depth for this field and the reservoir temperature is as follows:

a. Aliso Canyon - 5,400 feet subsea, 180°F

3. Reservoir pore volume calculated from geologic information utilizes data obtained during the drilling and completion of the well such as electric logs or core information to calculate the total pore volume of the reservoir. These calculations are based on the following equations:

a. Gas reservoirs

i. Equation: $V = Ah\phi(1-S_w)$

Where:

V = Reservoir gas pore volume in cubic feet

A = Gas zone area in square feet

h = Average gas zone thickness in feet determined from electric logs or cores

ϕ = Porosity fraction determined from porosity logs or well test analysis

S_w = Water saturation from log, core, or well test analysis

b. Oil reservoirs

i. Equation: $V = Ah\phi(1-S_w) + A_1h_1\phi(1-2_w-s_o)$

Where:

A = Primary gas cap area in square feet

A_1 = Secondary gas cap area in square feet

h_1 = Average secondary gas zone thickness in feet

s_o = Residual oil saturation

ii. In most portions of an oil zone storage reservoir, oil saturation is determined from core analysis or can be considered equivalent to residual oil saturation and can be estimated from the 16" normal resistivity curve using the following relationships.

Equation: Residual oil saturation = $(1-s_{xo})$

$$s_{xo} = \sqrt{\frac{Rmf}{R_{xo}\phi 2}}$$

Where:

R_{xo} = Resistivity of 16" normal or resistivity of flushed zone.

S_{xo} = Water saturation of mud filtrate within the flushed zone.

ϕ = Porosity

Rmf = Resistivity of mud filtrate.

4. Gas Reservoir pore volume calculated using material balance equations:

These calculations utilize production and pressure data in the following equations:

a. Equation for constant volume gas reservoirs using primary production:

$$V = \frac{P_{sc} G_p T}{T_{sc}} \left(\frac{1}{P_i / Z_i - P_f / Z_F} \right)$$

Where water production and influx are assumed negligible and where:

V = Gas pore volume in reservoir cubic feet.

P_{sc} = 14.7 psia

G_p = Gas produced in standard cubic feet.

T = Reservoir temperature in degrees Rankin (°R).

R_{sc} = 520°R

P_i = Initial pressure, psia.

P_f = Final pressure, psia.

Z_i = Initial gas compressibility factor.

Z_f = Final gas compressibility factor.

b. Equation for constant volume gas reservoirs using storage production

$$V = \frac{P_{SC} G_p T}{T_{SP}} \left(\frac{1}{P_1 / Z_1 - P_2 / Z_2} \right)$$

Where water production and influx are assumed negligible

G_p = SCF of gas produced or injected between pressure points P1 and P2.

P_1 and P_2 = The first and second stabilized average reservoir pressures bounding the production or injection period considered.

Z_1 and Z_2 = Gas compressibility factors for P1 and P2.

T = Reservoir temperature in degrees Rankin

5. Oil reservoirs pore volume calculations

a. Equation: The 'Reservoir Gas Pore Volume' is equal to the 'Original Gas Cap Pore Volume' plus the 'Secondary Gas Cap Pore Volume' plus the 'Space created by Water Production'.

Or:

$$V = GB_{gi} = \left(NB_{oi} - \left(N - N_p \right) B_o \right) + W_p B_w$$

Where:

G = Original gas pore volume, standard cubic feet (determined from either geologic data or an appropriate form of the material balance equation).

B_{gi} = Gas formation volume factor in reservoir cubic feet per standard cubic feet at discovery pressure.

N = Initial oil in place in stock tank barrels (determined from either geologic data or an appropriated form of the material balance equation).

N_p = Cumulative oil production in stock tank barrels.

B_{oi} = Oil formation volume factor in reservoir cubic feet per stock tank barrel at discovery pressure.

Bo = Oil formation volume factor at existing pressure in reservoir cubic feet per stock tank barrel.

W_p = Water production in stock tank barrels.

B_w = Water formation volume factor, reservoir cubic feet per stock tank barrel (approximates 5.615).

b. Simplifying assumptions used in the above equation are that no storage gas goes into solution in the oil and that there is no water influx into the storage reservoir. These simplifying assumptions are seldom true. However, the equation can be modified based on a judgment of the volume of gas which may go into solution in the reservoir oil and a judgment of aquifer activity surrounding the storage reservoir. When modified by these judgment factors, the equation provides a method for approximating a limit for the reservoir gas pore volume available for storage operations. An upper limit is established when it is assumed that all the residual oil is resaturated with gas. Generally, only a fraction of the oil becomes saturated and so the calculation has little usage beyond setting limits.

c. The values of G and N are not generally expected to be obtained with an accuracy greater than + 20%. However, this is not a major drawback since the methods are used to establish guidelines and set limits.

6. Calculation of gas content.

a. After the gas pore volume has been calculated, or approximated, by one of the methods indicated above, the gas content at the measured reservoir pressure is determined using the gas law as follows:

$PV = ZNRT$

Where:

P = Average reservoir pressure, psia

V = Gas pore volume in reservoir cubic feet

T = Temperature of reservoir, (°F + 460) degrees Rankin

Z = Compressibility factor, dependent on P, T, and gas gravity, from charts or tables.

N = pound moles (where one pound mole = 379.41 cubic feet @ 60°F and 14.7 psia).

R = 10.735 universal gas constant for above units.

Solving for gas content;

$$Volume(mscf) = \frac{(0.03533)PV}{ZT}$$

PV = ZNRT

Where:

P = Average reservoir pressure, psia

V = Gas pore volume in reservoir cubic feet

T = Temperature of reservoir, (°F + 460) degrees Rankin

Z = Compressibility factor, dependent on P, T, and gas gravity, from charts or tables.

N = pound moles (where one pound mole = 379.41 cubic feet @ 60°F and 14.7 psia).

R = 10.735 universal gas constant for above units.

Solving for gas content;

$$Volume(mscf) = \frac{(0.03533)PV}{ZT}$$

F. Calculation of effective gas content using the simple gas material balance and hysteresis curve(P/Z curve) methods

1. Pressure changes with rapid gas injection or withdrawal during selected operating periods can show the relationship between effective gas content and the storage inventory. Effective gas content is the gas which, within a given time, causes a measurable pressure response to injection or withdrawal operations. Not all gas in the reservoir yields such a response within the given time interval. The difference between

effective gas content at a given pressure (P_1) and the metered inventory is non-effective gas. Part of this non-effective gas can be due to the lack of pressure equilibrium within the reservoir. Any gas migration out of the storage reservoir also contributes to the non-effective gas. Either one of the two equations, or the graphical solutions presented below are used to calculate the effective gas content.

a. Calculations with negligible water movement are made using the following equation:

$$\text{Effective Gas Content at P1, Q1} = \left(\frac{\Delta Q}{\frac{P_1}{Z_1} - \frac{P_2}{Z_2}} \right) \left(\frac{P_1}{Z_1} \right)$$

Where:

P_1 = Pressure at the first operational point considered.

P_2 = Pressure at the second operational point considered.

Q_1 = Net storage volume at the first operational point considered.

ΔQ = The net change in gas inventory between the two operational points considered.

b. Calculations with significant water movement of a known rate are made using the following equations:

$$Q_1 = \left(\Delta Q - \left(We \times \frac{P_2}{14.7} \times \frac{520}{T_R} \times \frac{1}{Z_R} \right) \right) \frac{\frac{P_1}{Z_1}}{\left(\frac{P_1}{Z_1} - \frac{P_2}{Z_2} \right)}$$

Where terms are defined as above, and where:

We = Water influx in cubic feet.

T_R = Reservoir temperature, degrees Rankin.

Z_R = Z at T_R and P_2.

G. Graphical solutions

1. The hysteresis curve is a plot of reservoir pressure versus storage inventory. This curve utilizes the compressibility factor of non-ideal gas.

It is most effective in a constant volume reservoir since it assumes no water movement into or away from the storage reservoir; and no movement of gas into or out of solution in the reservoir oil. Actually, after sufficient storage history, the hysteresis curve becomes a qualitative tool for inventory verification since with constant operating procedures and a relatively constant storage cycling volume, aquifer movement and movement of gas into and out of solution is relatively constant and effectively drops from the equation.

VII. REPORTING GAS INVENTORY LOSSES

A. Calculated operational losses

1. Gas losses due to compressor, piping system or well blowdowns and wireline surveys are calculated by Storage Field personnel and reported to Measurement monthly. These reports are review by the Storage Field Engineer.

2. Estimates of losses related to workovers and well blowdowns are prepared by the Storage Field Engineer after a well has been killed. These estimated losses are reported monthly to Gas Measurement.

B. Losses from known well and surface facility leaks

1. Some small losses from valves, compressors, field piping, threaded well casing connections and well casing mechanical devices such as cementing stage collars, and some small casing leaks are inherent to Storage Field Operations. These leaks are estimated and reported as follows:

   a. Minor surface facility leakage is surveyed in each storage field periodically. Leakage surveys include wellhead valves and fittings, instrumentation, well piping, field piping, surface production facilities and the compressor station. Surveys are made more frequently if facility modifications are made which might change leakage rates.

   b. During these surveys, measurements are obtained on representative minor atmospheric leaks and then extrapolated to an estimated annual leakage rate for the field.

2. Subsurface leakage from wells is estimated by the Storage Field Engineer and reported to Storage Engineering Staff.

   a. Leakage from well casings is estimated by establishing a leakage rate using the radioactive tracer survey. The number of days of leakage is estimated by using subsurface temperature survey data. Casing shoe or Water Shut-Off (WSO) leakage is estimated by reviewing temperature, noise and radioactive tracer

surveys, pressure draw-down and the overlying wells' gas production during the time of the leak.

b. In cases where leakage rates are not quantifiable, an average rate of 30 Mcf/d may be used. Engineering judgment is then applied and an average daily loss rate selected. The number of days the leak was occurring is determined by taking one-half the difference in the number of days between the last normal and the first abnormal temperature survey.

3. Surface facility leakage and subsurface leakage are quantified annually by the Storage Field Engineer who reports the results to the Storage Engineering Manager and Gas Management.

C. Reservoir losses

1. Reservoir losses are categorized as those associated with Company-operated wells completed in the storage reservoir and general reservoir losses.

a. Losses associated with the Company-operated wells include losses through failures in the cement between the cap rock and well casing. These losses are also known as "shoe leaks," "WSO" leaks and "stage collar" leaks.

b. General reservoir losses include losses through abandoned wells or breakdown of some portion of the trapping mechanism. This type of loss is not directly detected by surveys of Company-operated wells in the storage zone.

c. Quantification of reservoir losses utilizes industry accepted methods of inventory verification.

2. Reservoir losses are quantified annually by the Storage Field Engineer who reports results to the Storage Engineering Manager and Gas Measurement.

PC DOCS FCD PROFILE SUMMARY	
Document Number:	224.070
Document Title:	Gas Inventory - Monotoring, Verification and Reporting
Document Category:	Recommended Method
Document Status:	Active
If Merged, Merged to:	
Effective Date:	2/5/1999
Current Version Issued:	2/5/1999
Review Date:	2/5/2004
Prior Numbers:	224.0050; 224.0045; 224.020
Company:	Southern California Gas Company
Business Unit:	SCG Energy Transportation Services
Business Organization:	Transmission & Storage Operations
Department:	Storage
Department Organization:	Storage Engineering
Organization Team:	None
Contact Person/Writer:	Dan Neville
Referenced Documents:	224.0020; 224.0035; 224.0025; 224.001
Related Documents:	
Part of O&M Plan:	No
Compliance Required by:	
Mandated by:	
CPUC Review Required:	No
Legal Review Required:	No

Author's Brief/Summary of Changes:

This FCD was revised by the Storage Engineer Peer Team. The title of the FCD was changed to Gas Inventory - Monitoring, Verification, and Reporting. It was merged with FCD 224.0045 and FCD 224.020 and changed to a Recommended Method.

Circulation Code	Filing Instructions
TRAN	File numerically in Volume II, behind Underground Storage Tab.

EXHIBIT 2

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DANIEL L. COHEN

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA

IN THE COUNTY OF LOS ANGELES

ENVIRONMENTALISM THROUGH INSPIRATION AND NON-VIOLENT ACTION ("ETINA"), et al Petitioners vs. CITY OF LOS ANGELES, et al Respondents and PLAYA CAPITAL COMPANY, LLP, et al. Real Parties in Interest	) CASE NO. BS 073182) [assigned for all purposes to the) Honorable Ann I. Jones in dept. 40))) FURTHER OBJECTIONS OF PETITIONER,) DANIEL L. COHEN TO RESPONDENTS) RETURN TO THE WRIT) WITH DECLARATION OF) DENNIS PALMIERI))))))))))

DATE: September 24, 2008
TIME: 8:30 A.M.
DEPT: 40
The Honorable Ann I. Jones

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COMES NOW, Petitioner DANIEL L. COHEN ("Cohen") and respectfully files his Further Objections to Respondent's Return to the Writ.

I. INTRODUCTION

1. In their October 25, 2005 Opinion, the Appellate Court ordered:

> "... the city to vacate its approval of the methane mitigation measures, for the purpose of determining whether a subsequent EIR or a supplemental EIR is required with respect to groundwater dewatering, and proceed accordingly as required by CEQA,"

2. On February 23, 2006, the Honorable George H. Wu issued a Peremptory Writ of mandamus with the identical language of the Appellate Court Order.

3. Respondents thereafter, filed a Return to the Writ. Petitioners filed a Motion to Enforce the Writ which was denied on procedural grounds. Petitioners filed a second Motion seeking to Enforce the Writ.

4. Thereafter, on or about March 5, 2007, Respondents filed a Supplemental Return to Peremptory Writ of Mandamus with a Proposed Order Discharging the Writ of Mandate.

5. On March 6, 2007, the Honorable George H. Wu issued a Minute Order denying Petitioner's Motion which sought to enforce the Writ stating, inter alia,

> "The Court finds that petitioner's have not established that respondent has violated the February 23rd Writ of Mandate. In reaching this decision the Court is not considering or otherwise ruling in the matters referenced in respondent's supplemental return to Peremptory Writ of Mandamus filed March 5, 2007."

6. Thereafter, or about March 12, 2007, Petitioners former attorney, Richard Find, filed Objections to the Supplemental Return to the Peremptory Writ and on March 28, 2007, filed Supplemental Objections to Supplemental Return to Peremptory Writ of Mandate as to which the Respondents filed a Joint Response to Petitioner's Objections to City's Supplemental Return to Writ on April 4, 2007 with Evidentiary Objections and a Request for Judicial Notice.

7. On or about April 6, 2007, Petitioner's former attorney filed a Reply in Support of Supplemental Objections to Supplemental Return to Peremptory Writ of Mandate.

8. In a hearing on April 11, 2007, the Honorable George H. Wu ordered the matter submitted as to Submitttals, Objections. Materials and Evidence except to the extent that a subsequent judicial officer allows for further Submittals and, or Objections.

9. In a Status Conference on May 9, 2008, the Honorable Ann I. Jones ordered that the Petitioners' would be allowed to file additional objections pending the outcome of the court's decision on a Motion to Augment to be heard on or about July 14, 2008.

10. Cohen filed a Motion to Strike Portions of the Administrative Record, and for an Order that the Respondents failed to Provide Adequate Information to the Public, such Non-Compliance Violated PRC 21005(a) and for a Ruling Consistent with PRC 21168.9(a). Cohen wanted the Court to take Judicial Notice that the Administrative Record ("AR") did not contain a hard copy of the non-binary readable form of the raw data on the CDM disks but only contained photocopies of the disks in the AR at 2:299-301 and the AR only contained an analysis of the alleged raw data.

12. On July 30, 2008. the Honorable Ann I. Jones denied the Request for Judicial Notice and denied Cohen's Motion, stating, inter alia,

> "However, respondent is hereby ordered to lodge with the court (and to personally serve Dennis Palmieri, Esq.) A hard copy of the information contained on those disks or before August 4, 2008."

13. As to Cohen's motion, the court went on the state, inter alia,

> " Accordingly, the Court DENIES the motion to strike portions of the Administrative Record, without prejudice to Petitioner Cohen making the same arguments as further objections to the Return to the Writ and to Respondents making the same opposition arguments as further responses."

II. PETITIONER'S FURTHER OBJECTIONS

A. INTRODUCTION

14. The Respondents failed to Comply with CEQA by (1) employing a "*peer review process*" rather than an initial study and (2) Respondent's failed to provide the "*raw input data*" on the disks in the AR and therefore any references to or consideration (in the AR) of the data contained on the disks should be rejected.

B. THE CEQA PROCESS

(i) THE EIR PROCESS

15. In determining if a project requires an EIR, CEQA Guidelines, 15002(k) requires a three step analysis (1) a preliminary determination whether the project is subject to CEQA at all, (2) if so, an initial study, and (3) if necessary, preparation of an EIR. (*No. Oil Inc. v. City of Los Angeles*, 13

Cal. 3d 68 (1974) "An EIR is required whenever it can be fairly argued on the basis of substantial evidence that the project may have *significant effect* on the environment. (Guidelines 15002(a); 15064(a); PRC 21068)

(ii) THE SUBSEQUENT OR SUPPLEMENTAL EIR PROCESS

16. In this regard, [T]he procedure for determining whether a Subsequent or Supplement to an EIR is required under Pub. Res. Cd. 21166 requires *the same process* as CEQA Guidelines 15060-15063." (*Concerned Citizens of Costa Mesa, Inc. v. 32nd District Agri. Assn.* (1986) 42, Cal. 3d 929, 936- If a subsequent or supplemental EIR is necessary, however, the state CEQA Guidelines require that the later EIR receive the same circulation and review as the initial EIR. (Guidelines 15162-15163; *Mira Monte Homeowners Asso. v. County of Ventura* (1985) 165 Cal. App. 3d 357, 363 - "Preparation of an additional EIR involves the same environmental review process applicable to an initial EIR.") Even if respondent state that the "*peer review process*" was exempted from such requirement because no determination as to a Subsequent, Supplement or Negative Declaration was then made, CEQA Guidelines still require the same circulation and review. (*Snarled Traffic Obstructs Progress v. City and Co. Of San Francisco* (1999) 74 Cal. App. 4th 793 @ 799 - "... examination of section 21166-the enabling statutory authority for Guidelines section 15162-we determined that the rules governing the circumstances in which a subsequent or supplemental EIR must be prepared also apply to situations where a negative declaration was adopted.") "If there is a possibility that a project not exempt from CEQA may have a *significant effect* on the environment, the agency considering the project *MUST* undertake an initial study. (*No Oil, Inc. v. City of Los Angeles, supra*; *Miller v. City of Hermosa Beach* (1993) 13 Cal. App. 4th 1118)

(1) PRELIMINARY DETERMINATION - SIGNIFICANT EFFECTS GUIDELINES 15002(K)(1)

17. PRC 21068 states "Significant effects on the environment" means a substantial, or *potentially substantial* adverse change in the environment."

18. PRC 21082.2(d) states,

> "If there is substantial evidence, in light of the whole record before the lead agency, that a project may have a *significant effect on the environment*, an environmental impact report shall be prepared."

19. PRC 21083 states, inter alia,

(b) "The guidelines shall specifically include criteria for public agencies to follow in determining whether or not a proposed project may have a "*significant effect on the environment.*" The criteria shall require a finding that a project *may have a significant effect on the environment* if one or more of the following conditions exist:

(1) A proposed project has the *potential to degrade the quality of the environment*, curtail the range of the environment, or to achieve short-term, to the advantage of long-term environmental goals.

20. While an iron clad definition of *significant effects* is not possible (Guidelines 15064(b)), if a project *may cause significant effects*, whether the effect is adverse or beneficial, an EIR is required. (Guidelines 15063(b)(1)) In determining whether *effects are significant*, the lead agency MUST consider views of members of the public expressed in the whole record. (Guidelines 15064(c)) The Appellate Court is a responsible member of the public.

21. Since the Appellate Court's October 25, 2005 opinion determined that "... permanent groundwater dewatering contemplated in connection with the methane mitigation measures adopted by the city "*is a potentially substantial project change because it could result in those new or substantially more significant impacts*," it already made a finding that dewatering had the *potential for the substantial adverse change* (PRC 21068) or the *potential to degrade the quality of the environment* (PRC 21083(b)(1)), warranting a Subsequent or Supplement to the EIR. (Guidelines 15002(k)(3),15063(b)(1); PRC 21082.2(b)).

(2) RESPONDENTS VIOLATED GUIDELINES 15002(k)(2) BY

22. Since a preliminary determination had been made that the dewatering project may cause, *significant effects*, An INITIAL STUDY was required under the second prong of Guidelines 15002(k), thus, responsible state agencies were required to be notified under PRC 21080.3(a).

23. Rather than notifying responsible state agencies (such as the Office of Planning and Research and the Department of Fish & Game), Respondents initiated a "*PEER REVIEW*" avoiding coupling the Appellate Court's opinion with Guidelines 15002(k)(3) and 15063(b)(1) and PRC 21068, 21083(b)(1) and 21080.3(a), where responsible state agencies would have provided "*raw data*"and, or, "*raw input data*" relative to the *potentially substantial* or *potential for the significant impact* addressed by the Appellate Court.

24. Immediately after the October 25, 2005 Appellate Court decision, on December 8, 2005, the City Attorney recommended City Council have a Closed Door Session (AR 8:1645-1646) to interpret the Appellate Order which was continued from December 14, 2005 to January 11, 2006. (AR 8:1639-1643) The City Counsel adopted a Verbal Motion on January 11, 2006 (AR 8:1638) to allegedly comply with the Writ, accepting the City Attorney's recommendations (AR 8:1632-1633) that compliance with the Appellate Court's decision only required authorization for the CLA, with concurrence from the City Attorney, to contract with one or two firms with expertise in ground water modeling and subsidence and provide a *peer review* of two reports. (AR 8:1638)

25. *First.* from the Appellate Court's direction, the two document *peer review* is much too narrow given the potentially substantial project change of the 1993 EIR envisioned by the 2001 Sepich correspondence to the LADBS.

26. *Second*, nevertheless, the City Counsel initiated a two step process, the first being the *peer review*, which the City Council and City Attorney allege, are not within CEQA. (AR 8:1633, fn1)

> **"The second requirement, i.e. "Determining whether a subsequent EIR or a supplemental EIR is required with respect to groundwaering, and proceeding accordingly as required by CEQA" will occur after the studies contemplated by your January 11, 2006, motion are completed. Staff will report back to you at that time with the results of the studies and with recommendations for your actions with respect to CEQA."**

27. These recommendations note Compliance with CEQA will only occur after the studies contemplated by the January 11, 2006 Motion. Such procedures violate CEQA requirements and Cohen Objects to such process arguing (it) created a ruse, going through the motions to create the appearance of a properly adopted procedure which did not occur.

28. The "*peer review*" was a not a proper study. (*Citizens Assn. For a Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal. App. 3d 151, 171[1])

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[1]"In administering its responsibilities under CEQA the public agency should implement procedures which contain at least provisions for: conducting initial studies, preparing negative declarations or drafting final EIRs, assuring adequate opportunity and time for public review and comment, evaluating and responding to those comments, and filing documents required by CEQA. (Cal. Admin. Code, tit. 14, § 15022; see Pub. Resources Code, § 21082.)

"An important purpose of the initial study is to "[p]rovide documentation of the factual basis for the finding in a negative declaration that a project will not have a significant effect on the environment; ..." (Cal.Admin. Code, tit. 14, § 15063, subd. (c)(5).) This purpose is particularly relevant to courts reviewing the administrative action pursuant to Public Resources Code section 21168. As discussed

29. In our case, the "*peer review*" was hardly an initial study and was too conclusionary. It is impossible to determine whether GEOCON and FURGO's analysis was supported by the evidence because it is unclear as to whether *raw input data,* if any, was relied upon in preparing their opinions. Neither the source nor the content of the *raw input data* relied upon for their environmental conclusions were specifically identified. Certainly, Playa Capitol, as the developer, provided information for the First Phase Project, but, even this information was conclusionary. See for example Respondent's Request to Augment Record with Proper Photocopies of the Record, i.e., AR 3:555 notes it is information supplied by Playa Capital. For the most part the specific sources and content of the data the developer relied upon in its application were not disclosed.

30. Rather than notifying responsible agencies to enable (them) to determine whether or not the "*raw input data,*" including data lineage, on the CDM disks was appropriate or correct with respect to the tables yielded or, whether additional input was essential for that agencies requirements, the City initiated a "*peer review*" which foreclosed responsible agency participation.

(3) <u>RESPONDENTS VIOLATED GUIDELINES 15002(K)(3)</u>

31. Cohen Objects - the *process* Respondents initiated was tainted and precluded the required notice and review by responsible agencies to foreclose an additional environmental report under 15002(k)(3). The failure to provide the "*raw input data*" to him, petitioners, the public and responsible agencies was a pre-determined intent - the "*peer review*" destined the *process* to find Respondents were not required to engage any further actions with respect to the substantial project change dewatering required or the <u>*significant effects*</u> on the environment dewatering will create.

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above, Public Resources Code section 21168, and thereby Code of Civil Procedure section 1094.5, apply to the instant case. <u>Section 1094.5, subdivision (b)</u>, states that "[a]buse of discretion is established if the respondent has not proceeded in the manner required by law, the order or decision is not supported by the findings, *or the findings are not supported by the evidence.*" (Emphasis added.) The Supreme Court has elaborated that "... implicit in section 1094.5 is a requirement that the agency which renders the challenged decision must set forth findings to bridge the analytic gap between the *raw evidence* and ultimate decision or order." (*Topanga Assn. for a Scenic Community v. County of Los Angeles, supra,* 11 Cal.3d at p. 515, 113 Cal.Rptr. 836, 522 P.2d 12, emphasis added; see *Myers v. Board of Supervisors* (1976) 58 Cal.App.3d 413, 429-431, 129 Cal.Rptr. 902.)

"Therefore, although an initial study can identify environmental effects by use of a checklist (see Cal. Admin. Code, tit. 14, § 15063, subd. (d)-(f)), it must also disclose the data or evidence upon which the person(s) conducting the study relied. Mere conclusions simply provide no vehicle for judicial review. (See <u>*Topanga Assn. for a Scenic Community v. County of Los Angeles, supra,*</u> <u>11 Cal.3d at p. 516, 113 Cal.Rptr. 836, 522 P.2d 12.)</u>"

32. The improper *process* supports a ruling under Evidence Code 413, that Respondents suppressed evidence from being placed in the AR, not only the non-binary readable form of the *"raw input data,"* but the *"input data"* from responsible agencies. Such suppression shoulders Cohen's Objection to the Return to the Writ - Respondents *process* failed to provide adequate information to the public and responsible agencies violating PRC 21005(a) which supports a requested order under PRC 21168.9(a) or any of the other subsections of 21168.9.

33. Respondent's argue that they were not required to notice responsible agencies per their argument on page 6 of their Joint Response to Petitioner's Objections to City's Supplemental Return to Writ. In that brief, Respondents argued

(1) CEQA does not require public hearing during any stage of the proceedings (Guidelines 15202) ;

(2) Guidelines 15164(c) does not require an addendum to be circulated or for Notice to other agencies for a determination as to whether or not an SEIR is required;

(3) Guidelines 15164(e) does not require express findings on the issue of whether an additional EIR is required or mandated.

34. Respondents are incorrect, Guidelines 15164(c) does not state notice to responsible agencies is not required for a determination as to whether or not an SEIR is required. If so, Respondent's argument would contradict precedent interpreting the PRC and the Guidelines or case precedent and statute conflict because PRC 21080.3(a) states that prior to determining whether an EIR is required, the lead agency *MUST* consult with all responsible agencies and with any other public agencies having jurisdiction over the natural resources affected by the project. PRC 21080.3(a) is applicable to an additional EIR because "preparation of an additional EIR requires the same environmental review *process* as the initial EIR." (*Concerned Citizens of Costa Mesa, Inc. v. 32nd District Agri. Assn*, supra; *Mira Monte Homeowners Asso. v. County of Ventura, supra; Snarled Traffic Obstructs Progress v. City and Co. Of San Francisco, supra; No Oil, Inc. v. City of Los Angeles, supra; Miller v. City of Hermosa Beach, supra)*

35. If, after all applicable Notices and consultation with responsible agencies, a determination is reached that a Subsequent EIR, or a Supplement to an EIR, or an addendum is or is not required,

then the requirements of Guidelines 15164 are followed. Respondent's interpretation of 15164, however, contrasts with the precise language and intent of 15164. Put another way, before arriving at the conclusion that a Subsequent EIR, or a Supplement to an EIR, or an addendum to an EIR is or is not required, the circulation and review ***PROCESS*** is still required. Respondents conspicuously failed and refused to follow the review and notice requirements of CEQA. Thus, the "*raw input data*" on the disks is suspect as it comes from a source other than from responsible state agencies. Respondent's improper *process* created a defective Administrative Record which then, does not contain the substantial evidence required from responsible state agencies to support the February 27, 2007 decision of the City Council.

C. THE RAW INPUT DATA ON THE DISKS

36. GEOCON, one of the "*peer reviewers*" the CLA retained, stated they performed a 3rd party hydrogeological review of a report by CDM, including all supporting documentation. (AR 3:496-500) Copies of the CDM disks were included in the AR, allegedly containing the "*raw data*"used by the peer reviewers for their analysis. (ADR 2, pages 299-301. Cohen is a board member of petitioner, Grassroots Coalition, Inc. ("GRC") which sent an August 15, 2006 letter (AR 5:853-857) stating:

> "We are in receipt of a cc'd July 5, 2006 letter of Latham & Watkins to Peter J. Guiterez, Assistant Attorney which states in relevant parts. We are in receipt of Ms. Venskus' letter and "Notice of Information Required for Adequate CEQA Review" of May 31, 2005, and your response letter of June 23, 2006. Please note that the input and output files for the modeling work performed by Camp Dreser & McKee (CDM) presented in CDM's November 23, 2005 and January 4, 2006 reports (referenced as items 1 and 2 in the Notice) were provided to the Chief Legislative 'analyst's Office in may 2006"
>
> "It appears we do not need to provide the CLA Office with our Item I request for inclusion. However, we have been requesting this information via the LA Regional Water Quality Control Board (LARWQCB) who has been acting on our behalf and attempting to garner this data for us. Playa Capital has not provided the non-binary (a readable) format to the LARWQCB, according to the LARWQCB. It may be important to note here that the LARWQCB's review of Playa Capital's dewatering reports was done without the actual raw data necessary to confirm the veracity of the CDM modeling. The LARWQCB has stated that their review simply had to trust that the information provided was valid. However, the LARWQCB has also stated that it believes that it would be prudent to have the reports reviewed independently. In order to perform a prudent independent review of the Plays Capital LLC (CDM) reports it is necessary to have a readable format for review of the raw input and output data to review the modeling. Under CEQA standards it is also necessary to have data to back up conclusions rendered and this for proper review, a readable no-binary format must be included for review purposes.
>
> "We request the non-binary-readable raw data of the input and output modeling data of the CDM reports, cited in our Noticed listing of documents, from the City.

37. In response, the City Attorney's Office, the CLA and representative of GEOCON refused as noted in GEOCON's response to the August 15, 2006 request of GRC. (AR 4:840)

> "Response: The data files for the groundwater model (specifically the input and output files) that were obtained by Geocon were provided in a format requiring specific computer software to be read. Review of these files without the specific software required to interpret them would be akin to reviewing items of computer code. The required software program (MODFLOW) is provided in the public domain, well-benchmarked, and widely accepted by the scientific community. The format provided by CDM is the standard format for providing the data. Geocon did not have issues with the format of the files provided for our review of the groundwater model.
> "Comment No. 2: "However, the LARWQCB has also stated that it believes that it would be prudent to have the reports reviewed independently.
> "Response: The reports were independently reviewed by Geocon."

38. Respondent's continued the impropriety of their *process* when they refusal to provide Cohen, petitioners, the public and the responsible state agencies with the "*raw input data*" up through the Court ordered Meet and Confer on May 19, 2008, and then in a letter dated May 22, 2008 from Robert D. Crockett, attorney for respondent Real Parties in Interest.

39. In the hearing on May 30, 2008, the Court noted CEQA required the Court to police the *process,* and ultimately required Respondents to deliver to Cohen's Counsel, the non-binary form of the "*raw data*" contained on the disks on or before August 4, 2008.

40. Respondent delivered 41 volumes of material on August 4, 2008.

41. Robert Crockett informed Counsel that the 41 volumes contained only the output of the *raw input data*, which is on the disks, but does not contain the "*raw input data*" on a disks.

42. Mr. Crockett explained that such "*raw input data*" comprises approximately 500,000 pages of material, it would consume approximately 200 boxes, he would need to write a program for the computer to print out such "*raw input data*" in a non-binary readable form and it would take approximately three weeks to do so, and, he would rather supply a disk containing the material. It is difficult to ... imagine ... just one disk holding 500,000 pages of information. .

43. Mr. Crockett requested a stipulation for an additional three weeks and prepared a basic stipulation as to such facts, a true and correct copy of which is attached as Exhibit A.

44. Cohen declined to agreed to the stipulation but, the Stipulation is proof positive that the disks (photocopies of which were in the AR @ 2:299-301) did contain the "*raw input data.*"

45. The impropriety of Respondents, *process*, continues, inexorably!

46. *First*, Cohen vehemently Objects that he did not receive the correct "*raw input data*" he demanded time and again which Respondents were required to provide under PRC 21003.1(b). Now, Respondent's still refuse to deliver the "*raw input data*" or the "*data lineage*" in the time ORDERED by the Court. Respondent's claim that the "*raw input data*" will consume an alleged 500,000 pages of material further substantiates why he, petitioners, the public and the responsible agencies should have been provided such a volume of material over two years ago when originally requested as noted at AR 5:853-857. Providing the alleged 500,000 pages three weeks from August 11, 2008 would be approximately August 31, 2008 - three weeks prior to the date for the September 24, 2008 hearing on the Return to the Writ and beyond the time when he can provide further Objections to the Return to the Writ. Cohen, petitioners, the public and responsible agencies have been severely prejudiced by Respondents failure to provide the information required under PRC 21003.1(b).

47. *Second*, Cohen Objects that the "*raw input data*" contained on the disks has been supplied by Respondent's experts (without lineage data) and not independently supplied by responsible agencies. Cohen's Objection is when Respondent's expert supplied the alleged "*raw input data*" which is alleged to consume 500,000 pages of information but failed to disclose the "*raw input data*" to Cohen, petitioners' the public and responsible agencies, such failure smacks of collusion, that is, Respondent's had "*raw input data*" supplied which would yield a predestined result, the out put to yield the tables contained in the AR to support the recommendations of the CLA which were adopted by the City Counsel on February 27, 2007.

48. *Third*, Cohen objects that even in their Stipulation, Respondents state they will need to write a program so that the "*raw input data*" on the disks can be readable. Writing a "*selective proprietary program*" to allegedly read "*selective raw input data*" utterly compromises the advocacy system and cleverly avoids independent verification by the public and by independent responsible state agencies. Respondents ... *process* ... got for them what they predetermined by a "*selective program*" to address "*selective input data*" destined to yield a pre-determined state of tables.

49. Despite the Court's May 30, 2008 Order, Respondent's may still attempt to claim that the "*raw input data*" is not required, relying on *Blue v. City of Los Angeles* (2006) 137 Cal. App. 4th 1131. Nevertheless, Blue is distinguished on the facts and the law. *Blue* involved a request for raw field

survey data in an Administrative Record to be used to reject or uphold findings of blight in a case where the plaintiff could visually inspect the area to determine if blight was occurring. The court found that it did not read into the language of Health and Safety Code sections 33457.1 or 33352, the requirement to disclose raw data concerning blight. The within matter addresses issues of subsidence and exacerbation of toxic plumes which are not readily detectable by visually observation, requires responsible state agency input and does not involve the Health & Safety Code 33457.1 or 3352.

50. Similarly, Respondent's may still attempt to rely on *Ebbetts Pass Forest Watch v. California Dept. Of Foresty and Fire Protection* (2008) 43 Cal. 4th 936 is distinguished on the facts and law. *Ebbetts Pass* involved the "California Department of Forestry and Fire Protection's (CDF) response to public comments on herbicide use in timber harvest plans (THP) which was ultimately found not inadequate due to CDF's reliance on past use data maintained by the Department of Pesticide Regulation and documents created by pest control advisers that a logging company had hired in the past, even though those materials were not contained in Administrative Record, where the company's typical use of herbicides in silviculture was described in THP, and the Department of Pesticide Regulation data on past herbicide use that CDF relied upon were identified with particularity. PRC 4581 et seq.; 14 CCR § 15148." While CCR 15148 addresses the inclusion of scientific reports which themselves do not need to be included in an EIR, it does not address input data from a responsible state agency and to the extent that such input data is not available to the public, it must be disclosed under PRC 21061.

D. RESPONDENT'S ARE IN CONTEMPT OF THE COURT'S ORDER

51. After two years of requesting the "*raw input data*" on the CDM disks, the Court determined on May 30, 2008 that the process required Respondents to provide such non-binary readable form of the "*raw input data*" to Cohen by August 4, 2008.

52. Respondent's failure to do so is a contempt (C.C.P. 1209(a)(5); 1218; *Conn v. S.Ct* (1987) 196 Cal. App. 3d 774, 784; *Reliable Enterprises, Inc. v. S.Ct* (1984) 158 Cal. App. 3d 604, 616)) because:

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A. The Court's July 30, 2008 Minute Order was valid;

B. Respondents had actual knowledge of the Order which was made orally in court by the Honorable Ann I. Jones while Respondent's attorneys were present and as noted in their proposed Stipulation;

C. Respondent's had the ability to comply with the order (they actually had the ability to comply since August, 2006 when originally requested per the Stipulation)

D. Respondents are in willful disobedience of the Order as they had personal notice of the contents of the order.

53. The above paragraphs 36 through 50 and 51-52 give sufficient notice to Opposing Counsel under CRC 3.1203 for the Court to issue an OSC re: Contempt. (C.C.P. 1212)

54. If the Court does not find that Respondents *willfully disobeyed* the May 30, 2008 Order to provide the non-binary form of the "*raw input data*" to Counsel by August 4, 2008, then as Respondents "*failed to obey*" the Court's Order (C.C.P. 2023.010(g)), sanctions are required under:

A. C.C.P. 2023.030(b), designating as a fact that Respondents violated PRC 21005(a) by failing to comply with the information disclosure provisions required by CEQA, and precluded relevant information from being presented which constituted a prejudicial abuse of discretion within the meaning of section PRC 21168 and PRC 21168.5; or,

B. C.C.P. 2023.030(c), issuing an evidentiary sanction because Respondents violated PRC 21005(a) by failing to comply with the information disclosure provisions required by CEQA, and precluded relevant information from being presented which constituted a prejudicial abuse of discretion within the meaning of section PRC 21168 and PRC 21168.5; or,

C. C.C.P. 2023.030(d), by finding that as Respondents violated PRC 21005(a) by failing to comply with the information disclosure provisions required by CEQA, and precluded relevant information from being presented which constituted a prejudicial abuse of discretion within the meaning of section PRC 21168 and PRC 21168.5, the Court will find that the decision by the City Counsel to adopt the recommendations of the CLA was made without compliance with CEQA ands enter an order consistent with PRC 21168.9(a)(1), voiding the February 23, 2007 decision by the City Counsel and rejecting the return to the Writ.

III. CONCLUSION

55. Cohen incorporates by reference hereat his Opposition to the Motion of Respondents to Overrule the Objections and for an Order to Discharge the Writ.

56. As reported in the July 14, 2006 hearing transcript at page 646, lines 9-10, Ms. Pfan represented to the Court, "We are proceeding in accordance with CEQA." Then, during the February 27, 2007 hearing, Ms. Pfan represented:

> **"A peer review is just sort of a term of art for having experts look at a topic. There's no requirement of how you go about doing it or whether or not you have to send it to certain agencies or whether or not you have to write up certain findings on the peer review. It's simply a study."**
> **(AR 7:403, lines 5-11)**

57. Assistant City Attorney, Ms. Pfan abused the process by misrepresenting to the City Council that CEQA did not require notification to responsible agencies, despite PRC 21080.3(a), and further abused the process by failing to address to the City Council, that an initial study is the second requirement in the CEQA process.

58. CEQA was intended to be, " ... a comprehensive scheme designed to provide long-term protection to the environment ...interpreted to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Mountain Lion Foundation v. Fish & Game Com.* (1997) 16 Cal. 4th 105, 112) The purpose of CEQA is, " ... to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR protects not only the environment but also informed self government. To this end, public participation is an essential part of the CEQA process." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal. 4th 1112, 1123)

59. And yet, rather than conducting a proper initial study with notification to responsible agencies for receipt of their *raw input data*, to afford the fullest protection for the environment and to inform the public and responsible officials of the environmental consequences for the protection of informed self government, Respondents instead determined to conduct a "*peer review*," call it a simple study, and refused to disclose their selected *raw input data.*

60. It is clear that the written evidence in the record (AR5: 853-936; AR5:94-980; AR7:1312-1331) along with the verbal presentations in the public review period was considerable, substantial

enough to require a Subsequent or Supplement to the EIR. It is also clear that the lead agency did not consider the evidence properly presented by interested parties warranting the court to find an abuse of discretion. (*Citizens for a Sensible Development of Bishop Area v. County of Inyo*, 172 Cal. App. 3d @ 172-173)

61. If the authority of the court is to *police the process,* then, the court must find that with respect to CEQA, the decisions of the Respondents with respect to deciding on a selective "*peer review*" rather than a proper study and, deciding not to provide a Subsequent or Supplement to the EIR were arbitrary, capricious, lacking in evidentiary support from the suppression of the *raw input data*, or, unlawfully or procedurally unfair.

63. Cohen respectfully requests that the Court enter an order that the process Respondents engaged to determine whether a Subsequent or Supplement to the EIR was required was an abuse of discretion, suppressed information under Evidence Code 413, failed to provide adequate information to the public and state agencies, violated PRC 21005(a), violated its May 30, 2008 Order and then enter an order consistent with PRC 21168.9(a)(1) and reject the Return to the Writ.

Dated: August 11, 2008

Respectfully Submitted

DENNIS PALMIERI
Counselor and Attorney
Attorney for Petitioner
DANIEL L. COHEN

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DECLARATION OF DENNIS PALMIERI IN SUPPORT OF PETITIONER DANIEL L. COHEN'S FURTHER OBJECTIONS TO THE RETURN TO THE PEREMPTORY WRIT OF MANDATE

I, DENNIS PALMIERI, do hereby declare

1. I am an attorney duly licensed to practice in the State of California and I am representing Petitioner Daniel L. Cohen ("Cohen") in the within matter, ETINA, et al v. City of Los Angeles, et al., Case No. BS 072182

2. In this declaration I am stating facts which are within my personal knowledge to which I could and would competently testify if called as a witness.

3. On July 30, 2008, the Honorable Ann I. Jones issued an order for Respondents to provide the raw data on the CDM disks to me on or before August 4, 2008.

4. Photocopies of the CDM disks are contained at AR 2:299-301.

5. Susan Pfann, Assistant City Attorney representing the City of Los Angeles and Robert D. Crockett, representing Respondent Real Party In Interest Plsya Capital were present in court during the proceedings when the court made the order.

6. On August 4, 2008, at approximately 5:48 p.m., Respondents delivered 41 volumes of information which Respondents contend was raw output data on the CDM disks.

7. On August 5, 2008, Robert D. Crockett imparted information to me that:

A. The CDM disks also contained raw input data which was not in the 41 volumes of information served on me on August 4, 2008.

B. The 41 volumes only contained the output data from the raw input data.

C. If printed, the raw input data on the CDM disks would consume 500,000 pages of information which would need to be placed in approximately 200 boxes and he needed three weeks to print the material but would rather provide such material to me in a disk after he wrote a program so the information could be read.

8. Robert D. Crockett sent me a Stipulation to this effect. A true copy of the Stipulation is attached as Exhibit A.

9. Petitioner Daniel L. Cohen will not authorize execution of the Stipulation.

10. The Court's July 30, 2008 Minute Order was valid.

11. Respondents had actual knowledge of the Order which was made orally in court by the Honorable Ann I. Jones while Respondent's attorneys were present and as noted in their proposed Stipulation.

12. Respondent's had the ability to comply with the order and, they actually had the ability to comply since August, 2006.

13. Respondents are in willful disobedience of the Order as they had personal notice of the contents of the order.

I swear under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct.

Executed on this 11th day of August, 2008 at Malibu, California

DENNIS PALMIERI

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Exhibit A

LATHAM & WATKINS LLP
Robert D. Crockett (Bar No. 105628)
Courtney E. Vaudreuil (Bar No. 223439)
355 South Grand Avenue
Los Angeles, California 90071
Telephone: 213-485-1234
Facsimile: 213-891-8763

Attorneys for Real Parties In Interest
Playa Capital Company, LLC, Playa Investments, LLC, Playa Commercial Debt Company, LLC, Playa Phase I Apartments, LLC

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF LOS ANGELES

ENVIRONMENTALISM THROUGH INSPIRATION AND NON-VIOLENT ACTION ("ETINA"), a California non-profit corporation; GRASSROOTS COALITION, a California non-profit corporation; SPIRIT OF THE SAGE COUNCIL, a non-profit unincorporated association; JOHN DAVIS and DANIEL COHEN,

Petitioners,

v.

THE CITY OF LOS ANGELES; THE CITY COUNCIL OF THE CITY OF LOS ANGELES; DOES 1-10,

Respondents.

PLAYA CAPITAL COMPANY, LLC, a Delaware limited liability company, et al.,

Real Parties in Interest.

CASE NO. BS073182

Assigned To: Hon. Ann I. Jones
Dept. 40

STIPULATION OF PARTIES TO REVISE BRIEFING SCHEDULE

Hearing:

Date: August 18, 2008
Time: 8:30 a.m.
Place: Dept. 40

-17-

THE PARTIES, THROUGH THEIR RESPECTIVE COUNSEL, REPRESENT AS FOLLOWS:

1. On July 30, 2008, the Court issued an Order requiring the respondent to lodge with the Court, and personally serve on Petitioner Daniel Cohen's counsel Dennis Palmieri, a hard copy of the information contained on the disks represented on pages 2:299-301 of the Return to Writ administrative record, on or before August 4, 2008;

2. Real Parties in Interest Playa Capital et al. ("Playa Capital") represent that they attempted to lodge 41 volumes of hardcopy documents, but such volumes were rejected by the Court due to the fact that Department 40 is dark until August 15, 2008.

3. Playa Capital represents that on August 4, 2008, Playa Capital personally served Petitioner's counsel Dennis Palmieri with a copy of the 41 volumes of hardcopy documents.

4. Playa Capital represents that in preparing to comply with the Court's Order, Playa Capital learned that in addition to the 41 volumes of hardcopy documents, comprised of .pdf and text files from the disks, the disks contain well over half a million pages of additional material, and that most of that material is not properly read without specialized groundwater modeling software. Playa Capital represents that it can print out the data, but it will need to program the graphics software to do so. It will need approximately three weeks to complete the printout. It and that it would rather deliver the data on an external hard drive rather than in 500,000 pages of paper. This data production will contain the raw input data discussed in CDM's reports contained in the administrative record as well as within the 41-volume report discussed above.

5. The parties have met and conferred regarding the best method for the Petitioners to receive the additional materials.

6. On July 30, 2008, the Court issued an Order setting forth the following schedule, prior to Playa Capital's knowledge of the volume of amount of paper necessary to print out data included on the disks:

-18-

(a) Supplemental objections to be filed and served on or before August 11, 2008;

(b) Responses to the supplemental objections to be filed and served on or before September 10, 2008;

(c) Hearing on the supplemental objections set for September 24, 2008;

NOW THEREFORE, THE PARTIES, THROUGH THEIR RESPECTIVE COUNSEL, STIPULATE AND AGREE TO THE FOLLOWING SCHEDULE:

(a) On September 2, 2008, Petitioners shall file and serve any supplemental objections to the Return to Writ;

(b) On October 10, 2008, the City and Playa Capital shall file and serve any response to Petitioners' supplemental objections;

(c) The hearing date on Petitioners' supplemental objections shall be October 24, 2008 or as soon thereafter as the Court selects.

(d) The printouts of the data may be delivered in .pdf files to the Court and counsel in one external hard drive delivered to the Court and one to Mr. Palmieri by August 26, 2008.

(e) Nothing in this stipulation shall be deemed to waive any claims, defenses or arguments petitioners may have. The passage of time which may result from the additional time granted by the Court under this stipulation shall not be deemed as a waiver of any of petitioners' claims, defenses or arguments.

Dated: August __, 2008 LATHAM & WATKINS

-19-

Robert D. Crockett
Courtney E. Vaudreuil

By_____
Robert D. Crockett
Attorneys for Real Parties In Interest Playa Capital Company, LLC, Playa Investments, LLC, Playa Commercial Debt Company, LLC and Playa Phase I Apartments, LLC

Dated: August __, 2008

LAW OFFICES OF DENNIS PALMIERI

By_____
Dennis Palmieri
Attorneys for Petitioner Daniel Cohen

Dated: August __, 2008

LAW OFFICES OF TODD T. CARDIFF

By_____
Todd T. Cardiff
Attorneys for Petitioners ETINA and Grassroots Coalition

Dated: August __, 2008

By_____
John Davis, pro per

Dated: August __, 2008

ROCKARD J. DELGADILLO, City Attorney
SUSAN D. PFANN, Assistant City Attorney
TIMOTHY McWILLIAMS, Deputy City Attorney

By_____
Susan D. Pfann
Attorneys for Defendant
City of Los Angeles

***

ORDER

GOOD CAUSE APPEARING, IT IS SO ORDERED.

1. Petitioners shall file and serve their supplemental objections to the Return to Writ on or before September 2, 2008 and Respondents and Real Parties in Interest shall file and serve any response briefing on or before October 10, 2008.

2. The groundwater modeling data from the disks shall be delivered in .pdf files to Dennis Palmieri in an external hard drive, and a copy lodged with the Court in an external hard drive by August 26, 2008.

3. The hearing on the supplemental objections shall be on _____ at 8:30 a.m.

Dated:

By _____
Ann I. Jones
Superior Court Judge

-22-

PROOF OF SERVICE

STATE OF CALIFORNIA, COUNTY OF LOS ANGELES

I, Dennis Palmieri, declare as follows:

I am employed in the County of Los Angeles, State of California. I am over the age of 18 and not a party to the within action; my business address is: 28990 Pacific Coast Highway, Suite 110, Malibu, CA, 90265.

On August 11, 2008, I served the foregoing document described as a FURTHER OBJECTIONS OF PETITIONER, DANIEL L. COHEN TO RESPONDENT'S RETURN TO THE WRIT on the interested parties in this action:

[X] by personal delivery to law office of Robert D. Crockett and the law office of Susan Pfann and Kathleen O'Prey Truman at their addresses as listed on the service and mailing list;

[X] by e-mail to Todd Cardiff, Esq to his e-mail address, cardifflaw@cox.net and to John Davis at his e-mail address, jd@johnanthonydavis.com

[ ] by placing the true copies thereof enclosed in sealed envelopes with postage fully pre-paid thereon and addressed as stated on the attached service and mailing list.

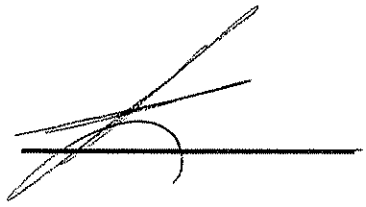
[ ] BY MAIL

[ ] I deposited such envelope in the mail at Malibu, California. The envelope was mailed with postage thereof fully prepaid. I am "readily familiar" with the firm's practice of collection and processing correspondence for mailing. Under that practice it would be deposited with U.S. postal service on that same day with postage thereon fully prepaid at Malibu, California in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

Executed on August 11, 2008, at Malibu, California.

[X] (State) I declare under penalty of perjury under the laws of the State of California that the above is true and correct.

[ ] (Federal) I declare that I am employed in the office of a member of the bar of this court at whose direction the service was made.



Dennis Palmieri

SERVICE AND MAILING LIST

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Susan Pfann
Assistant City Attorney
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CITY OF LOS ANGELES

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Playa Capital Company, LLC

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Todd T. Cardiff, Esq.
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Attorney for Petitioners
ETINA and Grassroots Coalition, Inc.

John Davis
P.O. Box 10152
Marina Del Rey, CA, 90295

D20

Todd T. Cardiff, Esq. (SBN 221851)
LAW OFFICE OF TODD T. CARDIFF
121 Broadway, Ste. 358
San Diego, CA 92101
Tel: (619) 546-5123
Fax: (619) 546-5133

Attorney for Petitioners
ETINA and Grassroots Coalition

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF LOS ANGELES, CENTRAL DISTRICT

ENVIRONMENTALISM THROUGH INSPIRATION AND NON VIOLENT ACTION ("ETINA") ET AL. Petitioners, v. CITY OF LOS ANGELES, ET AL. Respondents. PLAYA VISTA CAPITAL, LLC, ET. AL. Real Parties-in-Interest	Case No. BS073182 **PETITIONERS' ETINA AND GRASSROOTS COALITION'S NOTICE OF LODGMENT IN SUPPORT OF ADDITIONAL OBJECTIONS TO RETURN TO WRIT** Assigned for all purposes to: *Hon. Ann I. Jones* *Department 40* Hearing Date: Sept. 24, 2008 (rescheduled) Hearing Time: 10:00 a.m. Location: Dept. 40

TO ALL PARTIES AND THEIR COUNSEL OF RECORD:

PLEASE TAKE NOTICE that Petitioners ENVIRONMENTALISM THROUGH INSPIRATION AND NON VIOLENT ACTION ("ETINA") and GRASSROOTS COALITION have submitted true and correct copies of the following documents, attached hereto:

Exhibit 1 Documents from the Los Angeles Department of Sanitation, including

a. Industrial Waste Discharge Permits – table (dated 11/10/2005)

b. "Spider Map" Playa Vista – Phase 1 Industrial Waste Discharge Permits (dated 11/07/05)

c. Phase II Spidermap (dated 8/12/05)

Exhibit 2 Documents from the Regional Water Quality Control Board – Los Angeles Revised Fact Sheet, Waste Discharge Requirements for Playa Capital Company NPDES NO. CAG994004 (Order No. R4-2003-0111, CI 7648)

All such documents were previously authenticated by the Declaration of Patricia McPherson executed on May 30, 2008, and filed with the Notice of Motion and Motion to Augment. No objections to the authenticity of such documents were made.

I declare, under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct. Executed this 11th day of August, 2008, in the City of San Diego.

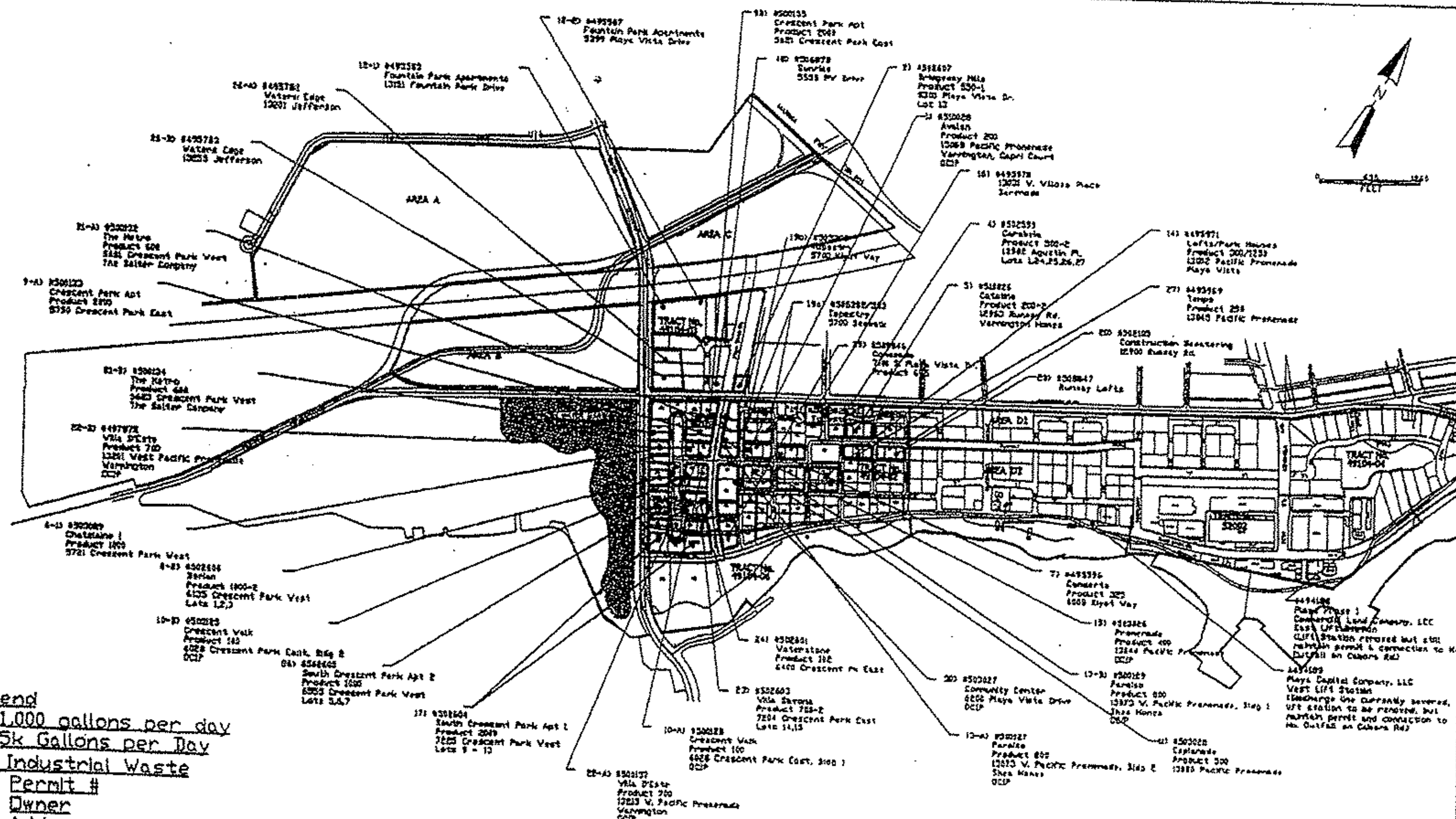
Todd T. Cardiff, Esq.

EXHIBIT 1

Playa Vista
Industrial Waste Discharge Permits

Map ID	Permit Number	Project Number	Project Name	Project Address	Permitted Discharge (gal/day)	Billing Company Name	Billing Contact Person	Billing Address
1	W-510026	200	Avalon	13068 Pacific Promenade	5,000	Avalon Maintenance Corp	Shelie Xanthos	16430 Roscoe Blvd. Ste 205 Bldg 3 Van Nuys CA 91406
2	W-502607	550-1	Bridgeway Mills	5300 Playa Vista Drive	1,000	Playa Capital	Accounting	12555 W Jefferson Blvd Ste 300 Los Angeles CA 90066
4	W-502599	500-2	Carabela	12982 Augstin Place	1,000	Playa Capital	Accounting	12555 W Jefferson Blvd Ste 300 Los Angeles CA 90066
5	W-510026	200-2	Catalina	12963 Runway Road	1,000	Catalina Maintenance Corp	Shelie Xanthos	16430 Roscoe Blvd. Ste 205 Bldg 3 Van Nuys CA 91406
25	W-503027	-	CenterPointe Club	6200 Playa Vista Drive	1,000	Playa Vista Parks & Landscape	Terrance Smith	6200 Playa Vista Dr Playa Vista CA 90094
32	W-503029	1000	Chatelaine	5721 Crescent Park West	1,000	Merit Property Management	Terrance Smith	25910 Acero St 2nd Fl Mission Viejo CA 92691
7	W-495596	325	Concerto	6008 Kiyot Way	5,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
20	W-502105	-	Construction	12900 Runway Road	1,500	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
29	W-508846	625	Coronado	7101 S. Playa Vista Drive	1,000	Warmington Group	Accounting	3090 Pullman Street Costa Mesa CA 92626
9-A	W-500133	2000	Crescent Park Apts	5750 Crescent Park East	5,000	Fairfield Residential LLC	Accounting	5510 Morehouse Dr Ste 200 San Diego CA 92121
9B	W-500135	2000	Crescent Park Apts	5821 Crescent Pk East	5,000	Fairfield Residential LLC	Accounting	5510 Morehouse Dr Ste 200 San Diego CA 92121
10-B	W-500121	100	Crescent Walk	6028 Crescent Park East, bldg 2	1,000	Crescent Walk @ PV	Shelie Xanthos	16340 Roscoe Blvd, Ste 205 Van Nuys CA 91406
10-A	W-500123	100	Crescent Walk	6028 Crescent Park East, bldg 1	1,000	Crescent Walk @ PV	Shelie Xanthos	16340 Roscoe Blvd, Ste 205 Van Nuys CA 91406
6-2	W-502606	1000-2	Dorian	6135 Crescent Park West	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
11	W-503028	500	Esplanade	13080 Pacific Promenade	1,000	Merit Property Management	Terrance Smith	25910 Acero St 2nd Fl Mission Viejo CA 92691
	W-507619	-	Firestation	5460 Playa Vista Drive		Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
12-1	W-495585	-	Fountain Park Apts	13151 Fountain Park Drive	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
12-2	W-495587	-	Fountain Park Apts	5399 Playa Vista Drive	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
14	W-495971	300/1250	Lofts/Park Houses	13002 Pacific Promenade	5,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
13-A	W-500127	800	Paraiso	13073 Pacific Promenade, bldg 1	1,000	Shea Homes	Melinda Kuhn	603 S Valencia Ave Brea CA 92823
13-B	W-500129	800	Paraiso	13073 Pacific Promenade, bldg 2	1,000	Shea Homes	Melinda Kuhn	603 S Valencia Ave Brea CA 92823
15	W-503026	400	Promenade	13044 Pacific Promenade	1,000	Western Pacific Housing	Rodney Singh	6701 Center Dr W #900 Los Angeles CA 90066
8	W-508847	850	Runway Lofts	12920 W. Runway Road		Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
16	W-495970	825	Serenade	13031 W. Villosa Place	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
17	W-502604	2000	South Crescent Park Apts 1	7225 Crescent Park West	10,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
26	W-502605	2000	South Crescent Park Apts 2	6555 Crescent Park West	5,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
18	W-500131		Sunrise	5555 Playa Vista Drive	-			
19	W-505382	900	Tapestry	5700 Seawalk Drive	1,000	Tapestry Maintenance Corp.	Bruce Ratliff	16340 Roscoe Blvd, Ste 205 Van Nuys CA 91406
19.	W-505383	900	Tapestry	5701 Kiyot Way	1,000	Tapestry Maintenance Corp.	Bruce Ratliff	16340 Roscoe Blvd, Ste 205 Van Nuys CA 91406
27	W-495969	250	Tempo	13045 Pacific Promenade	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
	W-500124	-	Test Site 2	12890 Discovery Creek Road		Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
21-A	W-500132	600-1	The Metro	5681 Crescent Park West	1,000	Crescent Park Ventures	Accounting	1663 Sawtelle Blvd Los Angeles CA 90025
21-B	W-500134	600-1	The Metro	5625 Crescent Park West	1,000	Crescent Park Ventures	Accounting	1663 Sawtelle Blvd Los Angeles CA 90025
22-B	W-510025	700	Villa D'Este	13201 West Pacific Promenade	1,000	Villa D' Este	Shelie Xanthos	16340 Roscoe Blvd, Ste 205 Van Nuys CA 91406
22-A	W-500137	700	Villa D'Este	13215 West Pacific Promenade	1,000	Villa D' Este	Shelie Xanthos	16340 Roscoe Blvd, Ste 205 Van Nuys CA 91406
23	W-502603	700-2	Villa Savona	7204 Crescent Park East	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
26-A	W-495782	-	Waters Edge	13201 Jefferson Boulevard	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
26-B	W-495783	-	Waters Edge	13255 Jefferson Boulevard	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
24	W-502601	102	Waterstone	6400 Crescent Park East	5,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
Total Permitted Discharge Volume					72,500			

Last Revision: 11/07/05
Printed: 11/10/2005, 2:37 PM



Legend
- ● 1,000 gallons per day
- ■ 5k Gallons per Day
- x) Industrial Waste
  - Permit #
  - Owner
  - Address

Note: Permittee is Playa Capital Company, LCC unless noted
~~OCIP Ownership Change in Progress~~

Playa Vista Site
5775 Centinela Avenue
Los Angeles, California 90046

TITLE:
Playa Vista - Phase 1
Industrial Waste Discharge Permits

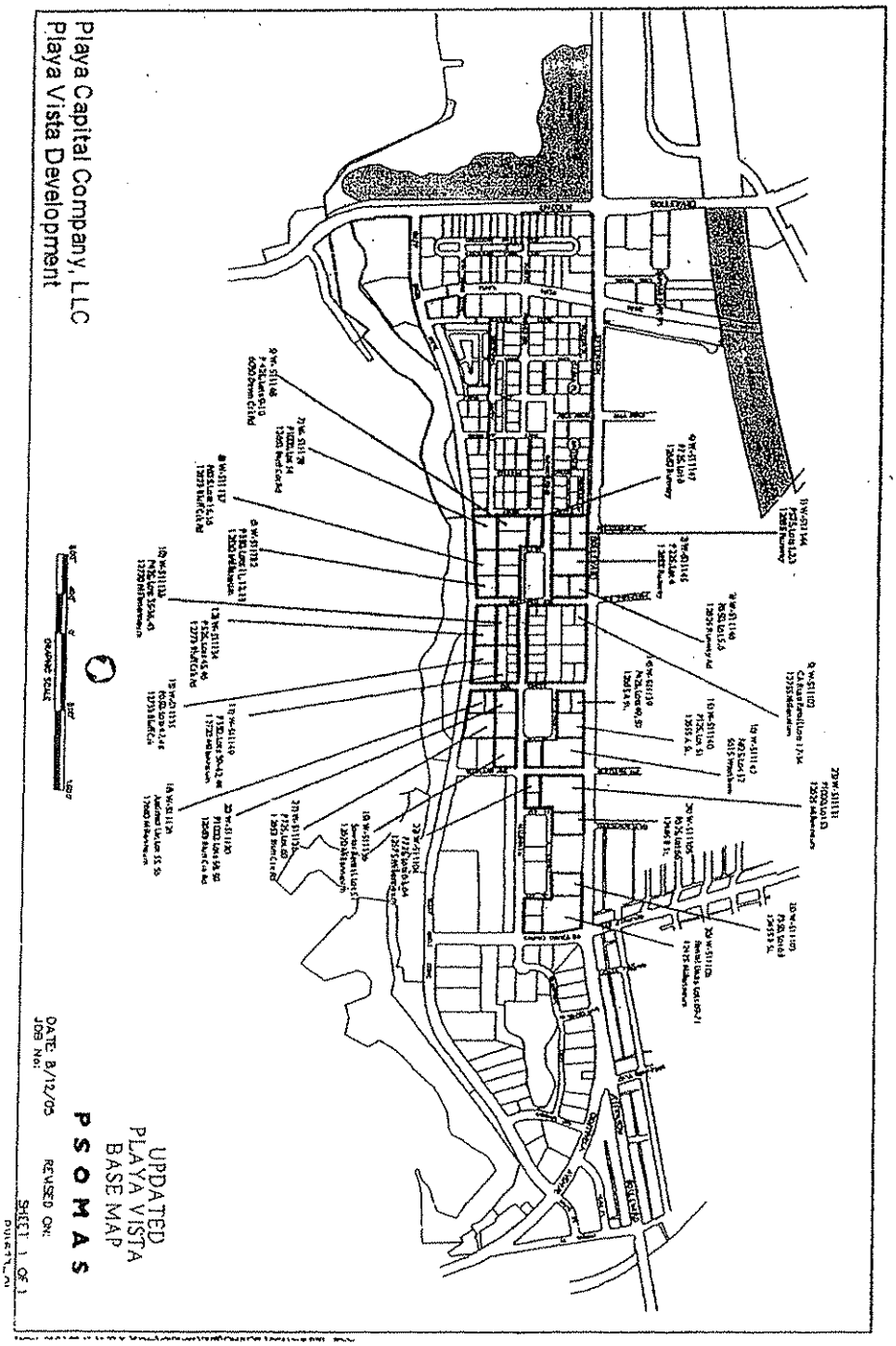

Playa Capital Company, LLC
Playa Vista Development
UPDATED
PLAYA VISTA
BASE MAP
PSOMAS
DATE: 8/12/05
JOB No:
REVISED ON:
SHEET 1 OF 1

EXHIBIT 2

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
320 West 4th Street, Suite 200, Los Angeles

REVISED FACT SHEET
WASTE DISCHARGE REQUIREMENTS
FOR
PLAYA CAPITAL COMPANY, LLC
(PLAYA VISTA)
NPDES NO. CAG994004
CI-7648

PROJECT LOCATION
Playa Capital Company, LLC
6775 Centinela Avenue
Los Angeles, California 90094

FACILITY MAILING ADDRESS
12555 W. Jefferson Boulevard, #300
Los Angeles, CA 90066

PROJECT DESCRIPTION

The Playa Vista Development is a residential/commercial development project and part of the Playa Vista Freshwater Wetland Project. The dewatering activities include Riparian Corridor construction and excavation and installation of a liner. Dewatering activities may occur concurrently in more than one area at the site. Playa Capital Company expects to discharge permanent subterranean dewatering flows to the sanitary sewer. In the April 13, 2006, letter, Playa Capital Company requested to relocate the discharge outfall No. 01 from the Riparian Corridor east of Lincoln Boulevard to the Riparian Corridor west of Lincoln Boulevard.

VOLUME AND DESCRIPTION OF DISCHARGE

Playa Capital is authorized to discharge groundwater from dewatering activities to the storm drain system at the following locations, below (See also Figure 1). Discharges from the outfalls listed below flow to Centinela Ditch or the storm drain, through Ballona Wetlands, to Ballona Creek, a water of the United States.

Outfall	Location	Latitude	Longitude	Maximum Daily Flow (gallons per day)
01	Teale St., West of Lincoln Blvd.	33° 57' 57"	118° 25' 32"	500,000
02	North East corner of Bay St. and Jefferson Blvd.	33° 58' 26"	118° 25' 39"	50,000
03	Central Drain on Lincoln Blvd between Teale St. and Jefferson Blvd.	33° 58' 13"	118° 26' 01"	400,000

Certain areas of the Playa Vista Development Project are also subject to a groundwater cleanup effort under General NPDES Permit CAG834001. The area proposed for

dewatering under this permit is located at least 800 feet from the areas of known or suspected contamination. However, Playa Capital will maintain a settling tank, bag filter, activated carbon, and Zeolite treatment facilities on site to treat any groundwater contamination that may be encountered. See Figure 2 for a schematic of treatment flow diagram.

APPLICABLE EFFLUENT LIMITATIONS

Based on the information provided in the NPDES Application Supplemental Requirements, and previous monitoring reports, the following constituents listed in the Table below have been determined to show reasonable potential to exist in the discharge. The discharge of treated groundwater flows to Ballona Creek; therefore, the discharge limitations under the "Other Waters" and "saltwater waterbodies" columns apply to your discharge

This table lists the specific constituents and effluent limitations applicable to the discharge.

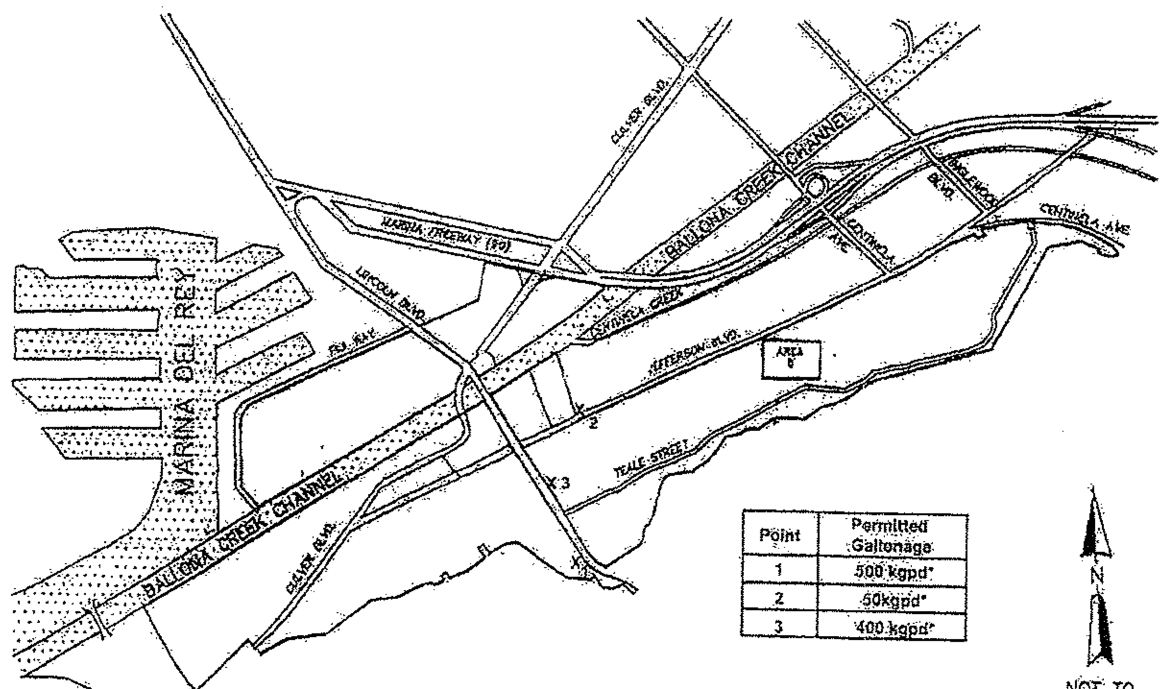
Constituents	Units	Discharge Limitations	
		Daily Maximum	Monthly Average
Total Suspended Solids	mg/L	150	50
Turbidity	NTU	150	50
$BOD_5 20^{\circ}C$	mg/L	30	20
Oil and Grease	mg/L	15	10
Settleable Solids	ml/L	0.3	0.1
Sulfides	mg/L	1.0	---
Phenols	mg/L	1.0	---
Residual Chlorine	mg/L	0.1	---
Methylene Blue Active Substances (MBAS)	mg/L	0.5	---
Organic Compound			
Trichloroethylene	µg/L	5.0	---
Metals			
Arsenic	µg/L	50	29
Copper	µg/L	5.8	2.9

FREQUENCY OF DISCHARGE

The discharges will be intermittent.

REUSE OF WATER

There are no other feasible reuse options for the groundwater other than for dust control purposes at the site. Therefore, the majority of pumped and treated groundwater will be discharged to the storm drain.



Point	Permitted Gallonage
1	500 kgpd*
2	50kgpd*
3	400 kgpd*

Legend

X Point of Entry to FWM

*kgpd = 1000 gallons per day

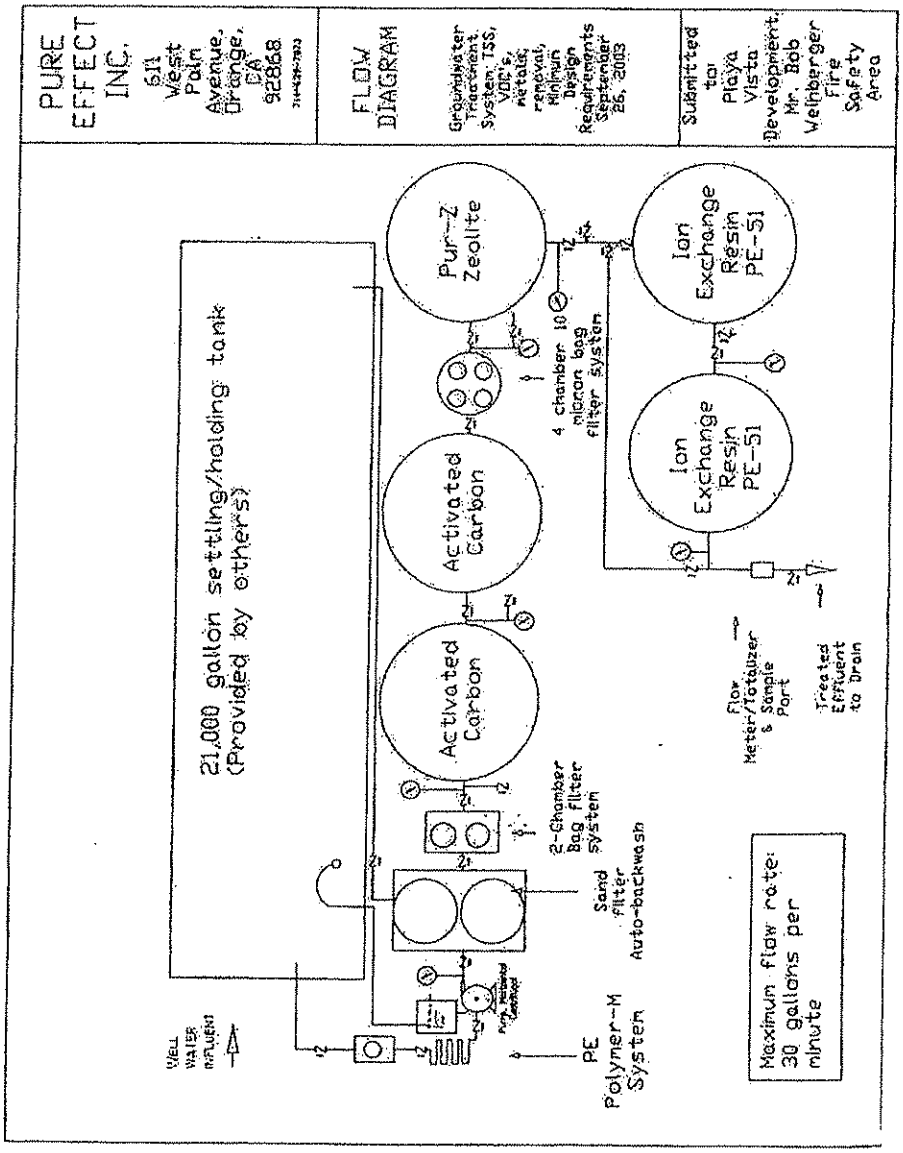
Figure 1

TITLE:

Point of Entry to FWM
NPDES Permit #CAG994004

Playa Vista Site

Figure 2


PURE EFFECT INC.
611 West Palm Avenue, Orange, CA 92868
FLOW DIAGRAM
Groundwater Treatment System, TSS, VOC's, Metals removal, Minimum Design Requirements September 26, 2003
Submitted to: Playa Vista Development, Mr. Bob Wehlberger Fire Safety Area
21,000 gallon settling/holding tank (Provided by others)
Pur-Z Zeolite
Activated Carbon
Activated Carbon
Ion Exchange Resin PE-51
Ion Exchange Resin PE-51
4 chamber 10 micron bag filter system
2-Chamber Bag Filter system
Sand filter Auto-backwash
PE Polymer-M System
Well water influent
Flow Meter/Totalizer & Sample Port
Treated Effluent to Drain
Maximum flow rate: 30 gallons per minute

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Attorney for Petitioners
ETINA and Grassroots Coalition

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF LOS ANGELES, CENTRAL DISTRICT

ENVIRONMENTALISM THROUGH INSPIRATION AND NON-VIOLENT ACTION ("ETINA") ET AL. Petitioners, v. CITY OF LOS ANGELES, ET AL. Respondents. PLAYA VISTA CAPITAL, LLC, ET. AL. Real Parties-in-Interest	Case No. BS073182 **PETITIONERS' ETINA AND GRASSROOTS COALITION'S ADDITIONAL OBJECTIONS TO RETURN TO WRIT** Assigned for all purposes to: *Hon. Ann I. Jones* *Department 40* Hearing Date: Sept. 24, 2008 (rescheduled) Hearing Time: 10:00 a.m. Location: Dept. 40

Respectfully submitted,

DATE: August 11, 2008

Todd T. Cardiff, Esq.
Attorney for Petitioner
ETINA and Grassroots Coalition.

ENVIRONMENTALISM THROUGH INSPIRATION AND NON-VIOLENT ACTION ("ETINA") and GRASSROOTS COALITION (collectively "Petitioners") submit these additional objections to the Return to Writ requested by City of Los Angeles' ("City") and Playa Capital, et. al. ("Playa Vista" or collectively, "Respondents"). Because there is some confusion as to the meaning and intent of the Court's July 30, 2008 Minute Order denying Petitioners' Motion to Augment the Administrative Record, and Petitioners' subsequent ability to cite to and produce evidence demonstrating a violation of the information disclosure policies of CEQA, the first part of this brief will address CEQA without citing to extra-record evidence. A SEPARATE AND SEVERABLE second part of the brief will discuss the documentary evidence which demonstrates that Respondents failed to disclose relevant information which precluded informed decisionmaking. Such two-part approach will permit the Court to consider or exclude the second part of the brief, without affecting the arguments in the first part of the brief.

PART I

CEQA, at its very heart, is an informational process. One of the basic purposes of CEQA is to "Inform governmental decisionmakers and the public about the potential significant environmental effects of proposed activities." (Guidelines § 15002(a)(1).)[1] One of the goals of an environmental impact report (EIR) is to "demonstrate to an apprehensive citizenry that the agency has in fact analyzed and considered the ecological implications of its action." (*No Oil v. Los Angeles* (1974) 13 Cal. 3d 68, 86.) Thus, "[CEQA] must be open to the public, premised upon a full and meaningful disclosure of the scope, purposes, and effect of a consistently described project." (*County of Inyo v. City of L.A.* (1984) 160 Cal. App. 3d 1178, 1185.)

In keeping with the informational nature of CEQA, the Public Resources Code mandates:

> Information relevant to the significant effects of a project, alternatives, and mitigation measures which substantially reduce the effects shall be made available as soon as possible by lead agencies, other public agencies, and interested persons and organizations.

[1] CEQA Guidelines are located at Volume 14 of the California Code of Regulations 15000 et.seq.

(Pub. Res. Code § 21003.1(b).)

Furthermore, "CEQA protects not only the environment but informed self-government." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 392.) "If CEQA is scrupulously followed, the public will know the basis on which its responsible officials either approve or reject environmentally significant action, and the public, being duly informed, can respond accordingly to action with which it disagrees." (*Id.*) Obviously, CEQA cannot accomplish its purpose if either the process or final document fails to disclose relevant information regarding significant impacts.

In keeping with the informational purpose of CEQA, the Public Resources Code states that non-compliance with the informational disclosure provisions of CEQA may constitute a prejudicial abuse of discretion, regardless of whether non-compliance would have changed the lead agency's decision.

> [N]oncompliance with the information disclosure provisions of this division which precludes relevant information from being presented to the public agency, or noncompliance with substantive requirements of this division, may constitute a prejudicial abuse of discretion within the meaning of Sections 21168 and 21168.5, regardless of whether a different outcome would have resulted if the public agency had complied with those provisions.

(Pub. Res. Code § 21005.)

"A prejudicial abuse of discretion occurs if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal. App. 3d 692, 712; *Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors* (2001) 87 Cal. App. 4th 99, 118; *See also, Sierra Club v. State Bd. of Forestry* (1994) 7 Cal. 4th 1215, 1235 (discussing timber harvesting plans).) Because the omission of relevant information is a violation of the procedural requirements of CEQA, a harmless error analysis is inapplicable and a failure to comply is automatically an abuse of discretion. (*County of Amador v. El Dorado County Water Agency* (1999) 76 Cal. App. 4th 931, 946; *State Water Resources Control Bd. Cases* (2006) 136 Cal. App. 4th 674, 723.) However, not every omission, regardless of how minor, is a per se abuse of discretion. (*Association of Irritated Residents v. County of Madera* (2003) 107 Cal. App. 4th 1383, 1391.) "The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure" (*County of Amador, supra,* 76 Cal. App. 4th at 954.)

As will be discussed below, not only did the City fail to present evidence from the Department of Sanitation, it failed to inform the Regional Water Quality Control Board that it was going through a CEQA process to evaluate the impacts of dewatering activities. This failure to disclose evidence, and the failure to inform trustee agencies of the CEQA process, prevented relevant information from being presented to the City Council. The City Council could not have made an informed decision lacking information about the extent of actual and potential dewatering activities.

A. The City's Failure to Disclose and Analyze Actual Data from the Department of Sanitation Constitutes a Prejudicial Abuse of Discretion.

The City's Chief Legislative Analyst Report process had a very narrow scope. It expressly limited the scope of review to solely "the potential for subsidence" and "exacerbation of existing groundwater contamination" caused by groundwater dewatering in connection with methane mitigation systems. (3 RR 472.)[2] Petitioners dispute that this is the proper scope of review. Because the court ordered the City to vacate the methane mitigation measures (not just the dewatering system), the City was required to look at all issues regarding such methane mitigation systems, not just to subsidence and contamination. Nevertheless, even *assuming arguendo* that the City could narrowly limit its review of the methane mitigation measures to dewatering, the City failed to gather all relevant actual data to evaluate the impacts of dewatering. As such, the City abused its discretion. (Pub. Res. Code § 21005.)

The CLA report is very specific on what the Peer Reviewers reviewed. The Peer Reviewers examined the modeling study prepared by Playa Vista's consultants, CDM, correspondence between CDM, Los Angeles Department of Building Services and the Regional Water Quality Control Board, allegedly the original EIR and public comment. (3 RR 473-78.) What is missing is any review of actual data from the Los Angeles Department of Sanitation. There are no Department of Sanitation documents in the record showing actual or permitted groundwater discharges into the City's sewer system.

Without reviewing existing permits and data from the Department of Sanitation, the agency responsible for accepting water from dewatering activities, there is no possibility that the CLA report complied with CEQA. "Impacts of the project must be measured against the real conditions on the

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[2] [volume] return record [page number]. Please note that the previous citation at page 4, lines 5-6 of Petitioners' Opposition to Return to Writ incorrectly cited to 3 RR 373. The correct citation is 3 RR 472.

ground." (*Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors* (2001) 87 Cal. App. 4th 99, 121 (citations omitted).) The City cannot simply rely on modeling data provided by Playa Vista, which has an economic interest in downplaying, limiting and minimizing the potential impacts of dewatering. (*See Id.* at 126 (discussing problems of relying solely on applicant's data).) The City cannot delegate to Playa Vista (or the public) the duty to gather necessary baseline information. (*Id.* at 122.)

Furthermore, the City cannot claim ignorance of the requirement to consider data from the Department of Sanitation. Afterall, the Peer Reviewer specifically noted that the water was discharged into the sanitary sewer, and also noted that "The water disposal has been installed pursuant to an industrial waste permit issued by the Bureau of Sanitation." In other words, the Peer Reviewer knew of the availability of existing hard data, but failed to review such data.

Petitioners specifically requested the City review its files from the Department of Sanitation in its "Notice of Information Required for Adequate CEQA Review" (5 RR 986.) In addition, a number of people questioned the lack of actual data from the Department of Sanitation. (*See e.g.,* 2 RR 428; 7 RR 1328; 1357.) In fact, five months before the final decision, Patricia McPherson stated in a public hearing "The Department of Sanitation has 65 - - 65 groundwater dewatering permits for the site at Playa Vista. You chose five building to look at. You didn't give [the Peer Reviewers] a fair model to begin with." (7 RR 1357:line 24 to 1358: line 3.) The City simply ignored such comment and pretended that the Department of Sanitation did not exist.

Respondents will likely argue, as they did in their Opposition to the Motion to Augment, that Petitioners could have obtained such data from the Department of Sanitation and included it in the record. Any assertion that its Petitioners' duty to review the City's files for the project, obtain the relevant documents, and re-submit such documents back to the City for review, is patently absurd. As discussed in the Guidelines, "The Lead Agency shall not knowingly release a deficient document hoping that public comments will correct defects in the documents." (Guidelines § 15020.) It is the City's duty, not the public's to do the proper environmental investigation. (*Save Our Peninsula, supra,* 87 Cal. App. 4th at 122; *Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d 296, 311.) The City violated the information disclosure provisions of CEQA by not producing records from the Department of Sanitation for the City Council and the public to review.

B. The City Abused Its Discretion By Failing to Inform the Regional Water Quality Control Board of its CEQA Review and Failing to Request the Appropriate Data.

Informing other governmental agencies that CEQA review is occurring is an incredibly important step in the CEQA process. Section 21080.3 of CEQA states:

> Prior to determining whether a negative declaration or environmental impact report is required for a project, the lead agency shall consult with all responsible agencies and trustee agencies. Prior to that required consultation, the lead agency may informally contact any of those agencies.

(Pub. Res. Code § 21080.3(a).)

Obviously, such consultation will only occur if the responsible or trustee agency is informed that it is evaluating a project (or a portion of a project) under CEQA. There is nothing in the record which demonstrates the City informed the Regional Water Quality Control Board (RWQCB) that it was participating in a CEQA process. The failure to inform a lead or trustee agency of the CEQA process constitutes a prejudicial abuse of discretion. (*Fall River Wild Trout Found. v. County of Shasta* (1999) 70 Cal. App. 4th 482, 492.)

This is not to imply that the RWQCB did not participate in the CLA process. However, the CLA process, according to the City's was not prepared under CEQA. As emphasized by Attorney Susan Pfann, "There's no requirement of how you go about doing [a peer review] or whether or not you have to send it to certain agencies...Its simply a study." (2 RR 403.) In this case, the City failed to inform the Regional Water Quality Control Board (RWQCB) of its CEQA process, instead simply requested the RWQCB review Playa Vista's modeling program. Petitioners' specifically objected to the City's failure to notify the RWQCB of the process thereby triggering full CEQA review. (5 RR 943.) By solely requesting a review of the modeling study prepared by CDM, the City prevented the RWQCB from fully participating in a manner required in a CEQA review process, and violated the information disclosure requirements of CEQA. (Pub. Res. Code § 21005.)

The City may argue that its failure to inform the RWQCB that it was participating in a CEQA process was not prejudicial because the RWQCB did make comments. Perhaps if the City had requested all the relevant data regarding dewatering at Playa Vista and Ballona Wetlands possessed by the RWQCB, the City would have an argument. However, there is no evidence in the record that the City

requested even basic data, such as NPDES permits or actual metering data, despite Petitioners' specific request for the City to review NPDES permits in its study of significant effects. (5 RR 986.)

D. The City Failed to Gather or Present Data Necessary for Determining Whether Dewatering Activities Were Cumulatively Considerable.

The lack of information from the RWQCB and Department of Sanitation is especially egregious when one considers the lack of analysis of cumulative impacts. A lead agency must determine not only whether direct and indirect effects of a project are significant, but must also consider whether such impacts are cumulatively significant. (Guidelines § 15064(h)(1).) A cumulative impacts analysis is necessary because "the outcome may appear startling once the nature of the cumulative impact problem has been grasped." (*Kings County Farm Bureau, supra,* 221 Cal. App. 3d at 721.) The City, by limiting its review to solely the five buildings identified by Playa Vista in its modeling data, failed to analyze whether all dewatering activities, when considered together, may be cumulatively significant.

Phase I of the Playa Vista Development consists of 3,426 residential units, 1.25 million square feet of office and light industrial space, 35,000 acres of retail space and 300 hotel rooms on 246.3 acres of land. ((Environmentalism Through Inspiration and Non-Violent Action, et. al. v. City of Los Angeles, 2005 Cal. App. Unpub. LEXIS 9697, at 3.) ("ETINA v. LA") Despite its massive size, there is no project description in the 2007 CLA Report describing how many buildings are a part of Playa Vista Phase I, nor how many buildings require dewatering systems. This data should have been easily obtainable from the Department of Sanitation which issues industrial wastewater permits for the dewatering systems. (3 RR 502.) The City Council was forced to consider the issue of the impacts of dewatering in a vacuum.

If one were to search exhaustively through the administrative record, one would find a table described as "Construction and Vesting Status of Playa Vista Phase I" that was submitted by Playa Vista on the date of the final hearing. (2 RR 226.) The table identifies 39 Buildings in the "west end of the first phase" (2 RR 226-29.) Of those 39 buildings identified by Playa Vista, 18 buildings are identified as having "ground-water dewatering system" Yet, the table fails to identify the volume of dewatering occurring at each building site. Such information is crucial to determining whether the dewatering at Playa Vista is cumulatively considerable.

Of course, as indicated by the description as "Playa Vista Phase I", there is also Playa Vista Phase II. Despite this well-known fact, there is also no analysis of Phase II dewatering activities. The 2007 CLA report indicates that the Peer Reviewers solely reviewed reports analyzing the potential impacts installed in Phase I of the Playa Vista development. (3 RR 473.) Analysis of the potential dewatering activities at Phase II is also critical for a cumulative impacts analysis. Finally, as indicated by the table identifying the buildings as the "west end of the First Phase", there is an "east end of Phase I" as well. There is no analysis of the actual or proposed dewatering activities at the east end of Phase I.

In addition, other dewatering activities independent of buildings must also be evaluated to determine whether there is a significant impact. It was incumbent on the City to request dewatering data from the RWQCB, the agency responsible for managing the States' water. Despite Petitioners' request that such data be evaluated, there is no evidence in the record that the City requested NPDES permits or flow meter data from the RWQCB. (5 RR 986.)

To properly analyze the potential cumulative impacts of dewatering requires a description and analysis of all dewatering activities at Playa Vista. This information is available from the Department of Sanitation and the RWQCB, but the City failed to request such information. There is no information in the record which describes NPDES permits of the Playa Vista site or actual discharge volumes into Ballona Wetlands. Without providing the total volume of all dewatering activities, neither the City nor the public can properly evaluate or participate in the public process. (See, Cadiz Land Co. v. Rail Cycle (2000) 83 Cal. App. 4th 74, 95 (failure to address the volume of groundwater in the aquifer constitutes prejudicial error).)

PART II

There is a genuine confusion as to the meaning of the Court's ruling on July 30, 2008 denying the Motion to Augment. The Court refused to augment the administrative record with the documents because they were not before the City Council at the time of the final decision. However, the Court also indicated in oral argument that such ruling was without prejudice to Petitioners' ability to bring such arguments under CEQA. What is unclear is whether Petitioners ability to bring such arguments in our additional objections, included the right to refer and cite to the documents excluded from the administrative record to establish non-compliance with the information disclosure requirements of

CEQA. (Pub. Res. Code § 21005.) Petitioners were unable to obtain a transcript of the hearing in time to resolve the dispute, and the court was unavailable for clarification of the issue.

It is absolutely clear, however, by reviewing the actual documents that the failure to obtain or provide the documents Petitioners' sought to augment constitutes an omission of relevant material. Because prejudice in not presumed under Public Resources Code section 21005(b), it is important for the court to consider the actual documents to determine whether the failure to include relevant information precludes informed decisionmaking and informed public participation.

CEQA is not intended to be a cat and mouse game, with the lead agency and applicant attempting to avoid evidence which contradicts its predetermined decision to approve the project. CEQA only functions when there is good faith effort at compliance and full disclosure. It is simply too great of a burden to expect the public to divine that the City and applicant are going to refuse to gather the relevant data. It is simply too great of a burden to expect the public to make up for the failure of the City to conduct the proper environmental investigation. The City cannot submit a legally deficient document hoping that the public will cure the deficiencies, or fail to identify the deficiencies. (Guidelines § 15020.)

A. Evidence From the Los Angeles Department of Sanitation and the Regional Water Quality Control Board Demonstrates the City and Playa Vista Violated Information Disclosure Requirements of CEQA.

Public Resources Code section 21005 states,

> [N]oncompliance with the information disclosure provisions of this division which precludes relevant information from being presented to the public agency . . . may constitute a prejudicial abuse of discretion.

There are number of ways that an applicant or a lead agency may fail to comply with the information disclosure requirements. (*See e.g. Fall River Wild Trout Found. v. County of Shasta* (1999) 70 Cal. App. 4th 482, 493 (failing to notify DFG); *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal. App. 4th 74, 95 (failing to identify size of aquifer); *Sierra Club v. State Bd. of Forestry* (1994) 7 Cal. 4th 1215 (failing to study endangered species); *Save Our Peninsula, supra,* 87 Cal. App. 4th at 122 (failing to use actual data).) In fact, many cases which have sought to strike down environmental impact reports have

sought to establish, through omission, that there has been non-compliance with the information disclosure requirements of CEQA. (*Association of Irritated Residents v. County of Madera* (2003) 107 Cal. App. 4th 1383, 1391.)

However, suppression of evidence is also a form of non-compliance. Evidence which clearly should be in the record, but has been improperly excluded, should be admissible to demonstrate a violation of Public Resources Code section 21005. Clearly evidence which has been withheld from the public, despite requests from the public for inclusion of such information, cannot be provided by the public. In addition, the public should be able to assume the lead agency will include documents which are required to be part of the administrative record under CEQA, such as documents in its own files on a project. (Pub. Res. Code 21167.6(e)(10).)

Such interpretation is supported by Western States which notes that extra-record evidence may be admissible to demonstrate procedural unfairness and agency misconduct. (*Western States Petroleum Ass'n v. Superior Court* (1995) 9 Cal. 4th 559, 575 n.5 & 579.) In *Western States,* the petroleum association sought to introduce newly created expert evidence, prepared after the close of the public hearing, to demonstrate that the Air Resources Board failed to consider all relevant factors. The Court held, "extra-record evidence can never be admitted merely to contradict the evidence the administrative agency relied on in making a quasi-legislative decision or to raise a question regarding the wisdom of that decision." (Id. at 579.) In contrast, Petitioners seek the court to consider documents already in the agency's files or trustee agency's files to demonstrate a procedural defect in the City's CLA process.

In this case, there is extra-record evidence from the Department of Sanitation which demonstrates that the level of dewatering is almost five-fold greater than that which was presented in Playa Vista's modeling study. (Notice of Lodgment, Ex. 1.)[3] Petitioners specifically requested such documents in the CLA process (5 RR 986.) The assertion that the public must independently dig through the City's own files to ensure that spider maps of Phase I and Phase II dewatering are before the City Council violates express CEQA policies placing the duty of environmental investigation squarely on the shoulders of the lead agency. (Guidelines § 15020; *Sundstrom, supra,* 202 Cal. App. 3d at 311.)

[3] The documents attached to the Notice of Lodgment have been previously authenticated by Patricia McPherson's declaration filed in conjunction with the Motion to Augment. Plaintiffs Request Judicial Notice of such declaration pursuant to Evidence Code section 452d. Respondents never objected to the authenticity of such documents.

Information concerning the actual state of dewatering in the City's own files on the Playa Vista would be critical to informed decision-making and required to be part of the record under CEQA. (Pub. Res. Code § 21167.6(e)(10).)

Even more egregious is the failure of the City to request and Playa Vista's failure to disclose evidence of NPDES permits in existence at the time of the hearing. Documents from the RWQCB demonstrate that 950,000 gallons a day of dewatering is occurring at the Playa Vista Site. (Ex. 2.) As evidenced by the 2003 permit number on page 2 of the document, such evidence was available to Playa Vista long before the 2007 CLA Report was adopted.

Respondents may attempt to argue that such dewatering is independent of the methane mitigation system. However, the document states, "The area proposed for dewatering under this permit is located at least 800 feet from the areas of known or suspected contamination." If dewatering is not occurring for the purpose of groundwater remediation, then it must be dewatering for the purpose of lowering the groundwater table, and therefore in connection with methane mitigation measures. In addition, the permit requires Playa Vista to maintain a settling tank, bag filter, activated carbon and Zeolite treatment in case the pumping encounters contamination. In other words, the RWQCB is concerned about expansion of the groundwater contamination...the same potential impact identified by the Court of Appeal. (*Environmentalism Through Inspiration and Non-Violent Action, et. al. v. City of Los Angeles*, 2005 Cal. App. Unpub. LEXIS 9697, at 36.)

The documents from the Department of Sanitation are unquestionably part of the City's file on the Playa Vista project and should have been made available to the City Council and the Public. (Pub. Res. Code section 21167.6(e)(10).) The failure to present such evidence to the public and City Council precluded informed decisionmaking and public participation and therefore violated CEQA. (Pub. Res. Code § 21005.) The documents from the RWQCB demonstrate that up to 950,000 gallons a day of dewatering is occurring at the Playa Vista site. Playa Vista, by failing to submit such relevant information to the decisionmaker, violated the information disclosure provisions of CEQA. (Pub. Res. Code 21003.1.) The suppression of such documents cannot be considered a good faith effort at full disclosure. The Return to Writ must be denied.

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Attorney for Petitioners
ETINA and Grassroots Coalition

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF LOS ANGELES, CENTRAL DISTRICT

ENVIRONMENTALISM THROUGH INSPIRATION AND NON VIOLENT ACTION ("ETINA") ET AL. Petitioners, v. CITY OF LOS ANGELES, ET AL. Respondents.	Case No. BS073182 **ETINA AND GRASSROOTS COALITION'S OPPOSITION TO RESPONDENTS AND RPI'S MOTION TO OVERRULE OBJECTIONS TO THE RETURN TO WRIT** Assigned for all purposes to: *Hon. Ann I. Jones* *Department 40* Hearing Date: May 14, 2008 Hearing Time: 8:30 a.m. Location: Dept. 40
PLAYA VISTA CAPITAL, LLC, ET. AL. Real Parties-in-Interest	

Respectfully Submitted:

DATE: March 1, 2008

Law Office of Todd T. Cardiff

Todd T. Cardiff, Esq.
Attorney for Petitioners
ETINA and Grassroots Coalition

I. INTRODUCTION

Petitioners offer this supplemental brief in opposition to Respondents' and Real Parties-in-Interests' latest motion to overrule our objections and approve the City of Los Angeles' ("City") Return to Writ. First, Petitioners will further discuss why the City latest actions failed to properly comply with CEQA. In addition, the City failed to comply with the writ in the first place, by failing to actually rescind its approval and stop construction of Playa Vista until the Court approved the return to the writ.

II. FACTS

Methane is highly flammable and can be explosive in concentration levels as low as 5%. (30 AR 7817[1]; 22 AR 5977.) Although methane is not toxic, it is known carrier for other toxic gases, including BTEX and H2S all of which are present at Playa Vista. (27 AR 7261; 29 AR 7582; 30 AR 7815.) Methane leaking into buildings is a serious cause for concern. In 1985, a methane explosion in the Los Angeles suburb of Fairfax injured 23 people at a Ross Dress-for-Less store. (5 RR 886.) Thus, the presence of high concentrations and releases of methane at the Playa Vista site is a cause for serious concern.

In 1993, the City of Los Angeles certified an EIR for the first phase of the Playa Vista Development which consists of 3,426 residential units, 1.25 million square feet of office and light industrial space, 35,000 acres of retail space and 300 hotel rooms on 246.3 acres of land. ((*Environmentalism Through Inspiration and Non-Violent Action, et. al. v. City of Los Angeles*, 2005 Cal. App. Unpub. LEXIS 9697, at 3.) ("*ETINA v. LA*") The City adopted a mitigated negative declaration (MND)/addendum to the EIR in 1995. (*Id.* at 4.) A second phase EIR for additional acres of development was recently rejected for among other things, issues on waste water. (*Santa Monica et. al. v. Los Angeles*, (2007) B189630, B189722 (consolidated).)

In 1999, large pockets of methane gas in subsurface geological formations were discovered at Playa Vista. (LA Ordinance 175790 (2004), preamble, fourth "whereas," Exhibit 1.) In response to this new information, the City directed the City's Chief Legislative Analyst (CLA) to prepare a report and

[1] AR = Administrative Record in (ETINA v. LA); RR = City's Administrative Record on Return to Writ.

public hearings on the safety of developing the Playa Vista site. (22 AR 6135-36; 28 AR 7337.) The CLA was to report back to the City Council's Planning and Land Use Management (PLUM) committee. (*ETINA v. LA*, at 5.) In 2001, the City approved new and experimental mitigation measures, still in a "progressive design stage" slated for use in the Playa Vista Project, after receiving reports from the CLA, the City's consultant, Exploration Technologies, Inc. (ETI) and John Sepich, Playa Vista's consultant (*ETINA v. LA*, at 8; LA Ordinance 175790, (2004) (fifth "whereas").)

The City's consultant found extremely high methane gas concentrations in the area. (1 AR 19; 28 AR 7478.) Because of the tremendous safety concerns at the Playa Vista site, the City's own consultant stated, "The safest approach would be to avoid building in this area; however, it is possible to build if it can be demonstrated that the methane is properly mitigated." (28 AR 7478.) These mitigation systems required methane mitigation measures below the slabs of each building, which include dewatering. (*ETINA v. LA*, at 35.) Playa Vista's own expert specifically noted the importance of dewatering: "permanent groundwater dewatering measures are also critical to insuring the proper operation of the methane mitigation measures." (*ETINA v. LA*, at 35.)

Not only were methane mitigation measures, including dewatering, required in every building, but 50 foot deep vent wells outside were also critical to safely mitigate the highest methane areas. (28 AR 7479.) The City's Consultant specifically noted:

> If the pump and treat or equivalent methane mitigation system is not effective or if Playa Capital does not install an appropriate mitigation system in the 50-foot gravel, ETI believes that development of the area should not proceed. Without the proper mitigation of the methane present, a dangerous situation exists at the site. No further development should be allowed on this site until these mitigation issues are resolved.

(28 AR 7479; *See also* 5 RR 899-900, describing the dewater mitigation measures in the 50 ft. gravel aquifer.)

One of the reasons the City's consultant was so adamant about dewatering the 50 ft vent wells was because previous pilot test wells failed without dewatering. As noted in ETI's report, "most of these attempts to install gas vent wells failed because the shallow silts at the top of the 50-foot gravels were to unconsolidated to remain open. The wells were clogged by unconsolidated clastic sediment and were invaded by water, which shut off the gas flow." (5 RR 917.)

On June 5, 2001, the PLUM committee considered the City's CLA report, endorsed the CLA's recommendations and recommended the City Council adopt the mitigation measures in the CLA report. On June 12, 2001, the City Council approved the committee's recommendations thereby adopting the CLA reports' recommendations as mitigation measures for the Playa Vista Development. No CEQA process or findings were made by the City. Petitioners timely filed a petition for writ of mandate.

The Appellate Court, in overturning the City's decision, found "Groundwater Dewatering in Connection with the Methane Mitgation Measures is a Potentially Substantial Change in the Project." (*ETINA v. L.A*, at 35.) The Court held that, because the City failed to determine whether a subsequent or supplemental EIR was required, the "appropriate remedy…is to order the city to make that determination and to vacate its approval of the methane mitigation measures until it makes the determination under CEQA and complies with CEQA." (Id. at 39-40.)

On February 23, 2006, the trial court, upon remand issued a peremptory writ of mandate which states:

> YOU ARE HEREBY COMMANDED immediately upon receipt of this Writ to vacate your approval of the methane mitigation measures for the Playa Vista First Phase Project, for the purpose of determining whether a subsequent EIR or supplemental EIR is required with respect to groundwater dewatering, and proceed accordingly as required by CEQA.

(Writ of Mandate, filed Feb. 23, 2006.)

On March 31st, 2006, the City passed an oral Resolution vacating its prior decision approving the methane mitigation measures which states:

> VACATE the approval of the methane mitigation measures for the Playa Vista First Phase Project, for the purpose of determining whether a subsequent Environmental Impact (EIR) or a supplemental EIR is required with respect to groundwater dewatering.

(Writ of Mandate, filed Feb. 23, 2006.) The motion failed to include the language, "and proceed in accordance with CEQA" as required by the writ.

Despite the vacation of the methane mitigation measures, construction at Playa Vista continued. The Los Angeles Department of Building and Safety (LADBS) continued to issue building permits for methane mitigation systems, continued to pump water from the ground in connection with the mitigation measures, issued temporary certificates of occupancy for buildings within Playa Vista Phase

I project. (Exhibit 2.) In addition, in response to a Public Records Act request, the Los Angeles Fire Department claimed to have never received notice of the writ. (LAFD Resp. to Grassroots PRA, Jan. 28, 2008 at p.2, Quest. 5., Exhibit 3.)

On February 7, 2007, the City issued another CLA report consisting of 18 pages. ("2007 CLA Report", 3 RR 468.) The CLA reports very specifically limited the scope of the review to solely "the potential for subsidence" and "exacerbation of existing groundwater contamination" (3 RR 373.) The CLA report ignored all comments outside of such issues, and even failed to notify the Department of Fish and Game which specifically requested "a copy of any mitigation plan, dewatering plan, or any document prepared to comply with the California Environmental Quality Act (CEQA) for its review and comment that identified potential impacts to the Ballona Wetlands Ecological Reserve or any wetland mitigation site approved as part of the Playa Vista Development Project. (Fish and Game Letter dated January 10, 2006, Exhibit 4.)

On February 27, 2008, the City rescinded its prior "vacation" of the methane mitigation measures. (1 RR 1.) The City found solely based on the requirements of 15162 that there was no substantial evidence in the record to require a subsequent EIR. (1 RR 4.)

III. STANDARD OF REVIEW

It is unclear whether the City claims that its 2007 CLA report is an addendum to the EIR, or some other non-CEQA document. (Guidelines §§ 15162, 15164.) The Court is to determine whether the City abused its discretion. "An abuse of discretion is established if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence." (Pub. Res. Code § 21168.5.)

"The Legislature intended the CEQA to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Friends of Mammoth v. Bd. of Supervisors* (1972) 8 Cal. 3d 247, 259.) "Only by requiring the [lead agency] to fully comply with the letter of the law can a subversion of the important public purposes of CEQA be avoided." (*Citizens of Goleta Valley v. Bd. of Supervisors* (1988) 197 Cal. App. 3d 1167, 1176 ("Goleta I") (citation omitted.) "[The Court] can and must scrupulously enforce all legislatively mandated CEQA requirements." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d

553, 564 ("Goleta II").) If the City has failed to follow the letter of the law, then the decision or determination must be overturned.

Not only must the court determine whether the City complied with the exact letter of the law, but it must also determine whether its findings or decision is supported by substantial evidence. In this case, the City was required to make a finding whether a subsequent or supplemental EIR was required. The standard of review "is whether the record as a whole contains substantial evidence to support a determination that the changes in the project were not so 'substantial' as to require 'major' modifications to the EIR." (*Bowman v. City of Petaluma* (1986) 185 Cal. App. 3d 1065, 1075.) Whether "substantial evidence" supports the City's decision is determined in light of the whole record. (Pub. Res. Code § 21168.) Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts. (CEQA Guidelines § 15384.)

However, in this case, the City and Real Parties-in-Interest have continued to build the project. Further, because the decision was made under compulsion of a court order, it must be specially scrutinized. (*Environmental Defense Fund, Inc. v. Coastside County Water Dist.* (1972) 27 Cal. App. 3d 695, 706) As the Court of Appeal noted in such case, "Since the project was then under way, there would be an understandable tendency to rationalize what was already done." (*Id.*) Thus, while the court may be applying a "substantial evidence test" it must closely scrutinize the whole record, including evidence contradicting the City to ensure that the City is not simply making a post-hoc rationalization of decisions it has already made. (*No Oil, Inc. v. Los Angeles* (1974) 13 Cal. 3d 68, 78.)

IV. LEGAL ARGUMENT

1. The City Violated CEQA by Failing To Prepare a Subsequent EIR, Supplemental EIR or an Addendum to the 1993 EIR.

The first issue is whether the City complied with the procedural requirements required by CEQA. As noted above, the court must scrupulously enforce the letter of the law of CEQA. (*Goleta Valley II, supra,* 52 Cal. 3d at 564.) If the City has failed to follow the letter of the law, in any way, then the decision or determination must be overturned. "Only by requiring the [lead agency] to fully comply with the letter of the law can a subversion of the important public purposes of CEQA be avoided." ("*Goleta Valley I, supra*, 197 Cal. App. 3d at 1176 (quoting *People v. County of Kern* (1974)

39 Cal. App. 3d 830, 842.) In this case, the City failed to properly prepare even an "addendum" when it decided not to require a subsequent EIR or supplemental EIR.

Once an EIR is prepared, a subsequent EIR shall only be prepared upon the next discretionary approval, and only when: 1. there are substantial changes in the project which requires major revisions to the EIR; 2. new circumstances which required major revisions to the EIR, or; 3. new information which demonstrates new impacts or that the impacts will be substantially more severe than the impacts analyzed in the EIR. (CEQA Guidelines § 15162.)

A lead agency may prepare a supplemental EIR when the conditions contained in Section 15162 are present, but only minor changes to the EIR are necessary to analyze the impacts. (CEQA Guidelines § 15163.) Both supplemental and subsequent EIRs require the same public notice and review as the original EIR. (CEQA Guidelines §§ 15162(d), 15163(c).)

A lead agency may prepare an addendum to the EIR, if a certified EIR requires some changes or additions, but none of the conditions outlined in Guidelines section 15162 are present. (CEQA Guidelines § 15164.) An addendum does not need to be circulated to the public, but the lead agency must explain to the public why a subsequent EIR is not being prepared. (CEQA Guidelines § 15164(c) & (e).) Such explanation must be supported by substantial evidence. (CEQA Guidelines § 15164(e).) "The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project." (Guidelines § 15164(d).)

There is one other option. As discussed in Section 15162, at the next discretionary decision, a lead agency may determine no additional documentation is required under CEQA. (Guidelines § 15162(b).) However, as indicated by reading section 15162, 15163, and 15164 in conjunction, the decision to prepare no additional CEQA documentation is only permitted when there are no changes required of the EIR, at all. If some changes or additions need to be made, depending on how major the changes are, either a subsequent or supplemental EIR, or an addendum must be prepared.

In this case, the City should have, at the very least, prepared an addendum to the EIR. As discussed by the Court of Appeal, the 1993 EIR failed to discuss dewatering issues in connection with methane mitigation measures. (ETINA, *supra,* at p. 36).) In fact, as noted by the City itself, the methane mitigation measures themselves are new. As is clearly stated in the City's own ordinance,

"WHEREAS, in 1999, large pockets of methane gas in subsurface geological formations were discovered at the Playa Vista project area of West Los Angeles." (City of LA Ordinance 175790, (2004).) Such ordinance then immediately states that "new methane mitigating systems" were developed and used in the Playa Vista Project. (Id.) The methane mitigation measures and the dewatering are changes to the project that require, at a minimum, some changes to the EIR. Thus, the City, at a minimum, must prepare an addendum under CEQA.[2] Because, as is demonstrated by the City's Notice of Determination, the City did not even prepare an addendum under CEQA, it violated CEQA, and therefore the Return to Writ must be denied.

2. The 2007 CLA Report Does not Constitute an Addendum Under CEQA, Because it is Completely Inadequate as an Informational Addition to the EIR.

The basic purpose of CEQA is to "inform governmental decisionmakers and the public about the potential significant environmental effects of proposed activities." (Guidelines § 15002.) "An EIR is an "environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return. The EIR is also intended to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." (*Laurel Heights I, supra*, 47 Cal. 3d at 392 (citations and internal quotes omitted).) While courts do not pass on the correctness of an EIR's environmental conclusion, they must consider the sufficiency of the EIR as an informational document. (Id.) Because an "addendum" becomes part of the EIR once approved, it must comply with the informational purposes of an EIR. It must be sufficient to inform the public about the scope of the changes to the project (in this case, the methane mitigation measures and dewatering efforts), the potential impacts, and how such impacts are mitigated to a level of insignificance.

The 2007 CLA report utterly fails as an informative document for a decision maker or the public. First, there is nothing in the 2007 CLA report which identifies itself as an addendum under CEQA or that it is modifying the 1993 EIR or previous CEQA documents in any manner. The closest the 2007 CLA Report comes to even mentioning the 1993 Final EIR, is a listing at the back of 2007

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[2] Petitioners believe that a supplemental EIR is the minimum the City could prepare. (Guidelines § 15163.)

CLA report, for "Additional documents Reviewed under the Initial Peer Review Reports." At the hearing approving the 2007 CLA Report and rescinding the vacation, there was no substantive discussion of the 1993 EIR or 1995 MND/Addendum. The City should have, at least, prepared some kind of list or table comparing the 1993 EIR and the 1995 MND/Addendum with the new methane mitigation measures and dewatering. (*American Canyon Community United for Responsible Growth v. City of American Canyon* (2006) 145 Cal. App. 4th 1062, 1073-74.) Without some analysis of the scope of the EIR, and the new information, there is no possibility the City Council could make an informed decision whether "substantial changes to the EIR" were necessary, requiring an EIR. (Guidelines § 15162.)

Secondly, an addendum, as the name implies, adds to the EIR. At a minimum, an addendum would need to describe the methane mitigation measures and the dewatering systems. Yet there is only the barest of descriptions of the methane mitigation measures or the dewatering systems in the 2007 CLA Report. (2007 CLA Report at 5) How many vent wells are needed at the Playa Vista site?[3] How many dewatering pumps? What is the maximum capacity of the dewatering pumps? Where are the vent wells? What are the depths of the lowest portions of the buildings compared to the height of the water table? How many acres of impervious lining needs to be installed to prevent methane seepages (and explosions). The public and the City Council are completely in the dark on these important issues. The failure to describe the methane mitigation measures and how it compares to the 1993 EIR is akin to have a legally deficient project description. (*County of Inyo v. Los Angeles*, (1977) 71 Cal. App. 3d 185, 193.) CEQA documents must be organized and written in a manner that will be meaningful to the decisionmaker and the public. (Pub. Res. Code § 21003(d).)

While, perhaps some of this information may be pieced together from looking through thousands of pages of documents, such facts are not included in the 2007 CLA report. The public is not required to "ferret out" information that should be clearly stated in an EIR, or in an addendum to an EIR. As discussed by the Supreme Court:

> The data in an EIR must not only be sufficient in quantity, it must be presented in a

[3] Petitioners discuss later the evidence that the 50 foot vent wells require dewatering.

> manner calculated to adequately inform the public and decision makers, who may not be previously familiar with the details of the project. "[I]nformation 'scattered here and there in EIR appendices,' or a report 'buried in an appendix,' is not a substitute for 'a good faith reasoned analysis.

(*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal. 4th 412, 442.)

All of the City's analysis is done in a vacuum of contextual information. The City's 2007 CLA report fails to accurately describe the scope of the previous EIR and MND/Addendum, the potential risks of methane nor the extent of the mitigation measures, making it impossible for the City Council and the public to accurately review the project, and the changes to the project. The City abused its discretion by failing to accurately describe the changes to the project.

3. If the 2007 CLA Report is an Addendum, Then the City Failed to Consider Such Addendum with the 1993 EIR or 1995 Mitigated Negative Declaration/Addendum.

As explicitly stated in the Guidelines, "The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project." (Guidelines § 15164(d).) There is nothing in the 2007 CLA report or the findings which state that the City Council considered the report in context of the 1993 EIR or 1995 mitigated negative declaration. The only mention of the 1993 Final EIR, is a listing at the back of 2007 CLA report, for "Additional documents Reviewed under the Initial Peer Review Reports." In other words, allegedly, the peer reviewers reviewed the 1993 Final EIR. This is not an indication that the City Council actually considered the 2007 CLA Report with the EIR and the Project.

The City's failure to consider the 2007 CLA Report with the EIR before approving the project (or discretionary changes to the project), is an abuse of discretion, *even assuming arguendo*, that it constituted an addendum. (*Cf. Save San Francisco Bay Ass'n v. San Francisco Bay Conservation Etc. Com.* (1992) 10 Cal. App. 4th 908, 935 (remand not required when it was clear the Agency considered the addendum with the EIR).) In the *Save San Francisco Bay* case, the Court found that it was error not to include a finding that the Port Commission considered the EIR when approving the addendum to the EIR. (*Id.*) But, the Court held that such error was more akin to a clerical oversight, "de minimis in the extreme", because the Port Commission clearly considered the EIR in its lengthy administrative

review. (*Id.*) We have no such clerical oversight or de minimis error in this case. The City simply failed or refused to consider the prior EIR in conjunction with the 2007 CLA Report. The City failed to make the findings required by law, and failed to comply with the express requirements of CEQA. And, therefore, the City abused its discretion.

4. The City Failed to Proceed in a Manner Required by Law by Failing to Consult with a Trustee Agency in Violation of CEQA.

Notification and consultation with responsible or trustee agencies is an important part of CEQA. Potential significant impacts could be missed or ignored if the proper agencies are not notified concerning the scope of a project. Thus CEQA requires notification and consultation with responsible or trustee agencies even prior to the preparation of an initial study. (*Mejia v. City of Los Angeles* (2005) 130 Cal. App. 4th 322, 340.)

Section 21080.3 of CEQA states:

> Prior to determining whether a negative declaration or environmental impact report is required for a project, the lead agency shall consult with all responsible agencies and trustee agencies. Prior to that required consultation, the lead agency may informally contact any of those agencies.

(Pub. Res. Code § 21080.3(a).)

In this case, the Court ordered the City to make a determination whether a subsequent EIR or supplemental EIR was required. Thus, the City was required to consult with all responsible agencies or trustee agencies prior to making its determination. The Guidelines specifically identify the California Department of Fish and Game as a "trustee agency." The Guidelines state:

> "Trustee agency" means a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. Trustee agencies include:
>
> (a) The California Department of Fish and Game with regard to the fish and wildlife of the state, to designated rare or endangered native plants, and to game refuges, ecological reserves, and other areas administered by the department. (Guidelines § 15386.)

The California Department of Fish and Game, as a "trustee agency," specifically requested a copy of any mitigation plan, dewatering plan or any document prepared for CEQA. (Exhibit 4.) Fish and Game was interested in commenting on potential impacts to the adjacent Ballona Wetlands

Ecological Reserve. They noted that "as the landowner of the Ballona Wetlands Ecological Reserve, the Department is interested in any project or activity that could directly or indirectly impact the ecological reserve." The City never contacted the Department of Fish and Game concerning their review, and therefore Fish and Game was never able to analyze or comment on the proposed mitigation measures and its potential to impact to wetlands. (Exhibit 4 (Public Records Act Request).)

The City may argue that because they found that dewatering would not have a significant effect, they were not required to notify the Department of Fish and Game. This issue was specifically addressed by the Court of Appeal:

> A public agency is a trustee agency only if it has jurisdiction over resources "affected by" a project. (Guidelines, § 15386; see also § 21080.3, subd. (a).) If the lead agency proposes to adopt a negative declaration, however, then by definition it has found that the project will have no significant effects on any resource.
>
> We conclude that natural resources can be "affected by" a project, and hence the lead agency may have duties toward "trustee agencies," even if the lead agency believes the project will have no significant effect on the environment. This broad construction of "trustee agency" serves the statutory purpose of fostering interagency consultation.

(*Gentry v. City of Murrieta* (1995) 36 Cal. App. 4th 1359, 1387.)

Dewatering could potentially affect the adjacent Ballona Wetlands Ecological Reserve or other wetlands on the project. The City was required to consult with the Department of Fish and Game prior to its determination to not prepare a subsequent or supplemental EIR. The City's failed to proceed in a manner required by law by failing to consult with the Department of Fish and Game and therefore the City abused its discretion.

5. The City Could Not Continue to Grant Building Permits and Must Vacate All Approvals of Permits Until It Resolves the Deficiencies in its CEQA Process.

When the Court of Appeal issued its ruling, it specifically directed the trial court to "issue a peremptory writ of mandate ordering the City to vacate its approval of the mitigation measures and determine whether conditions requiring the preparation of a subsequent EIR or a supplement to the EIR are present with respect to groundwater dewatering." (*ETINA v. LA*, 2005 Cal. App. Unpub. 9697, at 3.) The first part of such order was to "vacate its approval of the mitigation measures"

Once the mitigation measures were vacated, all work on the project should have been halted, including non-methane related construction, until CEQA was completed. CEQA requires the City to consider all the alternatives, and mitigation measures prior to approving a project. (*Laurel Heights Improvement Assn. V. Regents of University of California* (1993) 6 Cal. 4th 1112, 1123 (Laurel Heights II).) The purpose of CEQA is not to inform officials of impacts of projects that have already occurred. (*Laurel Heights Improvement Assn. v. Regents of University of California*, (1988) 47 Cal. 3d 376, 394.) Otherwise, CEQA would turn into simply an exercise in post-hoc rationalization for projects already approved. (*Id.*, citing *No Oil, Inc. v. Los Angeles* (1974) 13 Cal. 3d 68, 78.)

CEQA prohibits a lead agency from approving a project without imposing feasible mitigation measures or alternatives which reduce the environmental impacts to a level of insignificance. (Pub. Res. Code § 21002.) As discussed in the CEQA guidelines, "public agencies shall not undertake any actions concerning the proposed public project that would have a significant adverse effect or limit the choice of alternatives or mitigation measures." (CEQA Guidelines § 15004(2).) Therefore, when mitigation measures are vacated, the project must halt until the lead agency determines how to properly mitigate the project. Allowing projects to go forward, despite an inadequate EIR, is problematic from a public policy point of view. As explained by the Court of Appeal:

> It is all too likely that if such activities proceed pending preparation of an adequate EIR, momentum will build and the project will be approved, no matter how severe the environmental consequences

(*San Joaquin Raptor/Wildlife Rescue Ctr. v. County of Stanislaus* (1994) 27 Cal. App. 4th 713, 742.)

In this case, continued construction while the City is considering methane mitigation measures and dewatering prejudices CEQA.

If dewatering does not occur, the methane mitigation system could be ineffective resulting in the potential for an explosion. As noted by the court, Playa Vista's own expert, John Sepich, recommended "permanent groundwater dewatering systems at all basements," and stated, "permanent groundwatering measures are also critical to insuring the proper operation of the methane mitigation systems." *(ETINA, supra*, 2005 Cal. App. Unpub. 9697, at 35.) If the dewatering systems are not properly designed, maintained or operated, the methane mitigation systems will also be inoperative, potentially leading to an explosive situation.

However, once a structure is completed, then the City has two choices: either vacate the building or accept the risk of subsidence. Accepting the risk of an explosion is not possible. Thus, the only proper course of action is to stop all construction until the City properly determines the risks.

6. The Writ Covered All Construction Approvals Because Neither the Appellate Court nor the Trial Court Approved a Severance of the Project.

When a writ is issued, the general rule is that all approvals for a project are vacated until a lead agency complies with CEQA. (Pub. Res. Code § 21168.9(a)(2).) While CEQA specifies that an order "shall include only those mandates which are necessary to achieve compliance with this division, and only those specific project activities in non-compliance with this division" if the court wishes to permit a portion of the project to go forward, it must make additional findings. The three findings necessary for "severance" are: 1. the portion or specific project activity is severable; 2. severance will not prejudice complete and full compliance with CEQA, and 3. the court has not found that the remainder of the project to be non-compliance with CEQA. (Pub. Res. Code § 21168.9(b).)

In this case, the Court of Appeal specified that the City must vacate its approval of the methane mitigation measures until it determines whether a subsequent or supplemental EIR is required. (ETINA, supra, at 39.) Neither the appellate court nor the trial court made the three required findings to permit the remainder of the project to move forward during the City's attempt to resolve the deficiencies in its CEQA process. Thus, while the City was not required to rescind its prior decision certifying the EIR, the entire project is required to stop until the City determined whether a subsequent of supplemental EIR was required.

The requirement to halt construction is further emphasized CEQA Guidelines section 15162, which states:

> If after the project is approved, any of the conditions described in subdivision (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted. (Guidelines § 15162(c).)

The City must consider the new information, or changed circumstances prior to proceeding with the project and no other agency may grant approvals (discretionary or ministerial) until the decision on how to proceed is finalized.

The Guidelines are very clear that the project cannot proceed until such determination is made, even if the City determines that only an addendum is required. "The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project." (CEQA Guidelines § 15164(d), emphasis added.) Thus, the City's granting of permits, including permits covering methane mitigation measures prior to the Court's approval of the City's Return to Writ, is an abuse of discretion, and such approvals must be vacated. Furthermore, because the project has been ongoing, in violation of the writ and the law of CEQA, any CEQA review should receive additional scrutiny from the Courts.

7. The City Violated the Writ by Continuing to Approve Permits, Temporary Certificates of Occupancy and Certificates of Occupancy Before the Court has Approved its Return to Writ and Discharged the Writ.

The Writ of Mandamus ordered the City to "vacate your approval of the methane mitigation measures for the Playa Vista First Phase Project..." The City may have moved to rescind the mitigation measures, but the City did nothing to ensure the effects of such repeal were implemented. The City was required to affirmatively act to ensure that its departments were not continuing to implement the methane mitigation measures.

There was no notice to City departments about the writ and no follow-up to ensure that work on methane mitigation measures stopped until the City complied with CEQA. For example, a permit inspection report demonstrates that methane mitigation system, including dewatering was installed on June 20, 2006, three months after the City Council supposedly vacated the methane mitigation measures. (Exhibit 2.) An approval letter for methane mitigation system, including dewatering was issued by LADBS on April 4, 2006. On many sites work started on the methane mitigation systems post writ. (Exhibit 2.) A temporary certificate of occupancy was issued for another Playa Vista site on June 1, 2006. (Exhibit 2.)

LAFD continued to act as if no writ had been issued requiring the City to vacate the methane mitigation measures. The LAFD inspected methane mitigation systems on January 15, 2007, finding that out of the 16 methane systems they wished to inspect, they only had access to six, and of those systems, not a single methane monitoring system worked as intended. (LAFD correction notice, dated

Jan. 15, 2007, Exhibit 3.) The Los Angeles Fire Department claimed to have never received notice of the writ. (LAFD Resp. to Grassroots PRA, Jan. 28, 2008 at p.2, Quest. 5., Exhibit 3.)

8. Playa Vista and the City Failed to Use Actual Data to Determine Whether the Dewatering Would Have a Significant Impact.

The Peer Reviewers' modeling was based on data provided solely by Playa Vista, which has a substantial economic interest in avoiding CEQA review. No independent data was collected or used for the "peer reviewers." The actual data was not independently verifiable because such data was theoretically provided to the public in a binary electronic form. Unfortunately, no one but Playa Vista and allegedly the City's peer reviewers were able to open the electronic data. Such data was not provided in a hard copy to the public. The City cannot rely solely on Playa Vista, a party with a vested interest in the project to supply data. (*Save our Peninsula Com. v. Monterey County Board of Supervisors* (2001) 87 Cal. App. 4th 99, 121.)

Furthermore, actual data from the Department of Sanitation demonstrates that the modeling was off by 400%. (Exhibit 5.) Playa Vista claimed that their model estimated only 16,000 gallons a day were being pumped from the site. (3 RR 530.) However, actual estimates from the industrial waste water permits from the Department of Sanitation permits approximately 72,000 gallons a day. (Exhibit 5.) In addition, the CDM report analyzed five buildings. (3 RR 538.) Actual maps of the industrial discharge permits show numerous buildings requiring dewatering. (Exhibit 5.) Not only does this new information demonstrate that the City has been constructing dewatering systems in violation of the writ, but it demonstrates that the dewatering study was completely inaccurate and does not constitute substantial evidence. (See *Save our Peninsula, supra,* 87 Cal. App. 4th 99, 121, "the impacts of the project must be measured against real conditions on the ground.")

V. CONCLUSION

For the above reasons, the Court must deny the City's Return to the Writ and order the City to cease all further construction until it complies with CEQA.

LOS ANGELES FIRE DEPARTMENT

DOUGLAS L. BARRY
FIRE CHIEF

January 28, 2008

TO: Douglas L. Barry, Fire Chief

FROM: Jimmy H. Hill, Deputy Chief
Bureau of Fire Prevention and Public Safety

SUBJECT: RESPONSE TO GRASSROOTS COALITION
PATRICIA MCPHERSON (QUESTIONS 1- 11)

1. What testing program is LAFD collaborating in that would provide monitoring and testing to ensure that the gas mitigation systems meet state plumbing code standards and that the systems perform safely?

   The plumbing code does not address methane mitigation standards. The creation of standards is based on manufacturer specification. Early warning, alarms, and monitoring are similar to those found in NFPA Standard 72 (see attached), with Los Angeles Fire Department modifications to assure consistence appearance and performance throughout the City.

2. Please provide an exact listing of testing and monitoring that is and has been performed by LAFD. Please provide the exact system and/or portion of the gas system that LAFD provides monitoring and testing oversight.

   LAFD does not monitor detection and mitigation systems. A Central Station Signaling System (as required by NFPA 72) performs monitoring. LAFD Inspectors perform all acceptances testing to assure the operability of the Central Station Signaling System and other system components. Testing records are available at the LAFD Playa Vista field office.

3. Please provide an exact listing of system and/or part of gas safety system that Michael Ng and Captain Holloway of the LAFD have done "due diligence in assuring safety for residents of the Playa Vista community. " (Page 2, Board Report)

An exact listing of all system test and performance records is available at the LAFD Playa Vista field office. Inspector Ng is the Inspector of record. Captain Holloway had a minor role in the inspection and testing process. The LAFD has exercised due diligence in aspects of the Play Vista Project while following the CLA guidelines.

4. Please acknowledge and respond to Number 1 (2005 Appeal Court Ruling) in documents titled RE: November 7, 2007 Audit & government Efficiency Hearing . . ..

   Please clarify your request.

5. Why has LAFD failed to adhere to the 2005 Court Order that "vacated the approval of the methane mitigation systems" by approving methane systems and provided approval signatures for Certificates of Occupancy?

   We are unaware of an order to vacate. The Department awaits direction from legal counsel.

6. Has LAFD reviewed the 600 "working pages" of the 2007 City Controller's audit of Playa Vista?

   The LAFD was provided a summary and has reviewed the summary of the City Controller's audit.

7. What exact "training" has been provided by LAFD to any city employee regarding the gas mitigation systems?

   The LAFD & LADBS have collaborated to provide methane system testing skills to LADBS Inspectors. The manufactures, engineers, and technicians that build and design these systems have certified Inspector Ng to perform acceptance and maintenance testing. Portions of the knowledge and training received by Inspector Ng were taught to LADBS employees on October 23, 2007.

8. What expertise does LAFD cite for its oversight role of the gas mitigation system, including the experimental systems such as the 50' vent wells and the sub-slab portal monitoring (as cited by ETI in Number 3 of documents titles RE: Nov. 7, 2007 Audit....)

   Oversight comes from adherence to manufacturer specifications, and the design and approval criteria provided by the manufactures and design engineers. The LAFD has no jurisdiction over 50' vent wells or sub-slab portals monitoring.

9. What expertise (training, resume regarding gas mitigation and oilfield gas migration hazards) of LADBS personnel does LAFD personnel e.g. Inspector Ng or Captain Holloway acknowledge, have personal knowledge, rely upon? Please respond to same for any and all consultants that Inspector Ng and/or Captain Holloway rely.

   The LAFD & LADBS have collaborated to provide methane system testing skills to LADBS Inspectors. The manufactures, engineers, and technicians that build and design these systems have certified Inspector Ng to perform acceptance and maintenance testing. Inspector Ng provided a methane detection system overview to LADBS personnel on October 23, 2007.

10. Why is Capri 1 development site at Playa Vista still without any gas detection devices?

    To be answered by LADBS.

11. Have you reviewed the Grassroots Coalition material that was presented at the November 2007 Fire Commission meeting?

    Yes, Inspector Ng has reviewed the document.

Attachment: NFPA Standard 72 [1]

[1] The attached document is too large to send electronically. It is readily available at the NFPA website.

(6)

LOS ANGELES FIRE DEPARTMENT
CONSTRUCTION SERVICES
CORRECTION NOTICE

JOB ADDRESS:		INSPECTION DATE:
COURTYARD - CAPRI II (ADDRESSES BELOW)		01/15/07
JOB DESCRIPTION:		CONTACT PHONE:
R-3 SINGLE FAMILY HOMES		(310) 827-0171
TO: (NAME) (TITLE)	FIRM/DBA:	REINSPECTION CALL:
JONATHAN LONNER V.P.	LEE HOMES	213/272-8596
ADDRESS:		INSPECTOR:
475 WASHINGTON BL.		M. Ng
CITY: STATE: ZIP:		UNIT:
M.D.R. CA. 90292		CSU

Before Final Approval can be obtained, the following deficiencies shall be corrected, and the system(s) pre-tested. Call for reinspection when all corrections have been made.

METHANE ACCEPTANCE TESTS FOR -

(1) 5734 CELEDON CRK - 1. SENSORS FAILED 2. HORN/STROBES FAILED 3. DIALER/CSSS FAILED - NO HIGH METHANE ALARM SIGNAL & NO TROUBLE SIGNAL FOR H/S.

(2) 5736 CELEDON CRK - 1. FANS FAIL TO ACTIVATE ON ALARM 2. DIALER LINES DISCONNECTED

(3) 5738 CELEDON CRK - 1. HORNS/STROBES FAILED - NO ACTIVATION 2. NO HIGH LEVEL ALARM SIGNAL - CSSS

(4) 17931 RUNWAY RD - 1. HORN/STROBES FAILED - NO ACTIVATION 2. NO ACCESS TO FANS & PANEL (OWNER STORAGE)

(5) 5730 CELEDON CRK - 1. SENSOR FAILED 2. NO ACCESS TO FANS & PANEL (OWNER STORAGE)

(6) 5743 DAWN CREEK - (1) HOUSE SENSOR FAILED - 64% 2. V/R SENSOR FAILED - 34% VOL

* NOTES - ONLY 6 OF 16 HOMES AVAILABLE FOR TESTING, ALL 6 TESTED FAILED.

ADDITIONAL INFORMATION ON BACK ☒ BY INSPECTOR: M. Ng

Michael Ng, Insp II

SUPP. SYS.	RATED CON.	ELEV.	HVAC	ALARM	CSSS	EXIT SIGNS	E-LT/PWR.	FINAL APPR.

174

STATE OF CALIFORNIA-THE RESOURCES AGENCY ARNOLD S ARZENEGGER, Governor
DEPARTMENT OF FISH AND GAME
OFFICE OF THE GENERAL COUNSEL
1416 NINTH STREET
P.O. BOX 944209
SACRAMENTO, CA 94244-2090
(916) 654-3821

November 3, 2006

Patricia McPherson
Grassroots Coalition
3749 Grearwood Avenue
Los Angeles, CA 90066

Re: Public Records Act Request
No. 06-09-240

Dear Ms. McPherson,

This letter responds to your request dated September 1, 2006, under the California Public Records Act (Gov. Code, § 6250 et seq.). In general, you seek public records on behalf of the Grassroots Coalition related to any notice received by the Department of Fish and Game ("Department") under the California Environmental Quality Act ("CEQA") (Pub. Resources Code, § 21000 et seq.) concerning the "Playa Vista" project in the City of Los Angeles. The Department's Office of the General Counsel received your request on September 26, 2006.

After review of our files, the Department has found no public records responsive to your request. In addition, the Department's response to your request is not based on any exemptions to the PRA. Our PRA file for your request will be closed as a result.

If you have any questions regarding this matter, please contact, me at the address or telephone number listed above.

Sincerely,

John H. Mattox
Senior Staff Counsel

cc: Grassroots Coalition
11924 W. Washington Blvd.
Los Angeles, CA 90066

State of California – The Resources Agency
ARNOLD SCHWARZENEGGER, *Governor*

DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201

January 10, 2006

Flex your POWER

Mr. Bill Rosendahl,
Councilman 11th District
City of Los Angeles
200 N. Spring Street, Rm 415
Los Angeles, CA 90012

Playa Vista Methane Mitigation and Ground Dewatering Issue
(Ballona Wetlands Ecological Reserve)

Dear Mr. Rosendahl:

The Department of Fish and Game (Department) requests a copy of any mitigation plan, dewatering plan, or any document prepared to comply with the California Environmental Quality Act (CEQA) for its review and comment that identifies potential impacts to the Ballona Wetlands Ecological Reserve or any wetland mitigation site approved as part of the Playa Vista Development project.

The Department request is based on the following; the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitats necessary for biologically sustainable population of those species, and it is identified as a Trustee Agency pursuant to the State Guidelines Implementing CEQA (Section 15386) with jurisdiction over natural resources. Also, the Department acts as a lead agency or responsible agency (CEQA Guidelines Section 15381) for those projects that come under the purview of the California Endangered Species Act (Fish and Game Code Section 2050 et seq) or Fish and Game Code Section 1600 et seq. In addition, as the landowner of the Ballona Wetlands Ecological Reserve, the Department is interested in any project or activity that could directly or indirectly impact the ecological reserve.

If you have any questions concerning the content of this letter, please contact Mr. Don Chadwick, Senior Environment Scientist, of my staff, at 858-467-4276

Sincerely,

Larry L. Eng, Ph.D.
Regional Manager

dc:LLE

CITY OF LOS ANGELES

Industrial Waste Management Division
2714 Media Center Drive, Los Angeles, CA 90065
(323) 342-6200 Fax: (323) 342-6111

REQUEST for GROUNDWATER DISCHARGE

A request for the discharge of groundwater in the City of Los Angeles is reviewed on an individual basis.

First, contact the California Regional Water Quality Control Board, (213) 576-6600, for information on obtaining a National Pollutant Discharge Elimination System (NPDES) permit.

- If the NPDES permit is granted, the discharge of groundwater may be directed to the Storm Drain System. No contact with Industrial Waste Management Division (IWMD) is necessary.
- If the NPDES permit is not granted, the discharge of groundwater may be directed to the City sewer system.

For discharge to the sewer, the following procedures must be followed:

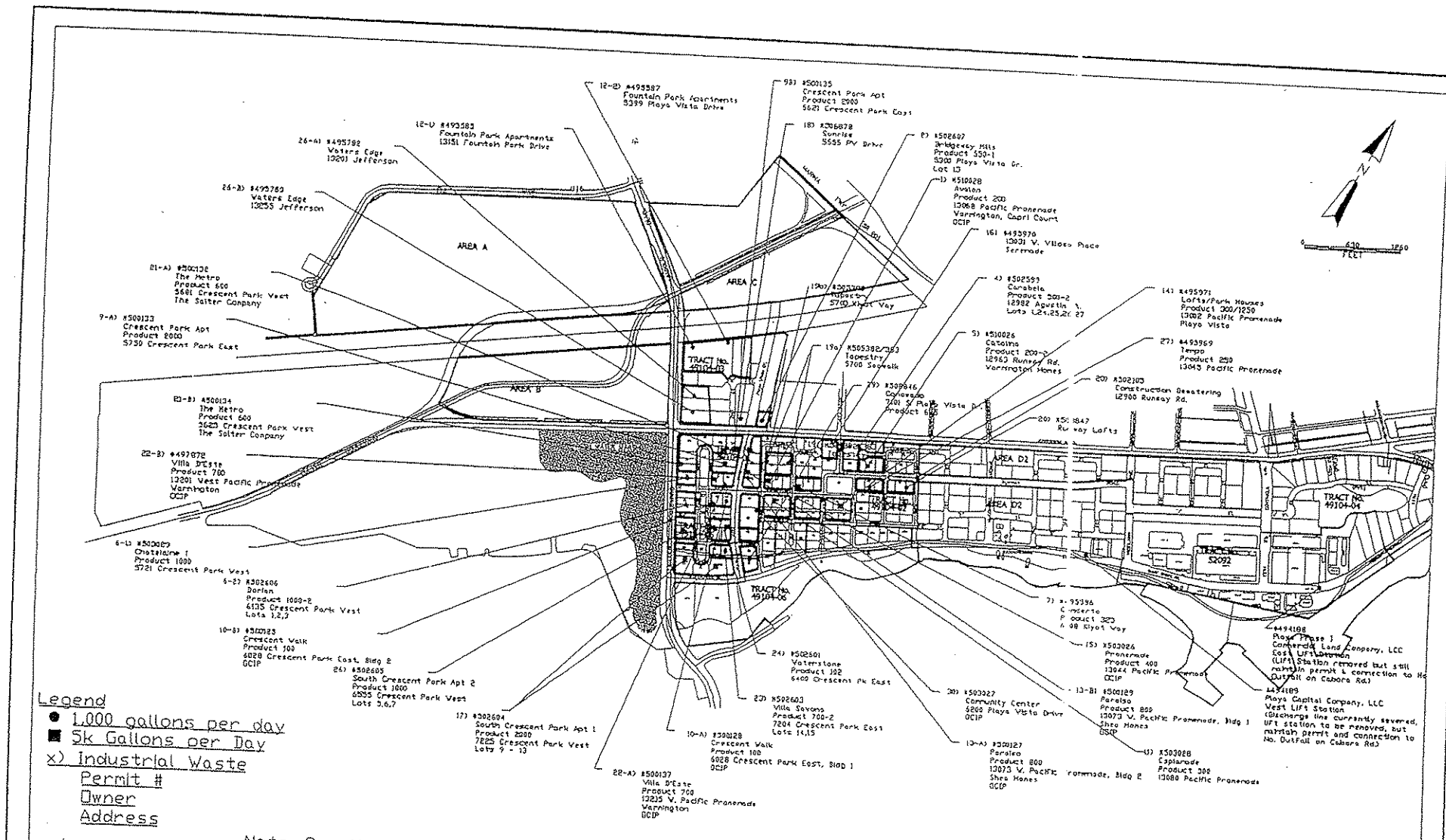
1. Contact the Bureau of Engineering for Sewer Availability by calling: the Public Counter, 201 N. Figueroa Street, 3rd floor, at (213) 482-7030, or Tony Pueblos ("A" permits/Sewer Permits) at (213) 482-7050.
2. Contact Financial Management Division's Senior Engineer David F. Cheung at (213) 485-2423 for Sewer Service Charge/Sewer Facility Charge clearance and flow meter requirements.
3. When steps 1 and 2 are completed and approved, contact Chief Industrial Waste Inspector I Sunny Owairu at (323) 342-6044. A formal, written request for groundwater discharge must be submitted to Industrial Waste Management Division and must include:
   - An analysis (list of pollutants is attached) of the groundwater, including BOD and TSS.
   - Notification of any pollutants that are detected.
   - The total and daily volumes of groundwater to be discharged.
   - The rate of groundwater discharge (in gallons per minute).
   - The location of the sewer maintenance hole where the discharge will occur.
   - The date(s) of discharge.
4. Upon approval, an Industrial Wastewater Permit Application must be completed and submitted to IWMD. After review and approval, an Industrial Wastewater Permit will be issued, allowing the discharge of the groundwater to the City sewer.

For further information, please call Ann Wong at (323) 342-6061, or Sunny Owairu at (323) 342-6044.

Pl ista
Industrial Waste Discharge Permits

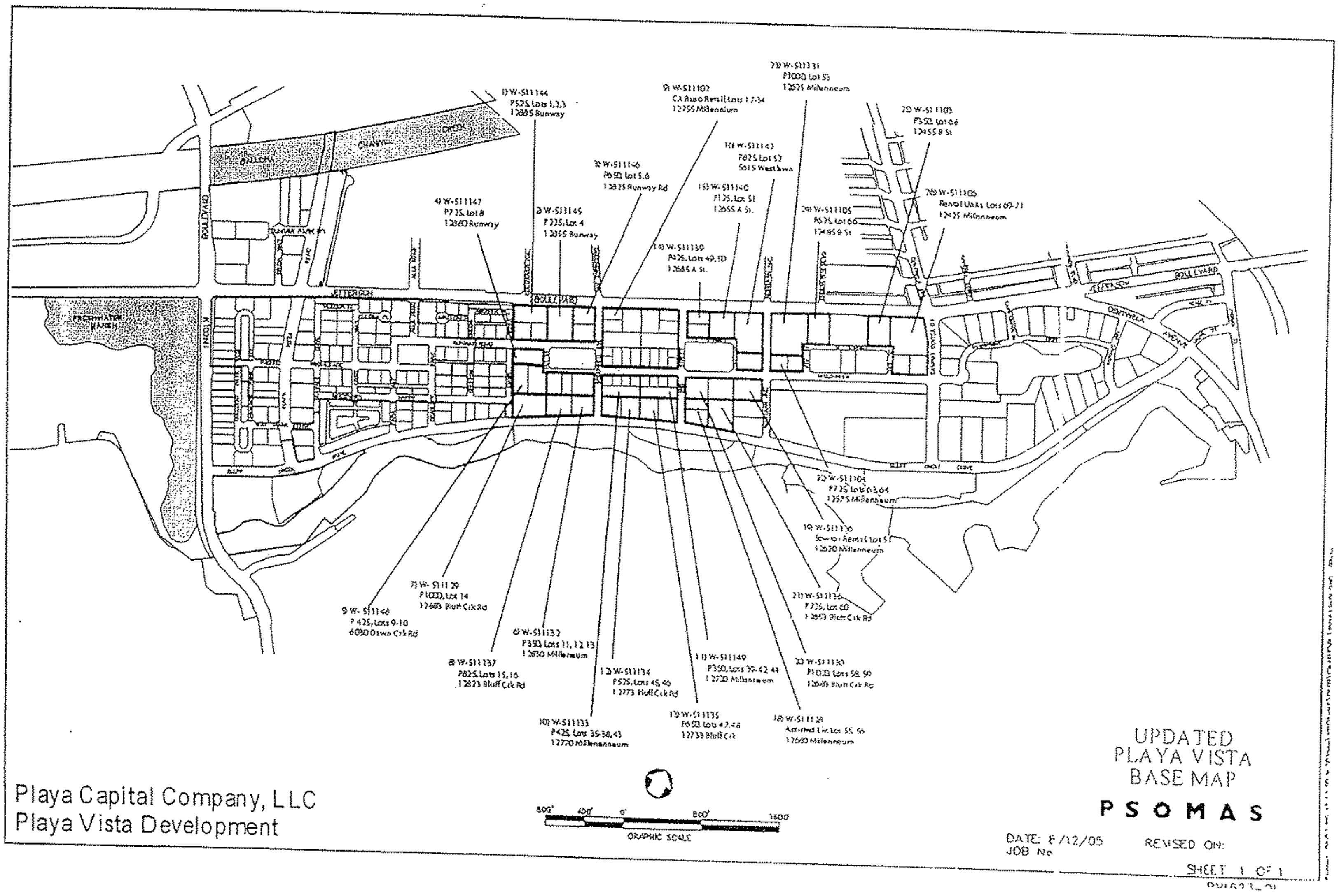
Map ID	Permit Number	Project Number	Project Name	Project Address	Permitted Discharge (gal/day)	Billing Company Name	Billing Contact Person	Billing Address
1	W-510028	200	Avalon	13068 Pacific Promenade	5,000	Avalon Maintenance Corp	Shelie Xanthos	16430 Roscoe Blvd. Ste 205 Bldg 3 Van Nuys CA 91406
2	W-502607	550-1	Bridgeway Mills	5300 Playa Vista Drive	1,000	Playa Capital	Accounting	12555 W Jefferson Blvd Ste 300 Los Angeles CA 90066
4	W-502599	500-2	Carabela	12982 Augstin Place	1,000	Playa Capital	Accounting	12555 W Jefferson Blvd Ste 300 Los Angeles CA 90066
5	W-510026	200-2	Catalina	12963 Runway Road	1,000	Catalina Maintenance Corp	Shelie Xanthos	16430 Roscoe Blvd. Ste 205 Bldg 3 Van Nuys CA 91406
25	W-503027	-	CenterPointe Club	6200 Playa Vista Drive	1,000	Playa Vista Parks & Landscape	Terrance Smith	6200 Playa Vista Dr Playa Vista CA 90094
32	W-503029	1000	Chatelaine	5721 Crescent Park West	1,000	Merit Property Management	Terrance Smith	25910 Acero St 2nd Fl Mission Viejo CA 92691
7	W-495596	325	Concerto	6008 Kiyot Way	5,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
20	W-502105	-	Construction	12900 Runway Road	1,500	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
29	W-508846	625	Coronado	7101 S. Playa Vista Drive	1,000	Warmington Group	Accounting	3090 Pullman Street Costa Mesa CA 92626
9-A	W-500133	2000	Crescent Park Apts	5750 Crescent Park East	5,000	Fairfield Residential LLC	Accounting	5510 Morehouse Dr Ste 200 San Diego CA 92121
9B	W-500135	2000	Crescent Park Apts	5621 Crescent Pk East	5,000	Fairfield Residential LLC	Accounting	5510 Morehouse Dr Ste 200 San Diego CA 92121
10-B	W-500124	100	Crescent Walk	6028 Crescent Park East, bldg 2	1,000	Crescent Walk @ PV	Shelie Xanthos	16340 Roscoe Blvd, Ste 205 Van Nuys CA 91406
10-A	W-500123	100	Crescent Walk	6028 Crescent Park East, bldg 1	1,000	Crescent Walk @ PV	Shelie Xanthos	16340 Roscoe Blvd, Ste 205 Van Nuys CA 91406
6-2	W-502606	1000-2	Dorlan	6135 Crescent Park West	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
11	W-503028	500	Esplanade	13080 Pacific Promenade	1,000	Merit Property Management	Terrance Smith	25910 Acero St 2nd Fl Mission Viejo CA 92691
	W-507619	-	Firestation	5460 Playa Vista Drive		Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
12-1	W-495585	-	Fountain Park Apts	13151 Fountain Park Drive	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
12-2	W-495587	-	Fountain Park Apts	5399 Playa Vista Drive	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
14	W-495971	300/1250	Lofts/Park Houses	13002 Pacific Promenade	5,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
13-A	W-500127	800	Paraiso	13073 Pacific Promenade, bldg 1	1,000	Shea Homes	Melinda Kuhn	603 S Valencia Ave Brea CA 92823
13-B	W-500129	800	Paraiso	13073 Pacific Promenade, bldg 2	1,000	Shea Homes	Melinda Kuhn	603 S Valencia Ave Brea CA 92823
15	W-503026	400	Promenade	13044 Pacific Promenade	1,000	Western Pacific Housing	Rodney Singh	6701 Center Dr W #900 Los Angeles CA 90066
8	W-508847	650	Runway Lofts	12920 W. Runway Road		Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
16	W-495970	825	Serenade	13031 W. Villosa Place	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
17	W-502604	2000	South Crescent Park Apts 1	7225 Crescent Park West	10,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
26	W-502605	2000	South Crescent Park Apts 2	6555 Crescent Park West	5,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
18	W-506578		Sunrise	5555 Playa Vista Drive	-			
19	W-505382	900	Tapestry	5700 Seawalk Drive	1,000	Tapestry Maintenance Corp.	Bruce Ratliff	16340 Roscoe Blvd, Ste 205 Van Nuys CA 91406
19	W-505383	900	Tapestry	5701 Kiyot Way	1,000	Tapestry Maintenance Corp.	Bruce Ratliff	16340 Roscoe Blvd, Ste 205 Van Nuys CA 91406
27	W-495969	250	Tempo	13045 Pacific Promenade	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
	W-500124	-	Test Site 2	12890 Discovery Creek Road		Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
21-A	W-500132	600-1	The Metro	5681 Crescent Park West	1,000	Crescent Park Ventures	Accounting	1663 Sawtelle Blvd Los Angeles CA 90025
21-B	W-500134	600-1	The Metro	5625 Crescent Park West	1,000	Crescent Park Ventures	Accounting	1663 Sawtelle Blvd Los Angeles CA 90025
22-B	W-510025	700	Villa D'Este	13201 West Pacific Promenade	1,000	Villa D' Este	Shelie Xanthos	16340 Roscoe Blvd, Ste 205 Van Nuys CA 91406
22-A	W-500137	700	Villa D'Este	13215 West Pacific Promenade	1,000	Villa D' Este	Shelie Xanthos	16340 Roscoe Blvd, Ste 205 Van Nuys CA 91406
23	W-502603	700-2	Villa Savona	7204 Crescent Park East	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
26-A	W-495782	-	Waters Edge	13201 Jefferson Boulevard	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
26-B	W-495783	-	Waters Edge	13255 Jefferson Boulevard	1,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
24	W-502601	102	Waterstone	6400 Crescent Park East	5,000	Playa Capital	Accounting	5510 Lincoln Blvd Ste 100 Los Angeles CA 90094
Total Permitted Discharge Volume					72,500			

Last Revision: 11/07/05
Printed: 11/10/2005, 2:37 PM



Playa Vista Site
6775 Cantinela Avenue
Los Angeles, California 90045

TITLE:
Playa Vista - Phase 1
Industrial Waste Discharge Permits


Playa Capital Company, LLC
Playa Vista Development
UPDATED
PLAYA VISTA
BASE MAP
PSOMAS
DATE: 8/12/05
JOB No
REVISED ON:
SHEET 1 OF 1
GRAPHIC SCALE
BOULEVARD
JEFFERSON
LINCOLN
BALLONA CHANNEL
CREEK
FRESHWATER MARSH

From: Ron Skarin
To: Galstian, Larry
CC: Mischlich, Pat
Date: 10/11/2007 4:29 PM
Subject: Updated Methane Program Action Plan
Attachments: Action Plan for Methane Program Phase 1 and 2 101207.wpd

Larry-
I just updated the Methane Action plan for your information.

Ronald Skarin
Principal Inspector
Specialty Inspection Section
L A Department of Building and Safety
213/482-0045

INSPECTION BUREAU - MATERIALS CONTROL SECTION

METHANE MITIGATION DEVELOPMENT PROGRAM - ACTION PLAN (10-12-07)

DEPUTY METHANE BARRIER INSPECTION PROGRAM
(PHASE ONE)

	PRODUCT	ACTION ITEMS	RESPONSIBLE PERSON	DUE DATE	% DONE	COMMENTS
PHASE 1	Certify and Register Current Deputy Methane Barrier Inspectors (**DMBI**)	Establish minimum DMBI knowledge and experience requirements	Ron Skarin, Pat Mischlich, Akber Khan	9-06-07	Done	
		Prepare DMBI Examination		9-06-07	Done	
		Change applicable I.B.s and documents for DMBI		9-06-07	Done	
		Create a list of all current persons inspecting methane barriers	Pat Mischlich	9-06-07	Done	
		Add DMBI to PCIS	Jim Bangham	9-21-07	Done	
		Notify all current Methane inspectors, Manufacturers, and Engineers of upcoming DMBI Seminar	Pat Mischlich, Jackie Gomez	9-10-07	Done	
		Prepare agenda for DMBI Seminar	Pat Mischlich	9-20-07	Done	
		Conduct DMBI Seminar	Keim / Galstian	9-21-07	Done	27 Candidates attended
		Testing for DMBI Certification	Akber Khan	11-05-07	75	7 App's approved as of 10-5-07. 10 addn'l app's received to date
		Notify Inspection staff of new DMBI program and upcoming effective date	Stevens / Steinbach/ Perez	11-05-07	50	Memo drafted (subject to management approval)
		Establish and maintain list of all registered DMBI on Internet	Eva Wong	11-05-07		List will be available online as DMBI become registered.
		Monitor and report quarterly on effectiveness of DMBI program Recommend changes as necessary	Pat Mischlich	Quarterly (2-1-08)	ongoing	
	Compile Technical References	Update Methane Barrier Research Reports	Tom Stevens / Yeuan Chou	9-21-07	50	Memo drafted (subject to Management approval)
		Compile a list of approved methane barrier Mfg's	Pat Mischlich	9-06-07	Done	
		Obtain Maps of methane areas within the City	Pat Mischlich	9-21-07	Done	
	Update LAMC	Draft Code changes related to Chapter 17	Akber Khan	1-1-08		
	Outreach program to public	Create public notification/information letter	Larry Galstian	9-06-07	Done	
		Contact persons currently approved to inspect barriers	Pat Mischlich	9-10-07	Done	

INSPECTION BUREAU - MATERIALS CONTROL SECTION

METHANE MITIGATION DEVELOPMENT PROGRAM - ACTION PLAN (10-12-07)

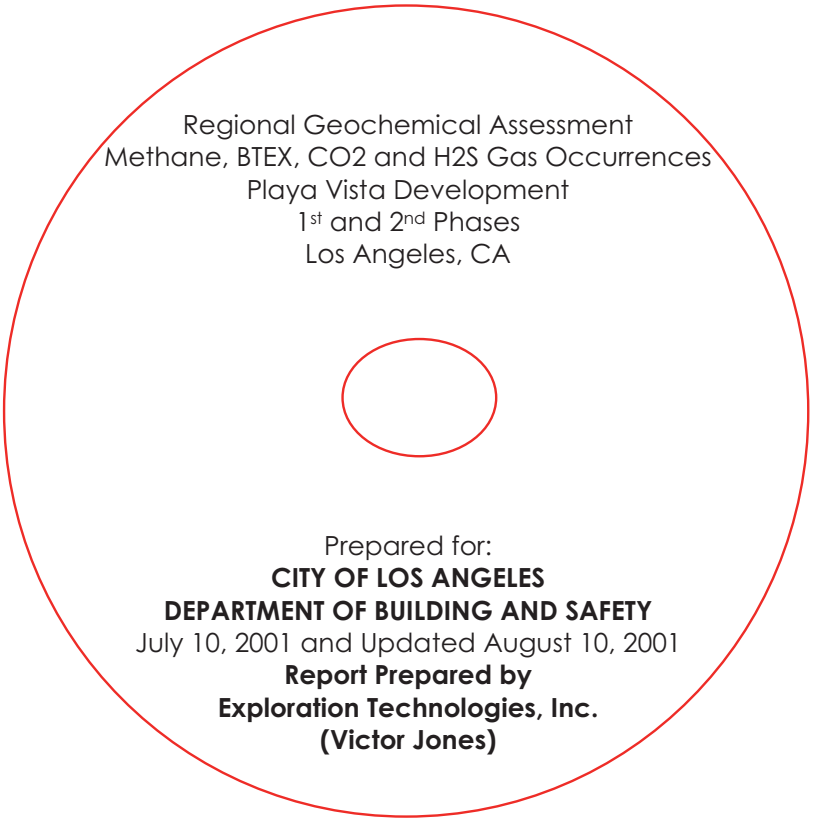
UPDATED METHANE MITIGATION TRAINING PROGRAM
(PHASE TWO)

PRODUCT		ACTION ITEMS	RESPONSIBLE PERSON	DUE DATE	% DONE	COMMENT
PHASE 2	Public Outreach	Post updated I.B.s, R.R.s, DMBI Application and related Methane info on Internet	Eva Wong	10-19-07	50	Updated IB's Posted - RR's pending final approval from LADBS Mgt
		Send notification letter to all existing deputy inspectors	Ron Skarin	10-19-07	50	Deputy letter drafted (Subject to management approval)
	Develop Updated Methane Mitigation Training Program for LADBS Staff and the Public	Finalize Methane Responsibility Matrix for plan check, inspection and LAFD	Colin Kumabe	10-05-07	Done	See MOU letter dated 9-12-07 signed by LAFD and LADBS
		Develop Updated Methane Mitigation Program Training Material for LADBS Staff	Pat Mischlich	10-19-07	75	Scope of work to be finalized, with Mechanical Inspection
		Coordinate Methane Mitigation training with LAFD	Colin Kumabe; Larry Galstian; Dave Keim	10-05-07	Done	Initial dates confirmed with LAFD
		Invite Mfg's and other Methane Mitigation experts to do in-house training for LADBS staff	Pat Mischlich	10-05-07	20	17 key staff received membrane training from one Mfg on
		Coordinate LAFD training for LADBS staff on Methane Program	Pat Mischlich	10-16-07	75	Initial Training for Insp staff to begin week of 10-23-07. Mfg's
		Inform LADBS staff of Methane Mitigation Enforcement responsibility and upcoming training	Larry Galstian	10-05-07	90	Memo Drafted (pending Management approval)
		Monitor Program effectiveness and recommend revisions as necessary	Larry Galstian	on-going		

Attachments to Letter No. 40 includes a CD and DVD. The CD and DVD are on file with:

City of Los Angeles, Department of City Planning, Room 750, City Hall

200 N. Spring Street, Los Angeles, CA 90012



Letter No. 41

Heal the Bay

1444 9th Street
Santa Monica CA 90401

ph 310 451 1550
fax 310 496 1902

info@healthebay. org
www.healthebay.o rg

April 30, 2009

David J. Somers, Project Coordinator
Room 750 City Hall
Department of City Planning
200 North Spring Street
Los Angeles, CA 90012
Sent Via Email to [david.somers@lac ity.org]
And Via Fax to (213)978-1343

Re: Comments on Recirculated Sections -Draft Environmental Impact Report (RS-DEIR) Village at Playa Vista. City of Los Angeles/ EIR No. ENV -2002-6129-EIR

Dear Mr. Somers:

On behalf of Heal the Bay, we submit the following comments on Recirculated Sections -Draft Environmental Impact Report (RS-DEIR) *Village at Playa Vista Project* ("Project"). We appreciate the opportunity to provide these comments.

Heal the Bay is a nonprofit environmental organization with over 13,000 members dedicated to making the waters of Southern California clean and healthy for marine life and people. Heal the Bay has actively worked to improve water quality in Ballona Creek and Ballona Estuary for over twenty years. Over the past fifteen years, Heal the Bay has worked with the Los Angeles Contaminated Sediments Task Force and others to develop solutions to the contaminated sediment problem in the Ballona Estuary. We recently completed work with the City and County of Los Angeles on a State -funded project to aid in developing a comprehensive structural BMP implementation analytical tool for the Ballona Creek Watershed in order to achieve water quality standards in receiving waters. Additionally, Heal the Bay has played an influential role in the development of local and regional stormwater regulations, which directly impact Ballona Creek. Heal the Bay was one of the key stakeholders in the development and negotiations of the Los Angeles County NPDES Municipal Stormwater permit and we played an instrumental role in the development and adoption of the SUSMP requirements of the permit. We are currently working with Ventura County officials and the Regional Water Quality Control Board (Regional Board) to develop Ventura County's MS4 permit, with a heavy focus on Low Impact Development requirements. Also, we work very closely with the Regional Board in developing protective Total Maximum Daily Loads (TMDLs) for Ballona Creek and associated implementation plans to meet TMDL requirements.

In the context of this project, Heal the Bay has a long history of reviewing potential environmental impacts from the various phases of the Village at Playa Vista Project. We commented extensively on natural resources and water quality impacts as well as mitigation activities of the Phase I Playa Vista Development and of the Phase II Draft and Final EIRs. These comments are incorporated herein by reference.

Heal the Bay
1444 9th Street
Santa Monica CA 90401
ph 310 451 1550
fax 310 496 1902
info@healthebay. org
www.healthebay.o rg

In addition, we believe the Water Quality and Biotic Resources sections of the original EIR must be updated since it was first released in 2003. We also have concerns pertaining to the RS-DEIR. First, the RS-EIR does not adequately discuss the water conservation strategies used in the development. The Wastewater Section of the RS-EIR should also identify key operation and maintenance components of the project that would prevent sewage spills and large storm events from impacting nearby waterways and aquifers. In addition, the Land Use Section should emphasize LID strategies used within the project.

Recent developments call for the recirculation of the Water Quality and Biotic Resources sections of the original EIR.

Although we submit these comments on the RS-EIR, there are sections of the original DEIR that remain inadequate in their analysis of impacts to biotic resources and water quality and do not incorporate the most recent stormwater regulations. As the Phase II Original DEIR was released in 2003, we are concerned that these two sections of the original DEIR have become outdated over the past six years. For instance, the City of Los Angeles completed the Integrated Resources Plan, and the Board of Public Works recently approved the Water Quality Compliance Master Plan for Urban Runoff. Both of these documents address improving water quality in Ballona Creek. In addition the 2006 303(d) list of water quality impairments was approved that includes impairments in Ballona Estuary and Wetlands and TMDLs were adopted for Ballona Creek. Since the completion of the original EIR, TMDLs for toxics and bacteria have taken effect in the Ballona Creek Estuary. These are only a few of the many advances in water quality regulation and planning since the Original DEIR was released. As the RS-DEIR and the original DEIR do not mention these developments, how does the project aim to address these standards? We believe these regulations must be considered.

As we understand, mosquito fish (*Gambusia affinis*) are now used for vector control in the constructed Freshwater Wetland System. The environmental impact of introducing non-native mosquito fish to this area was not adequately addressed within the original DEIR. The use of this species in the marsh is particularly concerning because of potential impacts to the saltwater marsh habitat adjacent to the constructed Freshwater Marsh. Gambusia may be a problematic introduced species because it is not restricted to a diet of mosquito larvae. Gambusias have been found to threaten native fish and frog species by eating their eggs. Gambusia was found to be a voracious predator on the tadpoles of green and golden bell frogs[1] and a number of other native frogs[2] in Australia. In addition, reports have been listed that implicate Gambusia in the decline of

[1] Morgan, L. A. and Buttemer,W.A. (1996) Predation by the non-native fish *Gambusia* holbrooki on small *Litoria aurea* and *L. dentata* tadpoles. *Aust. J. Zool,* 30:143-149.
Pyke, G.H. and White, A.W. (1996) Habitat requirements for the Green and Golden Bell Frog *Litoria aurea* (Anura: Hylidae). *Aust. Zool*, 30: 224-232.

[2] Harris, K. (1995) Is there a negative relationship between *Gambusia* and tadpoles on the Northern Tablelands? BSc (Hons) Department of Ecosystem Management, University of New England, Armidale.
Op cit. Morgan, L. A. and Buttemer, W.A.
Webb, C. E. and Joss, J. (1997) Does predation by the fish *Gambusia holbrooki* (Atheriniformes: Poeciliidae) contribute to declining frog populations? Aust. Zool, 30(3):316-324.

Heal the Bay
1444 9th Street
Santa Monica CA 90401
ph 310 451 1550
fax 310 496 1902
info@healthebay. org
www.healthebay.o rg

various native fishes.[3] There is a threat of impacts to habitat within the Ballona wetlands due to the fact that the fish exist in the freshwater marsh which is designed to overflow into the adjacent wetland area once or twice per year. Were native species of fish or insects ever considered for mosquito control within the riparian corridor and freshwater marsh instead of using Gambusia? This issue should be addressed in the EIR. We urge project proponents to look into using indigenous fish or insect species for vector control instead of using *Gambusia affinis*.

Project Proponents should increase water conservation measures and update the Wastewater Section of the RS-EIR accordingly.

After talking to project proponents, we understand that landscaping irrigation within the Village is now being served by reclaimed water and Phase II will also use reclaimed water for this purpose. This is a key component of mitigating water supply pressures from the development. As a side benefit, the use of reclaimed water by this project has brought dual plumbing to the region and increased demand for recycled water. Use of recycled water helps reduce Playa Vista's environmental impact from the development's increased sewage contribution to Santa Monica Bay. In addition to the current planned use of reclaimed water for Phase II, we encourage project proponents to look for additional ways to conserve water, including the use of waterless urinals (which save approximately 10,000 gallons of potable water annually) instead of conventional urinals within commercial properties and wherever possible within the development. The current precarious state of our water supply in California has made it even more crucial that the project demonstrate efforts to conserve water to the greatest extent possible. On February 27th of this year, for instance, Governor Schwarzenegger proclaimed a state of emergency due to historic water shortages in California.[4] Water shortages are expected to worsen due to climate change and population growth. Thus, the RS-EIR should better express how this development will strive to keep from further exhausting this precious resource by having not only the capability for maximum water reuse on-site, but through the use of as many water-saving features as possible. The project proponents should also explore ways to increase the native drought tolerant plants used for landscaping. On a visit to the site we were told that native drought tolerant plants are used for some of the landscaping on-site. Are there opportunities to increase landscaping with native drought tolerant plants?

The Land Use section of the RS-EIR should demonstrate that this project will implement adequate low impact development (LID) strategies.

The land use section should describe the project proponents' efforts to incorporate LID strategies in the project. The climate change section of the RS-EIR states that it is consistent with all of the measures promoted by the California Attorney General's office to reduce climate change impacts, including those pertaining to low impact development (LID), but there is no mention of LID within the recirculated Land Use section on or in other portions of the EIR. Although Heal the Bay is aware that Playa Vista uses LID stormwater pollution reduction practices, it is imperative that this project reduce the amount of effective impervious area ("EIA") in order to

[3] Courtenay, W. R. & G. K. Meffe. 1989. Small fishes in strange places: a review of introduced poeciliids. Pp. 319-331, in: G. K. Meffe & F. F. Snelson (eds.), Ecology and evolution of livebearing fishes (Poeciliidae). Prentice Hall, New Jersey, 453 pp.
[4] State of Emergency - Water Shortage http://www.gov.ca.gov/proclamation/11557/

Heal the Bay
1444 9th Street
Santa Monica CA 90401
ph 310 451 1550
fax 310 496 1902
info@healthebay. org
www.healthebay.o rg

reduce polluted runoff from the site and comply with imminent regulations. It is probable that the draft Ventura County MS4 (set for adoption on May 7, 2009) will serve as a template for the Los Angeles County MS4. The Ventura MS4 has a focus on LID requirements. The draft MS4 states that "[t]he goal of the New Development and Redevelopment standards shall be to reduce the effective impervious area (EIA) to 5% or less" for the SUSMP design storm (the 85th percentile runoff event with 0.2 inches per hour intensity). As this is an imminent consideration for developments in Los Angeles County regulated under the MS4, the project proponents should incorporate sufficient design features and land use elements that reduce the effective impervious area (EIA) to 5% or less. Many features may be used to achieve the goals of LID, including roof runoff collection systems (such as green roofs), pervious paving in low traffic areas, retentive grading, and onsite rainwater harvesting/reuse systems. Which of these features will be used in the Village development?

The RS-EIR should identify key operation and maintenance components of the project that would prevent sewage spills from impacting nearby waterways and aquifers and any associated spill response measures.

Within the last few years, numerous sewage spills have occurred in the Ballona Creek Watershed due to infrastructure failure, and as a result, there have been numerous closures of Dockweiler and Venice beach due to risks to human health. Are there any spill response procedures in place in case a sewage spill occurs in the project area? The RS-DEIR does not address this important issue. The Playa Vista Village development is situated within the Ballona Wetlands area, near a vital ecologically sensitive habitat. In addition, this area has a high groundwater table. Further, this development is located next to Ballona Creek, a direct conduit to the ocean. Even a small sewage spill can easily enter Ballona Creek, resulting in harmful environmental and public health impacts.

As discussed above, although the developer has provided us with additional information, we still have a number of concerns regarding the RS-EIR pertaining to wa stewater and land use within Phase II. It is crucial that project proponents address these issues. In addition, since there have been many changes in water regulations and in project components since the Original DEIR was released, applicable sections should also be updated. If you have any questions or would like to discuss any of these comments, please feel free to contact us at (310) 451-1500.

Sincerely,

Kirsten James
Water Quality Director

W. Susie Santilena
Water Quality Scientist

Letter No. 42

April 20, 2009

David Somers
City Planning Department
200 North Spring St., Room 750
Los Angeles, CA 90012

RE: The Village at Playa Vista

Dear Mr. Somers:

I am writing to urge the City to approve the construction of The Village at Playa Vista. This section of the formerly industrial property has sat undeveloped for years while the rest of Playa Vista has flourished.

The recirculated sections of the EIR, case number ENV-2002-6129-EIR, now adequately addresses the outstanding issues that were challenged in court and have delayed the construction of The Village.

With any new development there will be some environmental impacts, but the benefits of building The Village are so clear. It would complete the sustainable, urban infill vision for our city that Playa Vista has promised to provide all along. Just as importantly, during a time of great economic difficulty, it would result in the creation of thousands of construction jobs and millions of dollars in new city tax revenues annually.

The Inn at Playa del Rey encourages and supports the development of the Village and believes the City should move The Village forward without any more delay.

Sincerely,

Susan Zolla

Susan Zolla

435 Culver Boulevard
Playa del Rey, CA 90293
TEL: 310/574-1920 • FAX: 310/574-9920
E-mail: info@innatplayadelrey.com • www.innatplayadelrey.com

Letter No. 43

LAX COASTAL AREA Chamber of Commerce

9100 S. Sepulveda Blvd.
Suite. 210
Westchester, CA 90045
Phone: 310/645-5151
FAX: 310/645-0130
www.laxcoastal.com

March 20, 2009

The Honorable Bill Rosendahl
City Councilmember, 11th District
Los Angeles City Council
200 N. Spring Street, Room 415
Los Angeles, CA 90012

Mr. David J. Somers
City Planning Department
Los Angeles City Hall
200 N. Spring Street, Room 750
Los Angeles, CA 90012

Dear Mr. Somers:

On behalf of the LAX Coastal Area Chamber of Commerce and the over 35,000 employees we represent, I am writing to express support for the re-circulated sections of the draft environmental impact report for The Village at Playa Vista which will soon be back before City Council for consideration.

The majority of the original EIR, which was overwhelmingly supported by the Los Angeles City Council and Planning Commission in 2004, and upheld by the Superior Court, was ruled to be in compliance with the California Environmental Quality Act. We have reviewed the City's new analysis on the three issues – land use, wastewater and archaeological resources – required by the Court of Appeals. Based on our review, we have voted to support the City Council's recertification of the EIR for the Village and reapproval of the land use entitlements and related approvals.

The Village makes sense for our community. That's why our chamber supported the plan in 2004, and continues to support it now. And this project is especially important in these difficult economic times, because the Village will generate thousands of construction jobs and millions of dollars in city revenue. The Village will also provide new affordable and market rate housing and new retail, both of which are much needed in our community, while maintaining the critical smart growth principles that support conservation and sustainable development.

In addition, the parks, open spaces and transportation improvements will also help maintain and improve the quality of life for those who work and live near Playa Vista.

The LAX Coastal Area Chamber of Commerce urges you to vote to re-approve the land use entitlements and related approvals for The Village at Playa Vista and help Playa Vista move forward and complete its community vision.

Sincerely,

Jim Ferro

Cc: Mayor Antonio Villaraigosa

Letter No. 44

Los Angeles Area
Chamber of Commerce

March 23, 2009

RECEIVED
CITY OF LOS ANGELES
MAR 27 2009
ENVIRONMENTAL
UNIT

Mr. David Somers
Environmental Review Coordinator
Department of City Planning-EIR Unit
City of Los Angeles
200 N Spring St, Room 720
Los Angeles, CA 90012

Dear Mr. Somers:

On behalf of the Los Angeles Area Chamber of Commerce (Chamber), representing nearly 1,600 businesses in the region, I write to express our support of the recirculated sections of the EIR for the Village at Playa Vista. Specifically, we support the City Council's recertification of the EIR and the reapproval of the land use entitlements and related approvals. During this time of economic downturn, this project expects to generate thousands of construction jobs and millions of dollars in revenue to the city.

As you know, the Chamber—along with the Los Angeles City Council and City Planning Commission—also supported the original EIR in 2004. The recently completed supplemental analysis in the areas of land use, wastewater, and archaeological resources further indicate minimal impacts from the project. And the final supplemental analysis area, global climate change, demonstrates sustainable, urban infill development; a best-practice as the city continues to grow.

This project will also bring significant benefits to the community. The final phase of Playa Vista includes a new neighborhood retail center, new public parks and 2,600 new residential units. The Village includes state-of-the-art traffic improvements that will increase the safety and efficiency of traffic flow in both the project's adjacent area and the region.

The Chamber commends your management and the city's work as lead agency throughout this process. Please contact Public Policy Manager Vanessa Rodriguez at 213.580.7531 or vrodriguez@lachamber.com with questions or comments.

Sincerely,

Gary Toebben

Gary Toebben
President & CEO

Cc: Councilmember Bill Rosendahl

Letter No. 45

From: Greenwood, Molly [mgreenwood@nrdc.org]
Sent: Wednesday, March 18, 2009 11:31 AM
To: david.somers@lacity.org
Subject: NRDC Mailing Address

Hi David,

Thank you for speaking with me on the phone earlier regarding the 23 duplicate mailings we received for the Village at Playa Vista Project Draft EIR. I'm not sure how best to go about helping you update your mailing list for NRDC. Perhaps I could mail you the labels from the envelopes we received? For simplicity's sake, our one entry should probably just read:

NRDC
1314 2nd St.
Santa Monica, CA 90401

We received multiple envelopes addressed to "National Resources Defense Council" (a very common typo), along with various combinations including the acronym as well. One envelope was addressed to our old office location at 6310 San Vicente Blvd, Suite 250, Los Angeles CA 90048-5426. We also had some addressed to staff members, some of whom no longer work here.

Please let me know if I should send you the labels, and if so, to what address. Thank you for helping us reduce paper waste!

Best,
Molly

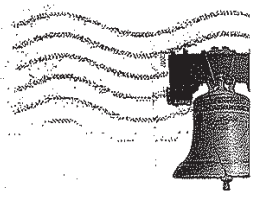
Molly Greenwood
NRDC
1314 2nd Street
Santa Monica, CA 90401
Tel: 310-434-2300 Fax: 310-434-2399
mgreenwood@nrdc.org

Please consider the environment before printing this email

Letter No. 46

Pile Drivers Local #2375
728 Lagoon Ave
Wilmington, Ca. 90744-5499

LONG BEACH CA 908
17 MAR 2009 PM 5 L



Dept. of City Planning
Environmental Review Unit
200 N. Spring St, Room 750
L. A., CA 90012

90012+3243

PILE DRIVERS LOCAL UNION NO. 2375
UNITED BROTHERHOOD OF CARPENTERS AND JOINERS
OF AMERICA
728 N. LAGOON AVENUE
WILMINGTON, CALIFORNIA 90744-5499
(310) 830-5300

MEMO

Date: March 16, 2009

To: Department of City Planning

From: John Schafer
Recording Secretary & Business Manager

Re: Save a Tree

Gentlemen:

Enclosed please find the five (5) address labels from envelopes that we just received from your office.

Please update your mailing address records as Joel Harzan passed away in 2000; and only one (1) correspondence would be sufficient for our office. It can be generic like the top one or addressed to myself.

Thanking you in advance for your assistance and cooperation in this matter.

DEPARTMENT OF CITY PLANNING
Environmental Review Unit
200 N. Spring Street, Room 750
Los Angeles, CA 90012

Joel B. Harzan
Pile Drivers Local Union No. 2375
728 Lagoon Avenue
Wilmington, CA 90744-5499

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Mailed From 90071
US POSTAGE
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MENT OF CITY PLANNING
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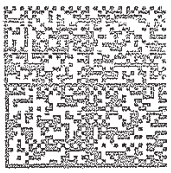
les, CA 90012



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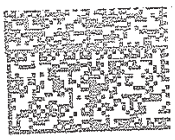
03/13/2009
Mailed From 90071
US POSTAGE

Pile Drivers Local Union No. 2375
Attn: Joel B. Harzan
728 Lagoon Avenue
Wilmington, CA 90744-5499

ARTMENT OF CITY PLANNING
ronmental Review Unit
N. Spring Street, Room 750
Angeles, CA 90012



Hasler

$00.42⁰
03/13/2009
Mailed From 90071
US POSTAGE

Pile Drivers Local Union No. 2375
Attn: Joel B. Harzan
728 Lagoon Avenue
Wilmington, CA 90744-5499

US POSTAGE

Pile Drivers Local Union No. 2375
Attn: Joel B. Harzan
728 Lagoon Avenue
Wilmington, CA 90744-5499

Spring Street, Room 750
geles, CA 90012

Mailed From 90071
US POSTAGE

Pile Drivers Local Union No. 2375
728 Lagoon Avenue
Wilmington, CA 90744-5499

Letter No. 47

April 21, 2009

David J. Somers
City Planning Department
200 N. Spring Street, Room 750
Los Angeles, CA 90012

Re: Re-Circulated Sections of EIR for The Village at Playa Vista, # ENV-2002-6129- EIR

To Mr. Somers:

With its proposal for The Village, Playa Vista is going to add thousands of construction jobs during a time when the economy desperately needs a shot in the arm. The Village will also generate millions of dollars per year for the City of Los Angeles' general fund.

What's not to like? This project provides for long overdue transportation improvements, the addition of new parks and public transit enhancements that extend throughout the west L.A. region.

I support The Village. For too long, it has been delayed by litigation from professional project opponents and red tape. The project is good for the City and good for the local area. I encourage the City to approve it.

Thank You,

Ernest M. Roberts

Ernest Roberts

9100 S. Sepulveda Blvd

Suite 200

Los Angeles, CA 90045

Voice 310.590.1385

Fax 310.590.1993

Letter No. 48

Making a difference since 1994

PACT Positive Alternative Choices Today: mentored work, learning, fun and play to empower at-risk youth

www.pactla.org
e-mail: mentors@pactla.org

12421 Venice Blvd. #7, Los Angeles, CA 90066 310.313.4119 Fax 310.313.2899

April 23, 2009

David J. Somers
City Planning Department
Room 750, City Hall
200 North Spring Street
Los Angeles, CA 90012

Dear Mr. Somers:

As a former member of the American Institute of Planners, I have followed and been impressed by the 3D execution of the sound planning principles that have guided the development of Playa Vista. Let The Village go forth and complete the proper integration of land uses.

I commend the City on such meticulous work in revising the three sections of the environmental impact report for The Village which were overturned by the Court, Case No. ENV-2002-6129-EIR. It created a very comprehensive document that analyzes the three issues currently holding up construction of The Village: the land use impacts of changing the property's zoning, the adequacy of its wastewater treatment system and its protection of archeological resources.

The recirculated sections of the environmental impact report presented a convincing case that the project does not cause problems on any of these topics. More importantly, I think The Village is going to have a positive impact on the community. The new public parks, open space, and neighborhood retail area will all benefit the surrounding community.

Like the rest of Playa Vista development, The Village balances the need for homes and retail space with the need for parks and open space. I hope that the City of Los Angeles will approve it.

Sincerely yours,

William R. Ewald, Jr.
PACT Chairman & CEO

Letter No. 49

From: Duane Vander Pluym [DVanderPluym@rinconconsultants.com]
Sent: Monday, March 16, 2009 1:29 PM
To: david.somers@lacity.org
Subject: NOC Recirc DEIR Village at Playa Vista

I received four copies of the above NOC to the same name and mailing address; please purge your mailing list to include only one instance. Thank you.

Duane Vander Pluym, D.Env.

Rincon Consultants, Inc.
790 East Santa Clara St.
Ventura, California 93001
805.641.1000 X-13
Fax 805.641.1072
http://www.rinconconsultants.com

Environmental Scientists Planners Engineers


Please consider the environment prior to printing this email.

Letter No. 50

SIERRA CLUB
FOUNDED 1892
Angeles Chapter

3435 Wilshire Boulevard
Suite 320
Los Angeles, CA 90010-1904

(213) 387-4287 phone
(213) 387-5383 fax
www.angeles.sierraclub.org

April 29, 2009

Mr. David Somers
Los Angeles City Planning Dept. Room 750
200 No. Spring St., Los Angeles, CA 90012

Dear Mr. Somers:

The Airport Marina Group of the Angeles Chapter of the Sierra Club has the following comments on the Playa Vista Phase 2 RS-DEIR:

1) Since the Phase 2 EIR was approved in 2004, things have gotten worse with water pollution and negative impacts on the environment.

Therefore, there needs to be a more environmentally sound alternative to this proposed high-density development being placed on the Ballona wetlands ecosystem. Such an alternative could include the current zoning of 100,000 square feet of retail/office space, with the rest of the land left as open space. The open space could include a treatment wetland to handle urban runoff from the Phase 1 east end development. The rest could be restored to native habitat, and some land for the indigenous Gabrielino Tongva people, who have been living here for 10,000 years.

2) Benefit of restoring most of Phase 2 area to native habitat -
The large monetary value of coastal wetlands is just now becoming recognized by government officials (such as shown on the PBS documentary "Poisoned Waters" last week). The value of the Ballona wetlands has still not been recognized. But now is the time to recognize it before more of it is destroyed. We have already lost over 95% of our wetlands in LA County and along the California coast.

3) Benefit of using Phase 2 to treat urban runoff of Phase 1 on the east end -
The fresh water marsh (urban runoff basin) west of Lincoln Blvd. was built to handle all the runoff from all of Phase 1. It will have to be dredged every 5-15 years to remove the toxic contamination from so much street runoff. This dredging will greatly disturb the wildlife and plant life there. This would be a tragedy, since that land adjoins the section of the Ballona wetland system purchased by the State of California in 2003. If some of the east end runoff can be treated east of Lincoln Blvd., then that would reduce the load on the fresh water marsh adjoining the wetlands. It could possibly reduce the amount of dredging of this wildlife habitat.

4) The City of Los Angeles needs to preserve open space. It has one of the lowest public acres of open space per resident ratio of any large urban area in the United States. Destroying this open space with 2,600 condos, and 325,000 square feet of retail space is not a good option. Already the Playa Vista developers (Morgan Stanley, Goldman Sachs, and the ULLICO construction union pension fund) have been allowed to put up very intense development on this part of the Ballona ecosystem. In fact, development east of Lincoln Blvd. was illegally allowed on delineated wetlands prior to the Phase 1 construction.

5) Finally, we have been told by gas experts that leaving open space on the Playa Vista site is a safer alternative, due to the underlying gas (which in some areas is extremely high) having more surface area from which to dissipate into the air. Otherwise, there is the danger it can build up under construction areas.

Please consider these comments in determining how this land should be utilized.

Thank you very much,

Joseph F. Young, Chair
Airport Marina Group
Angeles Chapter, Sierra Club

Letter No. 51

Southern California Gas Company

A Sempra Energy company

RECEIVED
CITY OF LOS ANGELES
APR 30 2009
ENVIRONMENTAL UNIT

April 23, 2009

City of Los Angeles
Department of Public Works
200 N. Spring Street, Room 525
Los Angeles, CA 90012-4801

Attn: David Summers

Southern California Gas Company

9400 Oakdale Avenue
Chatsworth, CA
91313

Mailing Address:
P. O. Box 2300
Chatsworth, CA
91313-2300
M.L.9314

tel 818-701-4546
fax 818-701-3441

Re: DEIR - The Village at Playa Vista Project
I/S of Jefferson and Lincoln to McDonnel Ave - Marina Del Rey

Southern California Gas Company-Transmission Department (The Gas Company) has received your request for pipeline locations within the general area of your proposed project. The Gas Company operates and maintains (**12**, **30**)-inch high pressure natural gas lines (**1159, 1167**) within the limits of your construction project. Attached are copies of our pipeline Atlas sheets (**LA 2072-2, 3, 2073-1**) which show the location of our pipelines. While we cannot guarantee the accuracy of these maps they are included to assist you in your planning and design.

One design parameter The Gas Company requires is that:

- Consideration be given to the safety of our pipeline during the design and construction stages.
- No mechanical equipment will be permitted to operate within three feet of the pipeline, and any closer work must be done by hand.
- A representative of The Gas Company must observe the excavation around or near our facilities to insure protection and to record pertinent data necessary for our operations.

Upon request, at least two (2) working days prior to the start of construction, we will locate and mark our active underground facilities for the contractor at no cost. Please call Underground Service Alert (USA) at (800) 422-4133.

Arrangements for someone to stand-by and observe can be made by calling (**213**) **703-4837** two working days prior to the start of construction. We would appreciate it if you would place a note on your plans to that effect.

Re: DEIR - The Village at Playa Vista Project
I/S of Jefferson and Lincoln to McDonnel Ave - Marina Del Rey

---

We will also require "final" grading plans and construction profiles prior to the start of construction.

Within the limits of your proposed construction, if you have not already done so, please contact the **Northern Distribution Region** of The Gas Company for information on their pipelines. You can contact them at **(818) 701-3316** and they will furnish you with any information you may require.

If a conflict is identified and can only be resolved by the relocation of our facilities, please be advised that the projected timetable for the completion of this relocation is one year. This includes planning, design, material procurement, cathodic protection, permits, environmental issues and construction.

Please refer to our Document Control Plan File **# 92-09-1159, 1167** and any correspondence directed to this office, in connection with this project. If you have further questions or require additional assistance, please contact **Mike Batista** (MBatista@Semprautilities.com) telephone number **(818) 701-4543.**

Sincerely,

Rosalyn Squires
Pipeline Planning Assistant
Transmission Department

Cc:MBatista
DEIR The Village at Playa Vista Project Jefferson Lincoln UReq.doc

Letter No. 52

From: Gordon Hamilton [Gordon.Hamilton@lacity.org]
Sent: Thursday, March 19, 2009 2:52 PM
To: David Somers
Subject: Fwd: Request for update to mailing list

fyi

>>> Planning Info 3/19/2009 2:47 PM >>>
FYI..

>>> Nancy Hastings <nhastings@surfrider.org> 3/19/2009 2:20 PM >>>
To Whom It May Concern;
In the past week or so I have received 5 copies of the Notice of Completion and Availability of Recirculated Sections of Draft EIR No. Env-2002-6129-EIR State Clearinghouse No. 2002111065. This is for the project name: The Village at Playa Vista Project.

4 copies were sent to attn: Nancy Hastings, 3783 Redwood Avenue, Los Angeles, CA 90066
1 copy was sent to attn: Southern California Regional Manager, Surfrider Foundation, PO Box 6010, San Clemente, 92674-6010

Please check your mailing database and help reduce the waste (and cost) of sending me 5 copies of the same thing. Thank you!

Respectfully,
Nancy

Nancy Hastings
Southern CA Field Coordinator
(310)995-7873 cell

Letter No. 53

From: <info@venicechamber.net>
To: <david.somers@lacity.org>
Date: 4/10/2009 4:42 PM
Subject: From Venice Chamber of Commerce re: Village at Playa Vista

April 10, 2009

David Somers
City Planning Department
Room 750
Los Angeles City Hall
200 North Spring Street
Los Angeles, CA 90012

Dear Mr.Somers,

On behalf of the Board of Directors of the Venice Chamber of Commerce, we want to reaffirm our continued support of the Village at Playa Vista. The Venice Chamber supported the Village when it went through the initial review and approval process in 2004. That approval process was one of the most public and transparent we have ever seen.

Although a court has required further analysis on three issues, we see no need to reverse our initial approval. The Village is an integral part of the Playa Vista project and will be a benefit to its surrounding communities. The Village creates new parks and enables investment in critically-needed transportation improvements with a commitment to public transit.

In these economic times, the Village will generate thousands of jobs and millions in City revenues. It continues Playa Vista's goals of providing workforce housing and new retail opportunities. Playa Vista demonstrates the smart growth principles that support conservation and sustainable development. And Playa Vista has proven itself as a good friend to its neighboring communities, such as Venice.

We urge the City Council to recertify the EIR for the Village and to reapprove the land use entitlements and other necessary approvals which will allow the Village can go forward and be completed.

Very truly yours,

[signed]

ANDY LAYMAN
President

cc: Honorable Bill Rosendahl

Letter No. 54

VOSS, SILVERMAN & BRAYBROOKE LLP

VS&B

April 27, 2009

David J. Somers
City Planning Department
City Hall
200 N. Spring Street, Room 750
Los Angeles, CA 90012

Re: Recirculated Sections of EIR for The Village
Case # ENV-2002-6129-EIR

To: David J. Somers

I have followed the news surrounding Playa Vista for many years, and always thought the development was a good idea because it offers a smart model for future growth in Los Angeles. We need more mixed-use developments that allow people to live close to jobs, schools and shopping, particularly on the Westside. This model for growth will cut down on traffic and protect the environment in addition to creating the sense of community that has been lost in Los Angeles.

Now the City has an opportunity to make the entire vision of Playa Vista a reality by approving The Village. The careful analysis in the re-circulated sections of the environmental impact report clearly shows that Playa Vista will not create the negative impacts that opponents of the project have claimed.

The City should approve The Village, allowing for the completion of this important model for smart growth on the Westside.

Very truly yours,
VOSS, SILVERMAN & BRAYBROOKE LLP

DAVID C. VOSS, JR.

MARINA TOWERS
4640 ADMIRALTY WAY, SUITE 800
MARINA DEL REY, CA 90292
T 310.306.0515 F 310.306.5368

Letter No. 55

Westchester Vitalization Corporation

Proud Sponsors of the Westchester Certified Farmers Market

Chartered in 1980

April 24, 2009

Mr. David J. Somers
City Planning Dept. Room 750
City Hall
200 North Spring Street
Los Angeles. CA 90012

Dear Mr. Somers,

The initial Playa Vista ground-breaking ceremony was met with great enthusiasm from many local residents and Westchester Vitalization Corporation Board of Directors were part of that celebration.

The same support and enthusiasm exists today. The Village will complete the vision that Playa Vista had promised, allowing people to live close to jobs, schools and shopping, thus reducing the number of cars on the road.

We are excited about The Village as it will continue to preserve open space land and provide new public parks and habitat, as well as neighborhood retail areas.

Playa Vista offers a model for future development that protects the environment and provides significant economic benefits. The Village will be a real community resource.

While we cannot speak to City requirements and/or process, we definitely support Playa Vista and their newest effort, 'THE VILLAGE.'

Respectfully,

Tina Hakanen
and Board of Directors

cc: Honorable Bill Rosendahl, CD 11

P O Box 88005 Los Angeles CA 90009 310 645 6778
email: tinahak@prodigy.net

Letter No. 56

wns | Westside Neighborhood School

April 27, 2009

David J. Somers
City Planning Department
Room 750, City Hall
200 N. Spring Street
Los Angeles, CA 90012

Subject: The Village at Playa Vista

Dear Mr. Somers:

Westside Neighborhood School (then called the Westchester Neighborhood School) endorsed The Village at Playa Vista when it first went through the City of Los Angeles approval process in 2004. We now urge the City to approve the Recirculated Sections of the EIR and allow Playa Vista to move forward with construction.

Playa Vista is a tremendous resource to our community. Beyond bringing benefits, including beautiful new parks and a public library, Playa Vista has been an incredibly strong supporter and partner for WNS. We have had the pleasure of using the new Sports Park for our school soccer, football and softball games. And most importantly, the Playa Vista Educational Trust has allowed WNS to bring extraordinary diverse arts and cultural programs – including dance, drama and music performances – to our students. This programming has truly enhanced our student's education in ways, which we would otherwise not have been able to provide. Approving The Village is integral to the PVET program and the educational support it provides.

Playa Vista's benefit to the community extends far beyond its boundaries. Through the years, their support has made a difference to all of the students at WNS.

The Village will also provide additional benefits to the area, including public transit enhancements that extend throughout the West Los Angeles region, as well as long overdue roadway improvements. We are also pleased that the plans call for more open space, including new public parks and habitat and a neighborhood retail area that is much needed and very appropriate for the area.

I hope that you will support Playa Vista in their efforts to complete their vision to ensure that Playa Vista can continue to support the children and their families in our community.

Sincerely,

Brad Zacuto
Head of School

Glenn Scott
Chair, Board of Trustees

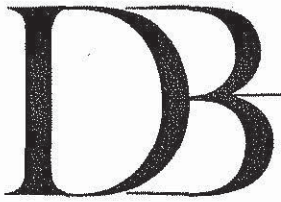
5401 Beethoven Street
Los Angeles, CA 90066
Tel: 310-574-8650
Fax: 310-574-8657
www.wnsk8.com

Letter No. 57

From: Doug Archer <dougarcher26@yahoo.com>
To: <david.somers@lacity.org>
Date: 2/2/2009 5:58 PM
Subject: Yes!

Yes, I support the completion of Playa Vista's The Village. That was the primary reason I moved to Playa Vista, and it has been a shame that the project has been stalled, especially after all the infrastructure was invested into it already. Now, it's just partially developed vacant land that is ready for continued development between the already developed Playa Vista homes and the offices (being built) near Centinela. Let's get going on this last phase of the project. It will also create jobs and stimulate the economy, which is greatly needed at this time! No more delays. Build it!

Letter No. 58



April 24, 2009

David J. Somers
City Planning Department
200 N. Spring Street, Room 750
Los Angeles, CA 90012

Re: Recirculated Sections of EIR for The Village at Playa Vista

To Mr. Somers:

With its proposal for **The Village, Playa Vista** is going to add thousands of construction jobs during a time when the economy desperately needs a shot in the arm. The Village will also generate millions of dollars per year for the City of Los Angeles' general fund.

What's not to like? This project provides for long overdue transportation improvements, the addition of new parks and public transit enhancements that extend throughout the west L.A. region.

I support **The Village**. For too long, it has been delayed by litigation from professional protest opponents and red tape. The project is good for the City and good for the local area. I encourage the City to approve it.

Thank You,

Diane Barretti

Barretti • 7339 W. 91st Street • Westchester, California 90045

Letter No. 59

From: <Madroneweb@aol.com>
To: <David.somers@lacity.org>
Date: 4/30/2009 5:00 PM
Subject: Comments on Village at Playa Vista RS-DEIR

April 29, 2009

Bruce Campbell
1158 26th St. #883
Santa Monica, CA 90403

David J. Somers
Department of City Planning
200 North Spring Street, Room 750
Los Angeles, CA 90012

Re: Comments on the Village at Playa Vista RS-DEIR

Dear Mr. Somers and to whom it may concern:

First I will mention some numbers and letters which I see on the Village at Playa Vista documents -- even though I'm not sure if they apply to the revisions or to the earlier documents. Those letters and numbers are: "ENV-2002-6129-EIR" and "State Clearinghouse # 2002111065" and the date "January 2009".

Second, I do not believe that the earlier Village at Playa Vista documents adequately considered reasonable alternatives despite what I believe is a mandate to do so under the California Environmental Quality Act. One reason why certain alternatives were not mentioned or adequately considered is that there is the presumption (which I believe was tossed out by a court) that the Village at Playa Vista can build a lot more buildings and square footage than is allowed under the current zoning. Thus, it was assumed that there could be massive development since I suppose Playa Vista representatives realized that they had the vast majority of City Councilmembers under their thumb, and that they would do their bidding to be able to change zoning ordinances in order to allow such dense developments. Both the Westchester/Playa del Rey Community Plan and the Area D Specific Plan would need to be changed so that the project as proposed can move forward.

I call for inclusion in the Final EIR of all contact which representatives of Playa Vista (and their family members and related companies) had with members of the Los Angeles City Council, as well as documentation of all Playa Vista (and related family members and companies) donations to members of the Los Angeles City Council, as well as to the Mayor and City Attorney of Los Angeles. The public deserves to know the extent to which officials are financially and otherwise influenced relating to this large project.

Due to the presumption that certainly the Los Angeles City Council would readily change the zoning for this area to accomodate the Village at Playa Vista, thus certain other alternatives were deemed unrealistic due to the cost of the property which increases further if one presumes that the two zoning plans will be changed so that the project can move forward. Since we are back to an earlier era when the zoning plans clearly state that there should be a maximum of 108,050 square feet of office space in the Village at Playa Vista, thus one cannot assume that the property is worth more than

the value which it has seeing that the current zoning says that office space construction at the Village at Playa Vista is limited. Also, besides claims that several intersections in the region would be improved, there has been no serious traffic analysis of the true impact of a huge increase in vehicle trips in the area far beyond the 1568 additional vehicle trips a day which is allowed under the current zoning for the Village at Playa Vista site.

The "Equivalency Program" says "may", so it sounds like the developers are still unsure what they want to do with the Village site, but it is likely they want to maximize their profit and what they can build on it. Do not say "may" or give vague ideas. Either abide by current zoning, or at least give an honest assessment of what plans are in the works for the site.

And despite calling on the public to limit comments to certain topics, the preparers of the RS-DEIR themselves have added one topic for further consideration -- that being global climate change. Yet, not surprisingly, one portion regarding global climate change was partially addressed (that portion focused on the claim that building the Village at Playa Vista would add insignificantly to global climate change), yet a rather obvious matter regarding global climate change was ignored. The omitted portion crying for attention is how global climate change will impact various portions of the Playa Vista development (including the Village site), as well as the general Playa del Rey and Marina del Rey areas. Ocean level should significantly rise and some scientists forsee that the Village site at Playa Vista will be under Pacific Ocean water in less than a century. This needs further analysis in a Supplemental DEIR document. How will ocean water east of Lincoln Blvd. impact the drainage/run-off ditch of the so-called "riparian area" which feeds into the so-called freshwater marsh -- which will be quite salty by that point?

The documents claim that there will be no problem with the impact of Playa Vista Village sewage on the Hyperion facility, but I doubt that the document was updated to account for various new developments planned in the Marina del Rey area, at Playa del Rey, and Loyola Marymount University, in the Hughes Center area, more skyscrapers in Century City, and other proposed Westside developments. Please account for these various development proposals in a Supplemental DEIR when you are assessing the Village at Playa Vista's impact on the Hyperion sewage facility and on Santa Monica Bay.

As far as comparative cumulative impacts of the Village at Playa Vista project on Santa Monica Bay, seeing that alternatives such as a regional park or a treatment/restored wetland were readily dismissed in earlier documents, those alternatives must be examined again in a Supplemental DEIR. A number of environmentalists in the area have called for natural treatment wetlands to treat the water from Centinela Creek and at least some water from Ballona Creek at the site proposed for the Village at Playa Vista. While the high cost of acquiring the land resulted in dismissal of some more environmental alternatives in the DEIR, yet if one considers what it would cost the City of Los Angeles to abide by TMDLs (Total Maximum Daily Loads) for Ballona Creek so that it does not violate regulations where it empties into Santa Monica Bay, then the fairly steep price for Village at Playa Vista land seems reasonable as compared to the cost which would be incurred by constructing major buildings and mechanical treatment facilities in order to clean up the water of Ballona and Centinela Creeks so that the federal guidelines for TMDLs (which will be enforced in future years) are met.

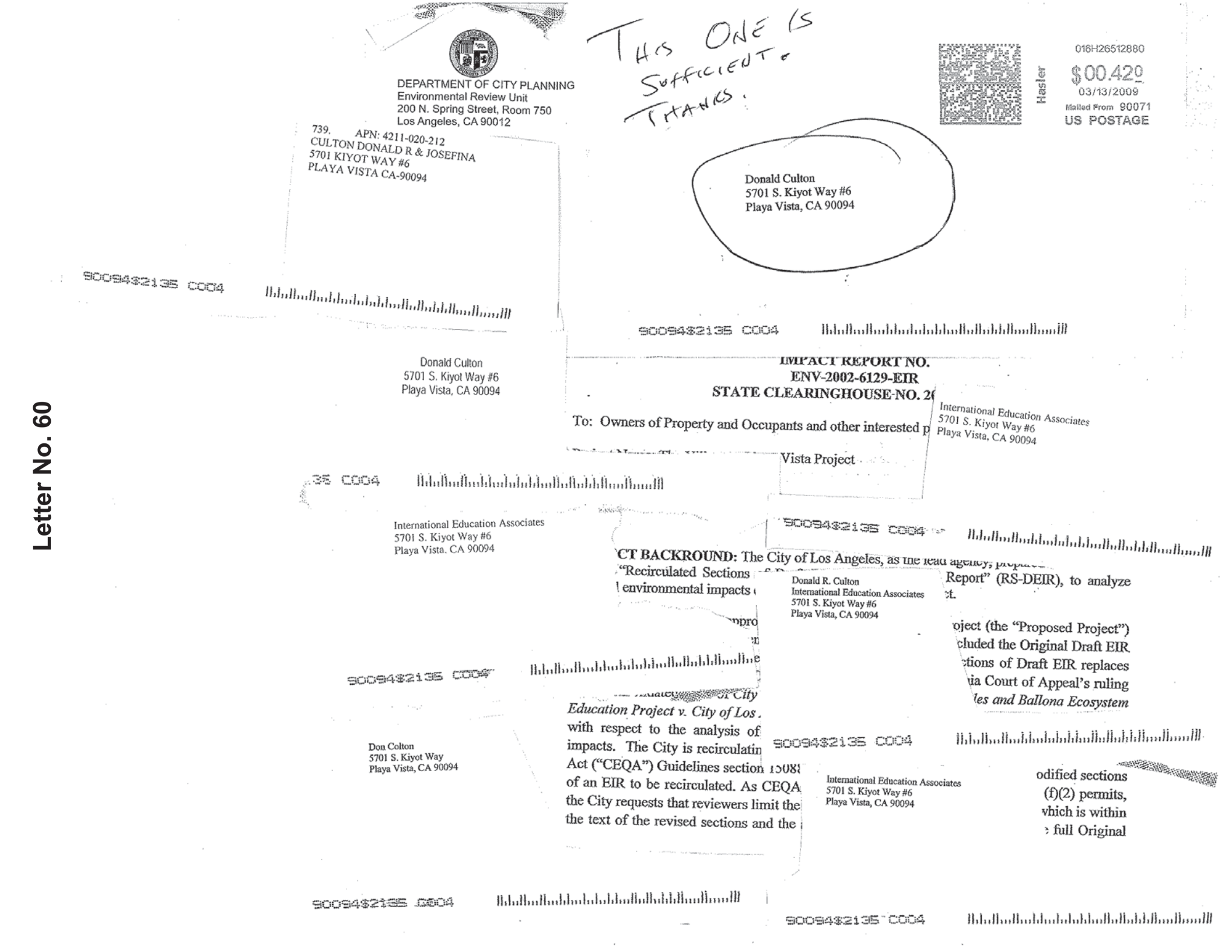
Clearly in such a comparison, Prop. O funds would get a lot more bang for the buck by acquiring the land for "natural treatment wetlands" to help cleanse Centinela and Ballona Creek water -- than if the major construction of buildings and mechanical treatment facilities was carried out. Thus, since it would be cheaper and there would be higher quality water emptying out of Ballona Creek and Centinela Creek if there was a natural treatment wetland at the Village at Playa Vista cleaning this water before it goes into Santa Monica Bay. Thus, this natural treatment wetland alternative would have quite positive impacts on Santa Monica Bay, rather than adding to the contaminant load which would occur if the Village at Playa Vista was constructed and commercially landscaped.

I call for not disturbing areas where native remains are known to be. If the approximately 400 native remains at Playa Vista Phase One is any indication, there likely will be many more native remains discovered at the Phase Two Village site. It is disgraceful especially if there are more than a handful of remains to dig up these original people of this area in order to put the run-off ditch from the development in the exact place which the developer wants. There must be "preservation in place" and if there are at least a handful of remains discovered in a locale, then this area should be thereafter avoided, except for some native plant restoration as long as the digging to plant such do not go too deep. Basic respect calls for a preservation in place alternative no matter what anti-native guidelines you may claim can be cited to dismiss it.

Sincerely yours,

Bruce Campbell

Letter No. 60



THIS ONE IS SUFFICIENT. THANKS.

DEPARTMENT OF CITY PLANNING
Environmental Review Unit
200 N. Spring Street, Room 750
Los Angeles, CA 90012

739. APN: 4211-020-212
CULTON DONALD R & JOSEFINA
5701 KIYOT WAY #6
PLAYA VISTA CA-90094

016H26512880
$00.42⁰
03/13/2009
Mailed From 90071
US POSTAGE
Hasler

Donald Culton
5701 S. Kiyot Way #6
Playa Vista, CA 90094

90094$2135 C004

Donald Culton
5701 S. Kiyot Way #6
Playa Vista, CA 90094

IMPACT REPORT NO.
ENV-2002-6129-EIR
STATE CLEARINGHOUSE-NO. 2

To: Owners of Property and Occupants and other interested p

Vista Project

International Education Associates
5701 S. Kiyot Way #6
Playa Vista, CA 90094

International Education Associates
5701 S. Kiyot Way #6
Playa Vista, CA 90094

CT BACKROUND: The City of Los Angeles, as the lead agency, prepa
"Recirculated Sections Report" (RS-DEIR), to analyze
l environmental impacts ct.

Donald R. Culton
International Education Associates
5701 S. Kiyot Way #6
Playa Vista, CA 90094

oject (the "Proposed Project")
cluded the Original Draft EIR
tions of Draft EIR replaces
ia Court of Appeal's ruling
les and Ballona Ecosystem

Education Project v. City of Los
with respect to the analysis of
impacts. The City is recirculatin
Act ("CEQA") Guidelines section
of an EIR to be recirculated. As CEQA
the City requests that reviewers limit the
the text of the revised sections and the

Don Colton
5701 S. Kiyot Way
Playa Vista, CA 90094

International Education Associates
5701 S. Kiyot Way #6
Playa Vista, CA 90094

odified sections
(f)(2) permits,
which is within
full Original

90094$2135 C004

Letter No. 61

From: "Pamela Davidson, Ph.D." <davidson@ucla.edu>
To: <David.somers@lacity.org>
Date: 3/31/2009 10:28 AM
Subject: Let Stand: Ballona Wetlands 2007 Court Decision

Mr. Somers:
I have been reading up on the Environmental Impact Report released by the Playa Vista Developers.
The Developers are hoping to overturn the 2007 Court Decision to halt development.
As a resident of the local community I am extremely concerned about the deficiencies in the analysis related to the environmental impacts of continued development on one of the last remaining wetlands on the California coast, which allows for filtering and cleansing of toxins and pollutants that would otherwise run off into the south bay. Other impacts not adequately addressed in the biased report provided by the Developers include the methane gas risk, water supply limitations, and global warming caused by continued destruction of our natural environment.

I certainly support the 2007 Court Decision. We should not continue to revisit these decisions. The local community has strongly spoken on these issues and we have won this battle in court. Rather we should be spending our time developing funds to protect our wetlands and to create a nature preserve for wildlife and the community to enjoy for generations to come.
Sincerely,

Pamela L. Davidson, Ph.D.
Email: Davidson@ucla.edu

Letter No. 62

TO: CITY OF LOS ANGLES
ATT: DAVID SOMERS
FROM: JOHN DAVIS
RE: AMENDED COMMENTS PLAYA VISTA PHASE 2 EIR
VIA CERTIFIED MAIL

MAY 1, 2009

DEAR MR. SOMERS,

PLEASE REPLACE MY SUBMISSION OF APRIL 30 WITH THIS DOCUMENT.

MY ATTACHMENT 2 WAS THE WRONG FILE.

THE ONLY CHANGE TO MY COMMENTS IS TO CORRECT THE ATTACHMENT.

PLEASE CONTACT ME IF FOR ~~ANY~~ REASON IF YOU DO NOT MAKE THE REPLACEMT.

THANK YOU,

JOHN DAVS
PO 10152 MARINA DEL REY CA 90295
310.795.9640

April 30, 2009

TO: CITY OF LOS ANGELES
RE: COMMENTS : EIR SCH NO. 2002111065
Re: Comments Playa Vista Phase 2 Environmental Impact Report
SIX PAGES PLUS ATTACHMENTS

Please find below my comments in regard to the Environmental Impact Report.

COMMENT 1: THE CITY CANNOT LAWFULL PROCEEDE IN THIS PROCESS BECAUSE IT IS IMPOSSIBLE TO DETERMINE ISSUES OF CUMULITIVITY BECAUSE PHASE ONE OF THE PROJECT IS UNDER CURRENT LITIGATION (BS073182) AS TO GROUNDWATER DEWATERING. UNTIL FINAL ADJUCICATION WHICH WILL SETTLE MATTERS OF GROUNDWATER DEWATERING AT PHASE ONE NO LAWFULLY VALID DETERMINATION OF CUMULITIVITY REGARDING GROUNDWATER DEWATERING AT PHASE TWO CAN BE MADE.

QUESTION: WHY DOES THE CITY FAIL TO WITHDRAW FROM THIS PROCESS UNTIL ADJUCIDICATION OF THE PHASE ONE LAWSUIT SO THAT IT WOULD BE POSSIBLE TO LAWFULLY EVALUATE CUMMULITIVITY RELATIVE TO GROUNDWATER DEWATERING AND ITS POTENTIAL TO CREATED NEW AND POTENTIALLY ADVERSE ON THE ENVIRONMENT AS CEQA COMMANDS?

COMMENT 2: PAGE 26 OF THE FEIR STATES "*LAND IMMEDIANTLY TO THE WEST AND EAST OF THE PROPSED PROJECT IS APPROVED FOR DEVELOPENT AS PART OF PLAYA VISTA FIRST PHASE DEVELOPMENT...* "

THIS IS SMIPLY A FALSE STATEMENT IN THAT THE CALIFORNIA COURT OF APPEAL ORDERED EITHER AND SEIR OR SEIR AND PROCEEDANCE IN ACCORDANCE WITH CEQA. PHASE ONE IS THERFORE UNDER LEGAL CHALLENGE. THE CITY AS RESPONDEDNT IS CLEARLY AWARE OF THE LITIGATION. THE LITIGATION IS NOT CITED IN THE HISTORY SECTOIN.

QUESTION 2: WHY DOES THE FEIR FAIL TO ADDRESS ONGOING PHASE ONE LITIGATION?

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COMMENT 3: THE CITY DID NOT COMPLETE THE MASTER FEIR PROCESS FOR PHASE ONE AND TWO, EVER. THE MANDATORY NOTICE OF COMPLETION WAS NEVER TRANSMITTED TO THE STATE OFFICE OF PLANNING AND RESEARCH THEREFORE A COMPLETE AND FAIRLY DONE FEIR NEVER EXISTED FOR PHASE ONE.
FURTHERMORE EVEN IF IT DID IT WAS IN THE FORM OF A MASTER EIR WHICH REQUIRES RECERTIFICATION BY THE CITY EVERY FIVE YEARS AND SINCE THE LAST CERTIFICATION WAS DONE BY THE CITY IN 1995 IT IS EXPIRED AND MAY NOT BE CITED FOR THIS PROJECT.

QUESTION 3: WHY HASN'T THE CITY BEGAN A NEW DRFAT MASTER EIR
PROCESS THAT LAWFULLY CONSIDERS THE CUMMULITIVE AFFECTS OF BOTH PHASES RATHER

THAN RELYING ON AN INCOMPLETE EXPIRED MASTER EIR FROM 2001 WHICH WOULD HAVE EXPIRED IN 1995 IF IT WAS COMPLETED?

COMMENT 4 : FEIR PDF PAGE 50 MAKES ONLY AN **ASSUMPTION** AS TO THE POTENTIAL ADVERSE CUMMULITVE AFFECTS OF GROUNDWATER DEWATERING WITHOUT EMPIRICAL EVIDENCE TO SUPPORT ITS CONCLUSION.

MAKING SUCH AN ASSUMPTION HAS LED THE CALIFORNIA COURT OF APPEAL TO REJECT THE GROUNDWATER DEWATERING FOR THE MASTER EIR WHICH GOVERNS BOTH PHASES OF THE PROJECT.

THE FEIR DOES NOT CONSIDER THE POTENTIAL ADVERSE AFFECTS FROM GROUNDWATER DEWATERING ON THE METHANE MITIGATION SYSTEMS THEMSELVES IN PHASE ONE, THE POTENTIAL TO CHANGE THE DIRECTIONAL FLOW OF GROUNDWATER, THE POTENTIAL TO DRAW CONTAMINATED GROUNDWATER FROM TWO SITES AT PLAYA VISTA TO AREAS THAT ARE NOT CONTAMINATED, THE POTENTIAL AFFECT ON THE THREE AQUIFERS INVOLVED AS IT RELATES TO SALTWATER INTRUSION – DISCHARGING THE WATER TABLE-CROSS CONTAMINATION THROUGH AQUIFER COMMUNICATION – AND OR SUBSIDANCE.

FURTHERMORE THE FEIR DOES NOT SPEAK TO THE CUMULITIVE AFFETS OF DEWATERING FROM ALL CONSTRUCTION DEWATERING ACTIVITIES ON BOTH PHASE ONE AND TWO WHICH ARE INTRINSICALLY RELATED PLUS THE DEWATERING ACTIVITY ASSOCIATED WITH ONE KNOWN SITE OF CONTAMINATION TO THE EAST PLUS ONE KNOWN SITE OF CONTAMINATED GROUNDWATER TO THE WEST, PLUS ALL DEWATERING ACTIVITIES IN THE ENTIRE PROJECT ASSOCIATED WITH GROUNDWATER DISCHARE PERMITS (INDUSTRIAL WASTE WATER PERMITS) ISSUED BY THE

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-

CITY OF LOS ANGELES DEPARTEMENT OF SANITARY WASTEWATER IN COMBINATION. THE QUANTIES OF GROUNDWATER DISCHARGE AT THE ENTIRE PROJECT SITE ARE PARTIALLY QUANTIFIED BY THE REGIONAL WATER QUALITY CONTROL BOARD IN MY RECENT LETTER TO THE LARWQCB. THE LARWQCB DID NOT CONDUCT A "PEER REVIEW" UNDER THE CALIFORNIA HEALTH AND SAFTEY CODE AS IT CLAIMED THERERFORE NO DATA DERIVED FROM A FALSFIED "PEER REVIEW" WHICH REPRESENTS POTENTIAL AGENCY MISCONDUCT OR GROSS NEGLIANCE MAY BE CITED BY THE CITY AS A SOLID FOUNDATION TO WHICH **TO DRAW CONCLUSIONS.**

ATTACHMENT 1 – MY LETTER TO THE LARWQCB

HOWEVER THE ACTUAL AMMOUNTS OF DEWATERING FROM THE CONTAMINED FIRE PIT AREA IN PAHSE ONE AND OR DEWATERING DONE UNDER THE ALREADY ISSUED INDUSTRAL WASTEWATER PERMITS ARE UNKNOWN.

GIVEN THESE CIRCUMSTANCES THE CITY HAS FAILED TO ADDRESS THE CUMMULITIVE AFFECTS OF DEWATERING.

"HOWEVER DEWATERING ACTIVITIES DURRING CONSTTRUCTIONAND OPERATION OF URBAN DEVELOPMENT USES ARE ANTICIPATED TO RESULT IN A LESS-THAN –SIGNIFICANT IMPACT SINCE THEY WOULD NOT CAUSE OR ACCELARATE GEOLOGIC HAZARDS WIHC WOULD RESULT IN SUBSTANTIAL DAMAGE TO STRUCTURES OF INFRASRTRUCTURE, OR EXPOSE PEOPLE TO SUBSTANTIAL RISK OF INJURY; CONSTITUTE A GEOLOGIC NATURAL HAZARD OR OTHER PROPERTIES BY CAUSING OR ACCELARATING INSTABILITY FROM EROSION; OR ACCLERATE DEPOSITITION WICH WOULD NOT BE CONTAINED OR CONTROLLED ON-SITE."

QUESTION 4A: WHY IS THE CITY RELYING ON BLIND FAITH INSTEAD OF EMPHERICAL EVIDENCE WHICH CEQA COMMANDS?

QUESTION 4B: WHY DOES THE FEIR AVOID CONSIDERING THE ACTUCAL AMMOUNTS OF GROUNDWATER DEWATERING INSTEAD OF MERLEY PROGNOSTIGATING THE AFFECT (ANTICIPATE). CEQA DOES NOT RECONGNIZE ANTICIPATION OR PROGNOSTIGATION OR BLIND FAITH.

NOTE: INCORPORTATED BY REFERENCE ARE COMMENTS MADE TO THIS FEIR BY PATRICIA MCHPERSON OF GRASSROOTS INC. A NON- PROFIT CORPORATION. EMPHISIS IS MADE TO THE SPIDER MAP SHOWING THE LOCATION OF ALL INDUSTRAL WASTE PERMITS AND IDENTIFYING THEM.

COMMENT 5 : THE CITY CANNONT CIRCULATE AN FEIR FOR COMMENT. COMMENT MAY ONLY BE MADE TO A DRAFT EIR IN CONJUNCTION WITH THE MANDATORY NOTICE OF CIRCULATION OF DRAFT EIR WHICH MUST MANDATORLY BE FILED WITH THE STATE OFFICE OFO PLANNING AND RESEARCH. ONLY THE LEGISLATURE OF THE STAE OF CALIFORNIA MAY LIMIT THE SCOPE OF CEQA IN LAW. THE CITY COUNCIL MAY NOT THEREFORE LIMIT THE SCOPE OF CEQA WHICH IS REPRESENTED AS UNLAWFUL IN THIS FEIR.

THE CITY CANNOT USTILIZE A DEFEATED FEIR WHICH IS SIX YEARS OLD TO ELICIT COMMENTS FROM THE PUBLIC. IT MUST CIRCULATE A NEW DRAFT EIR THAT FULLY ENCOMPASES CURRENT CIRCUMSTANCES. EVEN THOUGH THE COURT EXPRESSED CERTAIN CONCERNS, THAT FACT DOES NOT EXCUSE THE CITY FROM CONDUCTING CEQA IN COMPLETION. CEQA MAY ONLY BE LIMITED BY THE LEGISLATURE OF THE STATE. THE CITY CANNONT MERLEY ASSUME NO SUBSTANTIAL CHANGES TO THE ENVIRONMENT SINCE 2003, IT MUST INVISTIGATE AND PROVDE PROOF INSTEAD OF OFFERING UNSUPPORTED CONCLUSIONS WHICH FAVOR PROJECT.

QUESTION 5: WHY DID THE CITY FAIL TO ADDRESS THE ISSUED THAT THE MASTER FEIR FOR BOTH PROJECTS EXPIRED BECAUSE IT WAS NOT RECERTIFIED BY THE CITY COUNCIL AS NECESSARY EVERY FIVE YEARS.

NOTE: THE EXPIRED MASTER FEIR GOVERNS CUMMULITIVITY ON BOTH PHASES.

COMMENT 6: THE REGOINAL WATER QUALITY CONTROL BOARD MAY NOT ISSUE ANY NEW NPDES PERMITS BECAUSE THE EFFECTS OF GROUNDWATER DEWATERING IN PHASE ONE OF THE PROJECT WILL NOT BE DETERMINED UNTIL FINAL ADJUDICATION OF THE LAWSUIT FOR PHASE ONE WHICH IN NOW IN THE COURT OF APPEAL. FURTHERMORE THE LARWQCB CANNONT ISSUE ANY PERMITS BECAUSE ALL OR A FRACTION PORTION OF THE WATER WELLS AT THE SITE ARE ILLEGAL IN THAT NO
WELL COMPLETION REPORTS HAVE EVER BEEN FILED FOR ALL OF THE WATER WELLS ON PHASE ONE AND TWO WITH THE STATE WATER RESOURCES AGENCY AS REQUIED BY LAW NOR HAS THE APPLICANT COMPLETED A WELL COMPLETION REPORT RELEASE AGREEMENT – ENVIRONMENTAL CLEANUP STUDY FORM FOR ANY WATER WELLS WITHING TWO MILES OF A KNOWN BODY OF CONTAMINATED GROUNDWATER AND THEREFORE THE LARWQCB HAS NOT YET INITIATED THE REQUIRED ENVIRONMENTAL STUDY REQIRED FOR EACH AND EVERY WELL WITHIN TWO MILES OF THE KNOWN CONTAMINATION. THE REQUIRED FORMS MAY BE REFRENCED AT:

http://www.groundwater.water.ca.gov/technical_assistance/gw_wells/gww_complrept/index.cfm

ALL DEWATERING ACTIVITIES COVERD BY INDUSTRAL WASTE PERMITS REPRESENT WATER WELLS AND MUST BE REPORTED ON AS SUCH.
THE LOGIC FOR THIS POSITITION IS EXTRACTED FROM A STATE OF COLORADO SUPREME COURT DECISION ATTACHED

QUESTION 6: WHY DOES THE CITY FAIL TO CONSIDER THE FACT THAT LAWFULLY REQUIRED ENVIRONMENTAL STUDIES FOR WATER WELLS WITHINN TWO MILES OF A CONTAMINATED GROUNDWATER SOURCE HAVE NOT YET BE COMPLETED BY THE LARWQCB AND COULD NOT BECAUSE THE WELL OWNER FAILED TO LAWFULLY FILL OUT THE REQUIED FORM THEN SUBMIT IT TO THE STATE WATER RESOURCES AGENCEY. WHY DOES THE CITY RELY ON DATA FROM SOURCES (WATER WELLS) THAT ARE LARGLEY OR COMPLETELY ILLEGAL SOURCES OF DATA. WHY DOES THE CITY FAIL TO REQUIE ALL OF THE DATA LINAGE AND PROFFS OF A SECURE CHAIN OF CUSTODY FOR ANY DATA USED TO CREATE COMPUTER GROUNDWATER MODELS. WHY DOES THE CITY INSTEAD OF EMPHIRCAL SCIENCE SUBSTUTIED BLIND FAITH?

SEE ATTACMENT 1

ATTACHEMT 2 – ARTICLE REGARDING COLARADO SUPREME COURT DECISION REGARDING WHAT CONSTUTES A WATER WELL.

ATTACHMENT 3 – RESPONSE FROM LARWQCB THAT NO COMPLEIOTN REPORT RELEASE AGREEMENT-ENVIRONMENTAL CLEAN UP STUDY FORM HAS BEEN UTILIZED BY THE LARWQCB TO INITIATE ENVIRONMENTAL STUDIES FOR WATER WELLS WITHIN 2 MILES OF A KNOWN SITE OF GROUNDWATER CONTAMINATION.

COMMENT 7; A LARGE VOLUME OF GROUNDWAER HAS BEEN DISCHARD SINCE 2003 – SEE ATTACHMENT 1. UNKNOWN AMMOUNTS OF GROUNDWATER HAVE BEEN DISCHAERGED FROM THE FIRE PIT TRAINING AREA IN PHASE ONE WHICH CONTAINS TOXIC MATERIALS BUT THE VOLUME IS UNKNOWN. UNKNOWN ACTUAL VOLUMES OF GROUNDWATER HAVE BEEN DISCHARDED UNDER INDUSTRAL WATE PERMITS BUT THE QUANTIY REMAINS UNKNOWN.

LONG TERM DEWATERING QUANTITIES HAVE NOT YET BEEN DETERMINED AS THOSE VOLUMES ARE IN A CONSTENT STATE OF FLUX.

GIVEN THE AMOUNT OF KNOWN DEWATERING AND THE TWO UNKNOWN QUANTITIES PREVIOULSLY REFERENCED IT IS IMPOSSIBLE FOR THIS FEIR TO ADDRESS EITHER THE QUANTIFIABLE VOLUMES AT ANY CERTAIN POINT IN TIME OR THE QUANTITIAVE VOLUMES IN THE PAST OR FUTURE.

SEE ATTACHEMENT 1

QUESTION 7: WHY HAS THE FEIR FAILED TO CONSIDER QUANTITATIVE GROUNDWATER DEWATER VOLUMES FROM ALL FOUR SOURCES PAST AND FUTURE TO MAKE ITS CALCULATIONS.

COMMENT 8: SINCE 2003 AN EARTHQUAKE OF MAGNITUDE 3+ WAS EPICENTERED ON THE CHARNOCK FAULT WHICH BISCETS THE PLAYA VISTA PROJECT. ANOTHER RECENT EARTHQUAKE WAS EPICENERED ON AN ACTIVE FAULT LOCATED IN VENICE CA. NEARBY WHICH WAS ALSO A MAGNITUDE 3+.

QUESTION 8: WHY IS THE FEIR SILENT ON THESE NEW AND CHANGED ENVIRNMENTAL CIRCUMSTANCES THAT WERE NOT AND COULD NOT HAVE BEEN KNOWN AT TIME OF THE ORIGNAL CERTIFICATION OF THE FEIR?

COMMENT 10: THE CITY IS AWARE THAT THE STATE OF CALIFORNIA IS FINALIZING NEW TSUNAMI INUNDATION MAPS FOR THE AREA AND THEY ARE DUE TO BE RELEASED THIS YEAR.

QUESTION 10: WHY DOES THE CITY FAIL TO EXTEND THE COMMENT PERIOD TO A DATE AFTER THE NEW INUNDATION EVACUATION MAPS CAN BE CONSIDERED?

NOTE: THE CITY IS AWARE OF THE NEW MAPS AND POCESSES A DRAFT COPY.

SINCERLEY,

John Davis
PO 10152 Marina del Rey Ca. 90295

ATTACHMENT 1

Los Angeles Regional Water Quality Control Board April 15, 2009
Att: Executive Officer Tracy Egoscue
Re: Board Letter of March , 2009

Dear Executive Officer Egoscue,

In regard to meeting with staff, I would like to express my comments and questions prior as requested. PLEASE PROVIDE COPIES OF THIS LETTER TO THE BOARD MEMBERS.

Patricia McPherson will as you know join the meeting.

COMMENT ONE – CEQA AND CURRENT LEGAL CHALLENGE TO PROJECT

The proposal suggested requires an action under CEQA. A Master EIR overarches any CEQA process for Phase One. The change proposed may cause an adverse affect and or have unknown impacts on the environment therefore CEQA must occur and be related to the Master EIR. The Master EIR is expired and was not renewed every five years as legally required. Therefore a new EIR is required and any CEQA process must fall under it.

The California Court of Appeal dispositition in case B174856 reads as follows:

"The judgment is reversed with directions to the superior court to grant the petition and issue a peremptory writ of mandate ordering the city to vacate its approval of the methane mitigation measures, for the purposed of determining whether a subsequent EIR or a supplemental EIR is required with respect to groundwater dewatering and proceed accordingly as required by CEQA."

On remand to Los Angeles Superior Court the case was adjudicated in favor of
The City of Los Angeles and Playa Capital LLC.

Two appeals were filed in February 2009.

LARWQCB staff cannot substitute its approval for the proposal in avoidance of the CEQA process. If and until the Appeals Court finds the Superior Court decision on remand is sound, LARWQCB must withhold its approval because such would clearly prejudice appellant's case before the Court and would be violative of the CEQA process.

Furthermore the City Council vacated the methane mitigations in word only while the City continually employed the systems which include dewatering in clear violation of the Court order and with the encouragement of the LARWQCB staff via its prior approvals
prior to the most recent court ruling..

QUESTION ONE – WHY HASENT THE LARWQCB ADDRESSED THE RAMIFICATIONS OF THE LAWSUIT THAT OVERSHADOWS THE MODIFICATIONS IT HAS ALREADY APPROVED AND IS CURRENTLY CONSIDERING? WHY IS CEQA IGNORED IN THIS PROPOSAL, IS THE LARWQCB EXEMPT FROM CEQA?

COMMENT TWO-POTENTIAL MIS-CONDUCT BY LARWQCB RELATED TO A "PEER REVIEW" ISSUED ON DECEMBER 16, 2005.

Page two item 2 states the following: "In the light of protecting water resources and the environment, a conservative approach (worse case scenario) should be taken in the evaluation." "Use the historical high water elevation for the impact simulation runs."

The current proposal abandons this standard in favor of a "site wide groundwater survey" which is not maximumly protective of water resources and the environment.

A "Peer Review" is a formal part of the regulatory process whereby RWQCB is required by the California Health and Safety Code to submit the scientific portions of proposed regulations for external scientific evaluation to ensure that the scientific assumptions are sound. The "Peer Review" was sent to various State and Federal Agencies.

The "Peer Review" was NOT a "Peer Review" but does either represent gross negliance or misconduct of a State Agency and or Employees of the State. **See Attachment**

I met with the Executive Officer and Deputy Executive Officer in 2008 and asked them to notify all agencies copied that NO PEER REVIEW OCCURRED as it may have a differing affect on their judgment.

The Executive Officer has failed to date to notify the Board itself or any entity copied on the falsified "Peer Review". This is clearly a matter of human health and safety which should not be swept under the rug.

Furthermore no data linage was presented to the LARWCB to validate a secure chain of custody of such to prove that inputs to the model were sound and not FABRICATED. It should also be stated that the governing Board was not informed of the process and it was only approved by Staff and paid for by the applicant. Approvals of the afore referenced "Peer Review" were made in a document dated January 10, 2006 entitled only a "REVIEW".

The California Department of Toxic Substance Control received and evaluated the falsified "Peer Review" and the approving "Review" along with two other documents provided by non-governmental entities. DTSC states in its letter of November 14, 2006 that it concurred with the requirements for a "worst case" modeling assessment and further stated "Overall the technical review by the LARWQCB appeared to be through and professional". **See Attachments**

QUESTION TWO – WHY DID THE EXECUTIVE OFFICER UPON LEARNING THE PEER REVIEW WAS FALSE FAIL TO INFORM THE PUBLIC, THE GOVERNNING BOARD, AND ALL AGENCIES COPIED ON THE ORIGINAL
"PEER REVIEW? WHY DID STAFF LEAD THE PUBLIC AND GOVERNMENT AGENCIES TO BELIEVE THAT A "PEER REVIEW" COUNDUCTED UNDER THE
STATE HEALTH AND SAFETY CODE OCCURRED WHEN BY ITS OWN ADMISSION NO SUCH "PEER" REVIEW OCCURRED?

COMMENT THREE – No water well completion reports have been sought by LARWQCB to validate that any and all types of water wells used to obtain data were lawful data sources. Faith alone is not a sufficient standard nor a substitute for empirical evidence commanded by CEQA and valid science. I believe that all or a fraction of the wells are illegal under State Law in that Well Completion Reports are required under the California Water Code Section 13751 but do not exist. As a government agency I requested that such reports be obtained by the LARWQCB but it has failed to do so to date, after repeated requests. To validate the legitimacy of such wells as legitimate data-sources I hereby request, again, that the Executive Officer obtain such reports for the entire project site phases one and two since each and every water well may have an affect on the proposal at hand in the aspect of cumulatively.

QUESTION THREE – WILL THE EXECUTIVE OFFICER AT MY REPEATED REQUEST OBTAIN WELL COMPLETION REPORTS FOR ALL WELLS AT THE SITE BY FILLING OUT THE REQIRED FORM AT THE DEPARTMENT OF WATER RESOUCRES? :

http://www.groundwater.water.ca.gov/technical_assistance/gw_wells/gww_complrept/index.cfm

IF AGAIN THE LARWQCB FAILS THIS REQUEST WHY AND HOW CAN VALIDATION OF THE WELLS AS LEGAL DATA SOUCRCES BE PROVEN TO THE LARWQCB, OTHER GOVERNMENT AGENCIES AND THE PUBLIC? DOES THE LARWQCB CHOOSE TO SUBSTUTITE FAITH FOR EMPHERICAL DATA?

COMMENT FOUR – The proposal does not take into consideration cumulatively as it relates to the potential affects from other nearby dewatering operations that could affect the proposal and the environment. **See Attachments**

QUESTION FOUR – Why has the LARWQCB failed to date to consider the potential cumulative affects from the surrounding dewatering operations as those operations may and probably do cause environmental effects regarding this proposal.

COMMENT FIVE – The applicant is utilizing a Tsunami Inundation Map produced by the State of California for land planning as it relates to this proposal.
Maps produced for this purpose carry a disclaimer at the bottom stating they are NOT TO BE USED FOR LAND PLANNING PURPOSES.

QUESTION FIVE – WHY IS THE APPLICANT USING THE MAP FOR THE PROHIBITED PURPOSE OF LAND PLANNING?

COMMENT SIX
At a meeting with RWQCB Staff in 2008 with myself and Patricia McPherson in attendance Staff stated that the water table drawdown for the project was between 8 and 12 feet.

QUESTION SIX-CAN THE RWQCB PROVIDE ANY AND ALL DATA ALONG WITH THE DATA LINAGE AND SECURE CHAIN OF CUSTODY PROOFS WHICH STAFF USED TO DETERMINE THE AFORE REFERENCED DRAW DOWN OF THE AQUIFER INCLUSIVE OF ALL COMPUTER MODELS, THE SOFTWARE USED TO RUN THE MODELS, AND MAPS OF ANY KIND.

IF NOT DOES THE RWQCM EXERCISE BLIND FAITH IN THE APPLICANTS CLAIMS AND IF SO WHY?

COMMENT SEVEN – The applicant and to date the LARWQCB have ignored potential adverse and predictable periodic floods of Ballona Creek that may cause a adverse effect on the environment. An air photo obtained from Spence Collection at the UCLA library indicates clearly the extent of such flood waters. Staff and the Executive Officer of the LARWQCB have been presented with the photograph but to date have ignored it as evidence. **See Attachment**

QUESTION SEVEN – WHY HAS STAFF TO DATE IGNORED THE AIR PHOTO AND POTENTIAL FOR OVERTOPPING FLOODWATERS FROM BALLONA CREEK WHICH WOULD INUNDATE THE PROPOSED PROJECT AND POTENTIALLY CAUSE AN ADVERSE AFFECT ON THE ENVIRONMENT?
WILL THE LARWQCB NOW CONSIDER THE PHOTO, WHICH IS A LEGITIMATE FORM OF DATA, OR IGNORE IT AGAIN. IF IGNORANCE IS THE OPTION PLEASE EXPLAIN WHY?

PLEASE FIND BELOW COMMENS BY PATRICA MCPHERSON REGARDING THIS PROPOSAL.
(Comments by P.McPherson have been transmitted with her permission.)

Grassroots Coalition acted as Intervener on behalf of the public in Application No. 99-05-029 as well as our Complaint Case 00-05-010(which we now have a settlement agreement re: CPUC adopted settlement regarding Monitoring and Reporting On Status of SOCALGAS's Del Rey Natural Gas Storage Operation).

These California Public Utilities Commission litigation cases which occurred starting in late 1999/early 2000 had to do with investigating SOCALGAS's oil/gas storage reservoir leakage and the inherent potentials of health hazards to the public and the environment.

During the City of LA's investigation of the newly discovered oilfield gases surfacing at Playa Vista- part of the inquiry was- from where was the gas originating. ETI stated at the time that they believed that there existed the Lincoln Blvd. Fault that was acting to allow the thermogenic gases to surface throughout the area including Playa Vista. Later ETI described the area as a "fracture zone", "high velocity gas zone" etc. _

Davis and Namson were working on behalf of Playa Capital and determined there was no evidence of a Lincoln Blvd. Fault.

Davis and Namson -at the same time they were employed by Playa Capital LLC were employed by SOCALGAS to review the potential of their gas storage leakage. This is evident via:

Before The Public Utilities Commission Of The State Of California , Application No. 99-05-029

SUPPLEMENTAL EXHIBITS IN SUPPORT OF PROPONENT'S ENVIRONMENTAL ASSESSMENT dated Nov. 21, 2000 REVIEW OF THE PLAYA DEL REY GAS STORAGE FIELD, Los Angeles, California Nov. 9. 2000.

"Executive Summary

In addition, I am in the process of completing an extensive subsurface study of the Playa Vista Project area that lies mostly to the east of the Gas Storage Field (Davis and Namson, 2000) , and Playa Vista has kindly allowed me to include their subsurface work under the Gas Storage Field in this review for The Gas Company."

Thus, when the City made its determination regarding the fault and any potential for gas reservoir leakage..they utilized a consultant that was not independent-there was a conflict of interest.

QUESTION
DOES THE LARWQCB CONSIDER THIS A CONFLICT AND IF NOT PLEASE EXPLAIN WHY AND STATE EXACTLY WHAT DATA THIS FIRM PROVIDED REGARDING THE EXISTING PROPOSAL?

We would like to meet with Staff ASAP.

You may contact me by email.

Sincerely,

John Davis
PO 10152 Marina del Rey Ca 90295
jd@johnanthonydavis.com

California Regional Water Quality Control Board

Los Angeles Region

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Dr. Alan Lloyd
Secretary for Environmental Protection

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.waterboards.ca.gov/losangeles

Arnold Schwarzenegger
Governor

December 16, 2005

Mr. Colin Kumabe
Los Angeles City, Department of Building & Safety
201 North Figueroa Street, 3rd Floor
Los Angeles, CA 90012

PEER REVIEW ON REPORT ENTITLED "EVALUATION OF POTENTIAL EFFECTS OF DEWATERING ASSOCIATED WITH METHANE MITIGATION SYSTEMS AT PLAYA VISTA PHASE 1 DEVELOPMENT, DATED NOVEMBER 23, 2005" PLAYA VISTA SITE, LOS ANGELES, CALIFORNIA [CAO NO. 8-125, FILE NO. 98-192, SLIC NO.07733, SITE ID NO. 2043W-00]

Dear Mr. Kumabe:

The California Regional Water Quality Control Board, Los Angeles Region ("Regional Board") has conducted a peer review on the report entitled "Evaluation of Potential Effects of Dewatering Associated with Methane Mitigation Systems at Playa Vista Phase 1 Development ("Report")," dated November 23, 2005, prepared by Camp Dresser & McKee, Inc. ("CDM"), on behalf of Playa Capital Company, LLC ("Playa"). The Report includes the results from a computer modeling study for the potential effects of the de-watering systems associated with the methane mitigation measures in the Phase 1 development of the Playa Vista project on groundwater quality, contaminant migration, and groundwater levels. Based on the results from the calibrated model impact simulations, the Report concludes, in part, that the operation of the methane system de-watering will results in no significant impact on groundwater levels and groundwater quality for the Phase 1 project area.

Our review has focused on model assumptions, parameter selections, model area and computation grid, boundary conditions, calibration procedures, impact simulations (scenario runs), and sensitivity analysis. We have the following comments:

1. In general, our review indicates that the selected MODFLOW-2000 (groundwater flow) and MT3DMS (solute transport) models are appropriate for the proposed evaluation. The site conceptual model used in the model setup covers all the major components in the model area. The boundary conditions and recharge assumptions are within the range for typical urban environment.

2. The parameters used in the model are from either field test data or published literatures. However, the uncertainty or ranges associated with these

parameters may change the model outcome. In the light of protecting water resources and the environment, a conservative approach (worse case scenario) should be taken in the evaluation. We suggest the model be re-calibrated by changing the following parameters:

i) Change the ratio of horizontal to vertical hydraulic conductivity for the Upper Bellflower and Lower Bellflower to 10;
ii) Use the historical high water elevation for the impact simulation runs;
iii) Assume 80 percent of the water discharge from the sump originates from groundwater; and
iv) Use a value of 2 years for the biotransformation half-life in the model assessment of Maximum Contaminant Level's (MCL) exceedances in groundwater.

3. To monitor potential migration of the contaminant plume(s), a sentinel groundwater monitoring well should be installed between the identified contamination plumes and the methane system de-watering sites at the Avalon residential complex. The groundwater monitoring well should be located in close proximity to the intersection of Kiyot Way and Pacific Promenade and be installed as a water table well in the upper Bellflower Aquaclude/Aquitard. Quarterly groundwater monitoring, for the first year, should include analysis for volatile organic compounds using USEPA Method 8260B.

4. We recommend that the groundwater de-watering collection sump located within the Avalon residential complex, that discharges to the sanitary sewer, be monitored periodically for volatile organic compounds using USEPA Method 8260B.

If you have any questions or need additional information, please call Mr. David Bacharowski at (213) 576-6607, Dr. Arthur Heath at (213) 576-6725, or Mr. Adnan Siddiqui at (213) 576-6812.

Sincerely,

Jonathan S. Bishop
Executive Officer

cc: Mr. Gene A. Lucero, Latham & Watkins, LLP
Mr. Michael Smith, Camp Dresser & McKee, Inc.

California Regional Water Quality Control Board

Los Angeles Region

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Alan C. Lloyd, Ph.D.
Agency Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.waterboards.ca.gov/losangeles

Arnold Schwarzenegger
Governor

January 10, 2006

Mr. Colin Kumabe
Los Angeles City, Department of Building & Safety
201 North Figueroa Street, 8th Floor
Los Angeles, CA 90012

A REVIEW OF THE REPORT ENTITLED "EVALUATION OF WORSE-CASE SCENARIO – METHANE SYSTEM DEWATERING, IN RESPONSE TO LARWQCB COMMENTS," DATED JANUARY 4, 2006
PLAYA VISTA SITE, LOS ANGELES, CALIFORNIA [CAO NO. 98-125, FILE NO. 98-192, SLIC NO.07733, SITE ID NO. 2043W-00]

Dear Mr. Kumabe:

The California Regional Water Quality Control Board, Los Angeles Region ("Regional Board") has conducted a review on the report entitled "Evaluation of Worse-Case Scenario – Methane System Dewatering, In Response to LAQWQCB Comments" ("Report")," dated January 4, 2006, prepared by Camp Dresser & McKee, Inc. ("CDM"), on behalf of Playa Capital Company, LLC ("Playa"). The Report includes the results from a computer re-modeling in response to the Regional Board's comments, i.e., taking a more conservative approach (worse case scenario), listed in our previous letter dated December 16, 2005 (copy attached). The purpose of the model is to determine whether the methane dewatering systems specified in the Report may have an adverse impact on groundwater quality, contaminant migration, and groundwater levels at the site. Based on the results from the re-calibrated model impact simulations conducted under the worse case scenario, the Report concludes that the conclusions reached in the November 23, 2005 modeling report remain substantially unchanged.

The Regional Board staff are providing comments on the Report at the request of the Los Angeles Department of Building and Safety (LADBS) and as the lead agency for assessment, monitoring and cleanup at the Playa Vista site under Cleanup and Abatement Order No. 98-125 (CAO). As stated in our December 16, 2005 letter, our review focused on the model assumptions, parameter selections, model area and computation grid, boundary conditions, calibration procedures, impact simulations (scenario runs), and sensitivity analysis. Based upon these aforementioned assumptions and parameters, we have the following comments:

Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maureen F. Gorsen, Director
1011 North Grandview Avenue
Glendale, California 91201

Arnold Schwarzenegger
Governor

MEMORANDUM

TO: Dorothy Rice
Deputy Director
Site Mitigation and Brownfields Reuse Program

FROM: Richard L. Coffman, Ph.D., PG
Senior Engineering Geologist
Geological Services Unit, Glendale

Ning-Wu Chang, Ph.D., PE
Senior Hazardous Substances Engineer
Engineering Services Unit, Cypress

REGISTERED GEOLOGIST
RICHARD L. COFFMAN
No. 6614
Exp. 7-31-08
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL
NING WU CHANG
No.: C043843
Exp.: 6-30-07
CIVIL
STATE OF CALIFORNIA

CONCUR : Michael Sorensen, PE
Branch Chief
Engineering and Geological Services Branch

DATE: November 14, 2006

SUBJECT: Review of Documents on Dewatering Associated with Methane Mitigation Systems at Playa Vista Phase 1 Development, Playa Vista Site, Los Angeles California

PCA 91115 Log No. 63030

The Engineering and Geological Services Branch (EGSB) reviewed four documents related to Dewatering Associated with Methane Mitigation Systems at the Playa Vista Phase 1 Development. Our reviewers were Dr. Richard Coffman (Senior EG) with the Glendale Geological Services Unit and Dr. Ning-Wu Chang (Senior HSE) with the Engineering Services Unit, Cypress.

The documents reviewed included:

- *Evaluation of Potential Effects of Dewatering Associated with Methane Mitigation Systems at Playa Vista Phase 1 Development, Playa Vista Site, Los Angeles California*, prepared by Camp, Dresser and McKee and sent to Mr. David Nelson, Playa Capital Company, LLC, on November 23,2005

- Peer Review on Report Entitled "*Evaluation of Potential Effects of Dewatering Associated with Methane Mitigation Systems at Playa Vista Phase 1 Development, Dated November 23, 2005*" authored by the Regional Board and sent to Mr. Colin Kumabe, Los Angeles City Department of Building and Safety, on December 16, 2006

- *Evaluation of Worse-Case Scenario – Methane System Dewatering in Response to LARWQCB Comments, Playa Vista Site, Los Angeles California*, prepared by Camp, Dresser and McKee and sent to Mr. Jonathan Bishop, Regional Board, on January 4, 2006

- *A Review of the Report Entitled "Evaluation of Worse-Case Scenario – Methane System Dewatering, in Response to LARWQCB Comments, Dated January 4, 2006,"* prepared by the Regional Board and sent to Mr. Colin Kumabe, Los Angeles City Department of Building and Safety, on January 10, 2006

The above documents were provided and accompanied by a letter from Mr. Jonathan Bishop, Executive Officer of the Los Angeles Region, California Regional Water Quality Control Board (LARWQCB), requesting a review of those documents by the DTSC.

Conclusions and Recommendations:

1. We concur with the requirements of the LARWQCB for a "worst case" modeling assessment and re-evaluating the model should site conditions change. We have no additional comments to add regarding the modeling documents or review comments by the LARWQCB. Overall, the technical review by the LARWQCB appeared to be thorough and professional.

2. Monitoring of the ongoing dewatering operations and aquifer behavior will be critical in validating the model predictions. To this end, LARWQCB required the installation of a sentinel groundwater monitoring well. Since we do not have background information on the existing monitoring network in the vicinity of Playa Vista, we can not comment on the adequacy of this recommendation. We do recommend a vigorous field monitoring and reporting program to ensure any future changes in the groundwater flow direction, extent of groundwater contamination, and dewatering system operations are detected.

Comments from Dr. Richard Coffman:

The review performed by the GSU focused on those aspects directly related to the groundwater flow and fate and transport modeling set up and input parameters used to model Potential Effects of Dewatering Associated with Methane Mitigation Systems at Playa Vista Phase 1 Development, and subsequent review comments from the staff of the LARWQCB.

Subject: Responses to your Questions re: Playa Vista
From: "Arthur Heath" <AHEATH@waterboards.ca.gov>(Add as Preferred Sender)
Date: Tue, Feb 26, 2008 10:16 am
To: <jd@johnanthonydavis.com>
Cc: "Adnan Siddiqui" <asiddiqui@waterboards.ca.gov>, "David Bacharowski" <Dbacharowski@waterboards.ca.gov>, "Michael Levy" <MLevy@waterboards.ca.gov>, "Tracy Egoscue" <tegoscue@waterboards.ca.gov>, "Weixing Tong" <wtong@waterboards.ca.gov>

Hi Mr. Davis,

We have included responses in regard to your specific questions as indicated below. If you have additional questions, or comments pertaining to the Playa Vista site, please provide a memo or letter expressing your comments.

1) Who authorized the Regional Board to act as a peer reviewer regarding groundwater level measurements and dewatering systems at Playa Vista?

As the lead regulatory agency overseeing the assessment and cleanup of soil and groundwater contamination, we were requested by the City of Los Angeles Building and Safety(City) to provide our comments in relation to groundwater level measurements and the dewatering systems at Playa Vista. The management team, David Bacharowski, Art Heath, and Adnan Siddiqui, decided to respond to the City's request. David brought in Dr. Weixing Tong from the UST section to review the groundwater model associated with the dewatering systems at Playa Vista. This does not constitute "peer review", as you have referenced. This is an ordinary part of our oversight of groundwater remediation efforts. "Peer Review" is formal part of our regulatory process whereby we are required by the Health and Safety Code to submit the scientific portions of our proposed regulations for an external scientific evaluation to ensure that our scientific assumptions are sound.

2) Under what circumstances would the Regional Board normally act as a peer reviewer?

The Regional Board would not act as peer reviewer per se. As a public and a lead environmental regulatory agency, however, Regional Board staff would provide appropriate reviews, comments and recommendations (e.g., in response to assessment, cleanup, modeling documents required either by DTSC, Los Angeles County Hazmat Department, Fire Departments overseeing USTs, USEPA, for specific contaminated sites) in relation to our expertise as a public regulatory agency.

Arthur G. Heath, Ph.D.
Environmental Program Manager I
Remediation Section Chief
California Regional Water Quality Control Board, Los Angeles
Phone: (213) 576-6725
Fax: (213) 576-6717
aheath@waterboards.ca.gov

California Regional Water Quality Control Board

Los Angeles Region

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Linda S. Adams
Agency Secretary

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Arnold Schwarzenegger
Governor

May 15, 2007

Mr. John Davis
P.O Box 10152
Marina Del Rey, CA 90295

RESPONSE TO INQUIRY FOR PLAYA VISTA DEVELOPMENT PROJECT –5510 LINCOLN BLVD. PLAYA VISTA, CALIFORNIA (CLEANUP AND ABATEMENT ORDER NO. 98-125, FILE NO. 98-192, SLIC NO. 0773, SITE ID NO. 2043W-00)

Dear Mr. Davis:

The California Regional Water Quality Control Board, Los Angeles (Regional Board) has been acting as a lead agency in providing regulatory oversight for the characterization, cleanup, monitoring and No Further Action (NFA) determination for the contamination in soil and/or groundwater from historical industrial use at the Playa Vista Development Project (Site). At your request, Regional Board staff met with you on April 3, 2007. During the meeting you raised various issues regarding the Site. Subsequently you also sent electronic mails dated April 4, 2007 and April 6, 2007 (copies attached) to the Regional Board. This letter is in response to your inquiry to the Regional Board.

Question:
" Prior to the meeting I requested water well completion reports filed with State Water Resources be present at the meeting to validate the monitoring wells used in the model were legal data sources. No State Water Well Completion reports required by State law were presented to me at the meeting."

Response:
The groundwater monitoring wells at the Playa Vista site were installed at the request of the regulatory oversight agency since approximately 1980s. As a lead regulatory agency, Regional Board has required Playa Capital Company, LLC (Playa Capital) to install groundwater monitoring wells at various times all across the Site at appropriate locations. The primary purpose of these wells has been monitoring of the nature and extent of contaminant groundwater plumes originating at the Site. As required, Playa secured well permits from the appropriate agency prior to well installation. The Playa Vista site falls under the jurisdiction of Los Angeles County, Department of Health Services (LADHS). Upon completion of the work including the well installation Playa submitted a report to the Regional Board, which included a copy of the well permits obtained from the LADHS and other pertinent information such as screen intervals, boring logs, etc. As an example, a copy of the well permit was provided to you during our meeting on April 3, 2007.

The California Water Code (CWC) Section 13751 requires that a report made on forms called Well Completion Report be submitted to Department of Water resources (DWR) containing pertinent information. This report/form used to be called as "Well Drillers' Report" and is still referred to as such. The CWC Section 13750.5 requires that the well drilling contractor posses a C-57 water well contractor's license and it is the licensed drilling contractor who must file a Well Completion report with DWR.

Question:
"I asked to meet regarding letters of the RWQCB dated 12/16/05 and 1/10/06. The first letter suggested to Los Angele City Department of Building and Safety the following; ?We suggest the model be re-calibrated by changing the following scenarios??.ii) Use the historical high water elevation for the impact simulation."(worse case scenario)" I submitted the Ca Dept. Conservation Division of Mines and Geology Historic High Groundwater Level map and report upon which it was based. No person at the meeting could state what high historic groundwater level data was used in the model as input data. I was presented with a CDM report claiming to utilize high historic groundwater levels as input data for the model. I analyzed that report and it did not include historic high groundwater level data sourced from the State of California. After reading the second CDM Report it was apparent the historic high groundwater level was derived from 2005 only. Contrary to RWCQB suggestion of a "(worse case scenario)" (Historic High Groundwater Level). CDM used well observations cited ion the first CDM report that were obtained from 26 water monitoring well sites spanning in time from 2/14/05 to 10/3/05 excluding the period from 10/4/05 to 12/21/05 which were the months of highest rainfall."

Response:
Based on the information provided to the Regional Board by CDM, we concluded that the groundwater elevation data used in the model was collected between August 1999 and October 2005 from 22 groundwater monitoring wells present at the Site. Based on the records dating back to 1877, the rain fall observed during 2004/2005 season (37.96 inches) was used in the Model for the worst case scenario and assumed to continue forever. The Department of Conservation, Division of Mines and geology (Department) report you have referred is Seismic Hazard Zone Report 036 (Report) dated 1998. The Report summarizes the methods and sources of information used to prepare the Seismic Hazard Zone Map for the Venice 7.5-minute Quadrangle, Los Angeles County, California (Quadrangle), which covers approximately 62 square miles. The data used for depth to groundwater within the Quadrangle was relied heavily on turn of the century water-well logs and water measurements from borehole logs located within the study area. The map you provided is Plate 1.2 of the Report, which depicts a **hypothetical** *and not the* **actual** *groundwater table within alleviated areas. According to Plate 1.2, the depth to groundwater within Playa Vista Site is depicted to be between 5 and 10 feet. In addition, all of the water measurements used in the Report were collected from boreholes are located outside Playa Vista site. The Report covers an area that spans 62 square miles while the Playa Vista site covers only 0.72 square miles located within the Quadrangle. In the model, CDM used the more reliable site- specific groundwater data measured from groundwater monitoring wells located on the Playa Vista site.*

Question:
In addition, you have requested for review the information contained in Regional Board Playa Vista project files.

Response:
As you know, Regional Board maintains the Playa Vista project public file (approximately 35 boxes). Any person interested in reviewing the information contained in the file is welcome to do so at our office. According to our records, you made a file review request on March 9, 2007 and you came to our office and conducted the file review on March 12, 2007. You called back and requested to see the same file again and the requested material was placed in the public file review room for you; however, you never showed up to review it. In addition, in a telephone conversation with the on April 19, 2007, you specifically told Regional Board staff that you have completed your file review and that you would

request for file review in future, if needed. Please set up an appointment as you have done before to review the files at your convenience. In addition, the Regional Board established a document repository at Venice-Abbot Kinney Memorial Library and at Westchester Library where key reports such as remedial action plans and no further action determination requests are sent by the Regional Board public review. Furthermore, your name is on the list of interested parties that are provided a carbon copy of letters issued by the Regional Board regarding Playa Vista site.

We hope that our response will clarify your concerns. Please do not hesitate to contact the Regional Board staff, if you need further assistance. **If you have any questions regarding this matter, please contact Mr. Adnan Siddiqui at (213) 576-6812 or Dr. Arthur Heath, Remediation Section Chief at (213) 576-6725.**

Sincerely,

David A. Bacharowski

David A. Bacharowski
Assistant Executive Officer

Attachment: 1) E-mail from John Davis dated April 4, 2007
2) E-mail from John Davis dated April 6, 2007

cc: Patricia McPherson, Grassrrots Coalition
Colin Kumabe, LADBS
David Chernik, Playa Capital LLC
Gene Lucero Esq, Latham & Watkins LLP

From: Arthur Heath
To: Adnan Siddiqui
Date: 4/6/2007 9:38:55 AM
Subject: Fwd: RE: From John Davis Re Meeting of 4/3/07

fyi

Arthur G. Heath, Ph.D.
Environmental Program Manager I
Remediation Section Chief
California Regional Water Quality Control Board, Los Angeles
Phone: (213) 576-6725
Fax: (213) 576-6717
aheath@waterboards.ca.gov

>>> <jd@johnanthonydavis.com> 4/5/2007 12:02 PM >>>
Dear Dr. Heath,

Again thank you for meeting with me on 4/3.
Would it be possible to schedual a follow up meeting
on Monday of next week. This is an urgent matter.

Thanks,
John Davis

> -------- Original Message --------
> Subject: From John Davis Re Meeting of 4/3/07
> From: jd@johnanthonydavis.com
> Date: Wed, April 04, 2007 2:20 pm
> To: aheath@waterboards.ca.gov
> Cc: jd@johnanthonydavis.com
>
> Los Angeles County Regional Water Quality Control Board
> Att: Dr. Arthur Heath
> Re: Meeting of April 3, 2007 4/4/07
> ?SUBJECT: PLAYA VISTA/Public Interest/Dewatering Model/ Historical
> Water Table?
> cited in the City of Los Angeles Cheif Legislative Anylists Report
>
> Dear Dr. Heath,
>
> Thank you for attending the meeting arranged by Adnan Siddiqui. I would
> like to provide you my overview of the meeting.
>
> I asked to meet regarding letters of the RWQCB dated 12/16/05 and
> 1/10/06. The first letter suggested to Los Angele City Department of
> Building and Safety the following; ?We suggest the model be
> re-calibrated by changing the following scenarios??.ii) Use the
> historical high water elevation for the impact simulation."(worse case
> scenario)"
>
> The latter letter indicated the re-calibrated model had been run. We all
> agreed.
>
> I submitted the Ca Dept. Conservation Division of Mines and Geology

> Historic High Groundwater Level map and report upon which it was based.
>
> No person at the meeting could state what high historic groundwater
> level data was used in the model as input data.
>
> I was presented with a CDM report claiming to utilize high historic
> groundwater levels as input data for the model.
>
> I analyzed that report and it did not include historic high groundwater
> level data sourced from the State of California.
>
> After reading the second CDM Report it was apparent the historic high
> ground water level was derived from observations of 2005 only. Contrary
> to RWCQB suggestion of a "(worse case scenario)" (Historic High
> Groundwater Level), CDM used
> well observations cited in the first CDM report that were obtained from
> 26 water monitoring well sites spanning in time from 2/14/05 to 10/3/05
> excluding the period from 10/4/05to 12/21/05 which were the months of
> highest rainfal.
>
> Prior to the meeting I requested water well completion reports filed
> with State Water Resources be present at the meeting to validate the
> monitoring wells used in the model were legal data sources.
>
> No State Water Well completion reports required by State Law were
> presented to me at the meeting.
>
> After the meeting,I contacted Norri Alari of the RWQCB. He stated to me
> in a telephonic conversation that afternoon that the RWQCB understood
> the source of the model input data for historic high groundwater
> levels. He also stated a meeting took place after I left to consider my
> submittal of the Dpt. Conservation information. He indicated to me that
> the RWQCB would discuss my submission and questions regarding the model
> and the RWQCB would discuss my submission with DTSC, the Peer Reviewers,
> and LADBS.
>
> I would like to,as discussed in the meeting, to have a follow up meeting
> next week.
>
> Sincerely,
> John Davis
> PO 10152 Marina del Rey Ca, 90295
> 310-795-9640

From: <jd@johnanthonydavis.com>
To: Adnan Siddiqui <asiddiqui@waterboards.ca.gov>
Date: 4/6/2007 5:06:30 PM
Subject: RE: Request for meeting on April 9, 2007

Hk Adnan,

Ok. Here is a link that will allow you to validate State Well Completion Reports
were filed to prove the wells are legal.

http://wwwdpla.water.ca.gov/sd/groundwater/wells.html#wcr

Also, it is clear that the input for historic high groundwater levels used in the model
were only derived from recent water monitering well observations and only for a period
of 2005 exclusive of observations from Oct 4- Dec 31 2005 durring which high amounts
of rainfall occured. My humble suggestion would be that the RWQCB re-evaluate the
report only after the historic high groundwater levels as measured by the State are
used and that any prior acknowlegements of adiquacy be recinded.

Sincerley,
John Davis

CC
Patricia McPherson - GrassRoots Coalition

> -------- Original Message --------
> Subject: Request for meeting on April 9, 2007
> From: "Adnan Siddiqui" <asiddiqui@waterboards.ca.gov>
> Date: Fri, April 06, 2007 3:32 pm
> To: <jd@johnanthonydavis.com>
> Cc: "Arthur Heath" <AHEATH@waterboards.ca.gov>, "Noori Alavi"
> <nalavi@waterboards.ca.gov>
>
> Dear John,
> Due to busy schedule next week, we are unable to meet with you next
> week on April 9, 2007. However, I am working on a response to the
> concerns you expressed in our meeting on April 3, 2007. Thank you.
> Adnan
>
> Adnan Siddiqui, R.G., C.HG.
> Senior Engineering Geologist
> Chief Site Cleanup Unit III
>
> Phone: (213) 576-6812
> Fax: (213)576-6717

CC: patricia mcpherson <patriciamcpherson@earthlink.net>

Response-2:

1- Based on the information provided by Playa, Tishman Speyer Properties, L.P. (Tishman), currently owns a majority of the Campus Area located east of Area D (Figure 1). The Campus Area is entitled for commercial land use (offices, retail and other commercial uses), and open space.

Since 1998, several rounds of environmental investigations including soil, soil gas, and groundwater sampling have been conducted within the Campus Area with particular focus on the former buildings and areas of historical operation. These investigations revealed nine source areas (SAs). More recently, two SAs have been identified within the Campus Area as a SA-10 and SA-11.

A total seven of the source areas (SA-2, 4, 5, 6, 7, 8, and 9) are located within Tishman Properties (Figure 1). Therefore active remedial actions including groundwater extraction and long term monitoring are ongoing.

Individual volumes of groundwater extracted through groundwater treatment or dewatering during construction activities for specific Tishman properties have not been recorded. However, as we indicated in our Response 1 of this letter, since the beginning of 1996, a total of **163,108,224 gallons** of groundwater were extracted through the site-wide interim groundwater remedial actions, site-wide groundwater investigation and monitoring program, and Campus Remedial System. All extracted water were treated through different groundwater treatment units and discharged to the Centinela Creek under CI No. 6839.

In addition, since the beginning of 2000, a total **31,911,538 gallons** of groundwater were extracted through site wide construction activities and subsequently treated, and discharged to different discharge location points as identified in CI No. 7648.

2- Tishman Speyer's address is Tishman Speyer Properties, L.P., 400 S. Hope Street, Suite 200, Los Angeles, CA 90071, and ATTN: Mr. Gary Toeller.

Question -3:

"Please provide / make available any and all data and information, studies that the Board has that determine the effect of actual dewatering upon the groundwater recharge rate and salt water intrusion"

Response -3

1- As a part of site characterization, and cleanup of the impacted soil and groundwater generated from historical industrial operations at the Site, Regional Board did not require Playa to conduct any specific study to evaluate the effect of dewatering upon the groundwater recharge rate. However, as we indicated in our earlier correspondence to you, the Evaluation of Potential Effect of Dewatering, Associated with MMS at Playa Vista Phase 1 Development was prepared by CDM on behalf of Playa and submitted to the LADBS on November 23, 2005. Based on the results from the calibrated model impact simulation,

From: Augustine Anijielo
To: patriciamcpherson@earthlink.net
CC: David Bacharowski; Egoscue, Tracy; Hung, David; Laura Gallardo
Date: 5/29/2008 8:58 AM
Subject: Playa Vista Actual Discharge Volume under General NPDES permit CI-6839 & CI-7648
Attachments: Augustine Anijielo.vcf

Dear Patricia,

This is an additional response to your March 17, 2008, Public Record Act Request, regarding the Playa Vista Facility in Marina Del Rey. My understanding is that you were previously contacted by our office on your request via email on April 25, 2008. As you may be aware we have two active general NPDES permits for the Playa Vista site, one for construction dewatering and the other for cleanup of volatile organic compounds impacted groundwater. You have been informed on how to obtain copies of the two permits from our website. We have reviewed the monitoring reports submitted by Playa Vista for the two permits. Based on the information available in our files we have complied for you in the tables below the actual yearly volumes of water discharged by Playa Vista under the two permits.

Please let us know at least 3 days in advance so that we can arrange the files for these projects for your review should you desire more information on these projects. Thanks Augustine

Playa Vista Construction Dewatering Permit,
NPDES No. CAG994004, Order No. 2003-0111,CI-7648

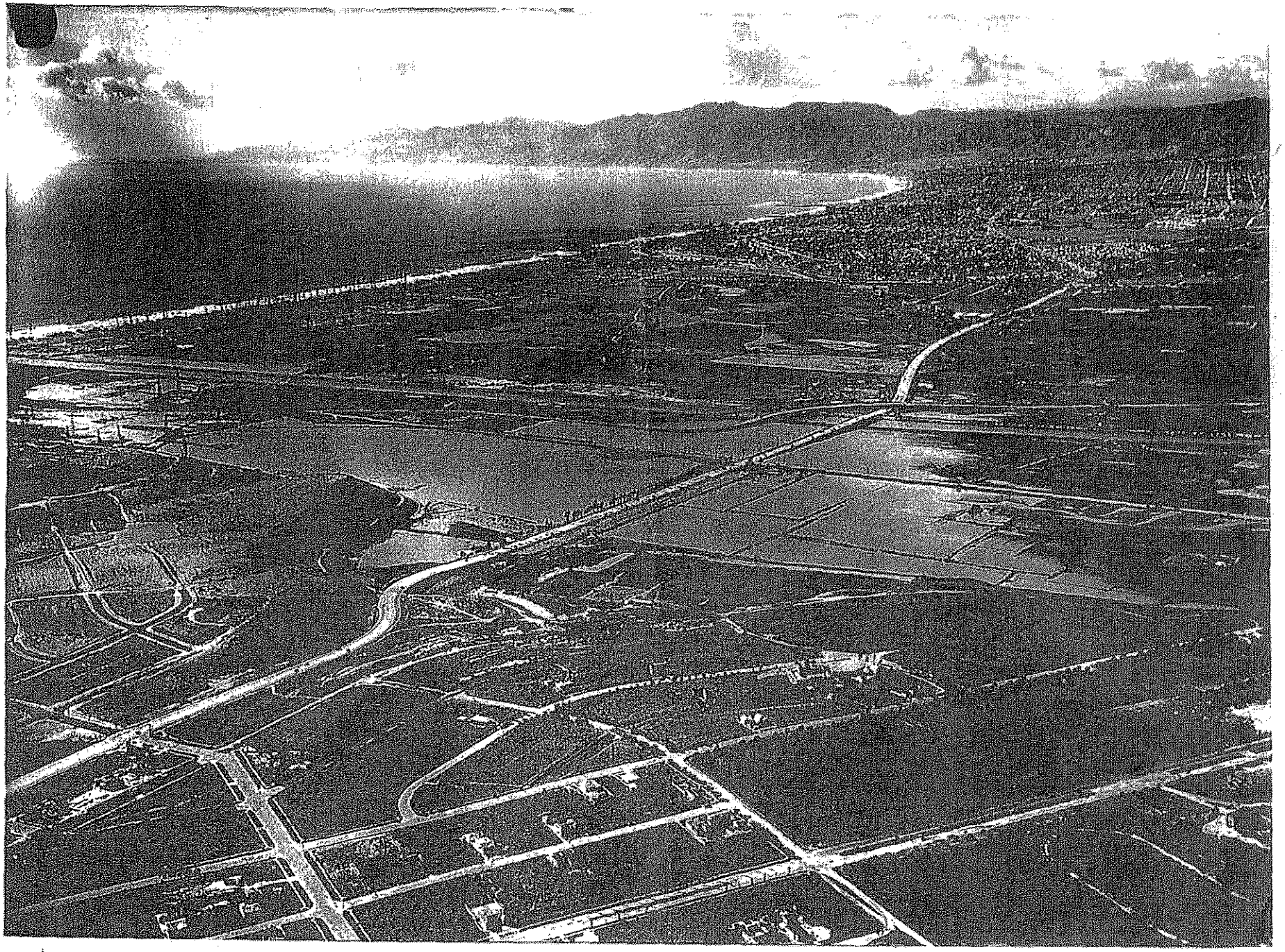
Year	Total Discharge in gallons
2007	1,680,000
2006	300,000
2005	1,992,000
2004	12,199,741
2003	-------
2002	893,151
2001	14,338,946
2000	507,700

Playa Vista Groundwater Cleanup Project
CAG914001; Order No. 2007-0022;CI-6839

Year	Total Discharge in gallons
1996	43,301,400
1997	8,863,200
1998	14,874,960

1999	3,545,100
2000	700,600
2001	1,520,288
2002	50,949
2003	42,966
2004	20,000
2005	80,000
2006	32,115,621
2007	45,443,762
2008	12,549,378

Augustine Anijielo, P.E., Chief
General Permitting/Special Projects Unit
Phone (213) 576-6657
Fax (213) 576-6660
aanijielo@waterboards.ca.gov



VIEW TOWARDS BALLONA WETLANDS

SIENCE COLLECTION, UCLA

ATTACHMENT 2

Supreme Court rules CBM water beneficial use

Operators must get state engineer permit

By Randy Woock
Staff writer, The Times Independent

The Colorado Supreme Court ruled last week that produced water from coalbed methane (CBM) wells are to be subjected to state laws governing water extracted for beneficial use, and that CBM operators must therefore get permits for their wells from the State Engineer's Office (SEO).

The Supreme Court's decision cited the Water Right Determination and Administration Act of 1969, which defined beneficial use as "...the use of that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the appropriation is lawfully made." The court's decision stated that, "Under the language of the Act, the (CBM) process "uses" water - by extracting it from the ground and storing it in tanks - to "accomplish" a particular "purpose" - the release of methane gas. Consequently, the extraction of water to facilitate (CBM) production is a "beneficial use" as defined in the Act and a "well" as defined in the Colorado Ground Water Management Act. "

The produced water from the CBM process had previously been considered a waste by-product, but the court's decision rejected such a classification. "We reject the argument that water used in (CBM) production is merely a nuisance rather than a 'beneficial use.'" the decision stated. "On the contrary, the use of water in (CBM) production is an integral part of the process itself. The presence and subsequent controlled extraction of the water makes the capture of methane gas possible."

The Vance case, also known as Vance v. Simpson, began in 2005 when BP America was conducting a CBM operation and disposing of the produced water by reinjecting it into the ground. Area ranchers, possessing senior water rights, brought suit in the local water court to compel the SEO to require permits for that kind of activity. No water well permit from the SEO had been obtained by BP America, as was standard practice. The state's water court ruled that CBM production constituted an appropriation of water for beneficial use, and that the SEO could not allow out-of-priority diversions without a well permit and, if necessary, an augmentation plan. BP America then filed an appeal with the Supreme Court and applied for a stay pending resolution of the appeal

The argument in the case was based upon whether water extraction during CBM drilling constituted "beneficial use." The ranchers claimed that the water diverted during the course of CBM production was used beneficially by being used to remove the gas then being used up during reinjection, therefore a permit from SEO should be required. BP America and the SEO claimed that an SEO permit should not be required since the purpose of its wells were to obtain CBM rather than water.

The 2705 CBM wells in the Raton Basin comprise 54 percent of all CBM wells in Colorado.

A similar case in Montana, West v. Tyrell, was decided by that state's supreme court with a ruling that produced water was legally equivalent to ground water.

Pioneer Natural Resources, the largest operator of CBM wells in Las Animas County, issued a response Thursday to The Times regarding the Supreme Court's decision in the Vance case. "Pioneer has been following the case for some time and is presently evaluating the ramifications of the Supreme Court's ruling," Tom Sheffield, Vice President of Pioneer's Rockies Assets Team, stated. "We appreciate the foresight of Representative (Kathleen) Curry, Senator (Jim) Isgar and the (SEO) for introducing a measure providing adequate time for a coordinated roll out of activities required by the new ruling while protecting existing tributary water rights in the state. That legislation, House Bill 1303, will be key to all Las Animas County water owners when it is passed and signed into law."

According to Curry, House sponsor of HB 09-1303, the bill would provide breathing space for the large number of operators whose wells were just rendered out of compliance by the court's decision. The bill would extend the amount of time available to operators to bring their wells into compliance with the permitting process as required by the court's decision from 60 days to 270.

"If I hadn't run (HB 09-1303)...the Vance case affirms that about 5,000 gas wells would have been shut down, so we ran that bill to make sure there was a permitting process in place for (CBM) wells," Curry said. "If we hadn't run the bill, the Vance case, based on the ruling...all of those wells would have been out of compliance; we were guessing the the Supreme Court would rule that produced water is a beneficial use."

Curry described the primary goal of the bill as setting up a regulatory process to "ensure that preexisting water users aren't injured,"

while also creating a process to brings all the CBM wells into the SEO's regulatory framework. "It implements the decision, so I think we did a preemptive strike, knowing that the decision could put us in a position where they (the SEO) could have to review well permits for 5,000 wells in a 60 day period, and that's just not practical," she said. "They only do 1,000-2,000 well permits a year, and there would have been a 60 day period where all the operators on those (CBM) wells would have had to come into the (SEO) to get a permit. At least this way now we've got a way where the state can handle the workload and the operators can come into compliance."

HB 09-1303 also provides a requirement for augmentation for wells that might be depleting senior domestic water rights or existing domestic wells, and gives the state engineer the right to set additional guidelines for determining tributary versus non-tributary waters, along with the right to take the necessary steps to bring an operation into compliance should the operator have failed to have done so within the 270 day period.

The bill stated that it was the legislature's general intent to "clarify the circumstances under which permits are required when non-tributary ground water is removed in conjunction with the mining of minerals."

Non-tributary water is defined by HB 09-1303 as possessing several characteristics, such as being "withdrawn from a well that is completed in a confined sedimentary bedrock formation," in addition to, "the well is not completed...in the Raton Basin and the well is located more than (12) miles from any point of contact between the aquifer and any natural stream, including its alluvium."

HB 09-1303 is currently being considered by the State Senate.---------- Forwarded message ----------
From: **Google Alerts** <googlealerts-noreply@google.com>
Date: Mon, Apr 27, 2009 at 8:06 PM
Subject: Google Alert - WATER RIGHTS

Google News Alert for: **WATER RIGHTS**

Supreme Court rules CBM **water** beneficial use
Trinidad Times Independent - Trinidad,CO,USA
Area ranchers, possessing senior **water rights**, brought suit in the local **water** court to compel the SEO to require permits for that kind of activity. ...

ATTACHMENT 3

Subject:

Subject: Public Records Request - Playa Vista/Parcel A/VOCs Vapor Monitoring
From: "Arthur Heath" <AHEATH@waterboards.ca.gov> (Add as Preferred Sender)
Date: Tue, Apr 28, 2009 3:12 pm
To: <jd@johnanthonydavis.com>

Mr. John Davis,

Per your April 27, 2009 public records request regarding the Playa Vista site/Test Site 2 Area in reference to the Well Completion Report Release Agreement - Environmental Cleanup Study Form (Form), we have reviewed our files, and do not have this Form for the Playa Vista site. In addition, Regional Board staff have not completed this Form for the Playa Vista site. If the Form has been filed for the Playa Vista site, a copy can be obtained from the State Department of Water Resources.

Thank you,

Arthur G. Heath, Ph.D.
Environmental Program Manager I
Remediation Section Chief
California Regional Water Quality Control Board, Los Angeles
Phone: (213) 576-6725
Fax: (213) 576-6717
aheath@waterboards.ca.gov

April 30, 2009

TO: CITY OF LOS ANGELES
RE: COMMENTS : EIR SCH NO. 2002111065
Re: Comments Playa Vista Phase 2 Environmental Impact Report
SIX PAGES PLUS ATTACHMENTS

Please find below my comments in regard to the Environmental Impact Report.

COMMENT 1: THE CITY CANNOT LAWFULL PROCEEDE IN THIS PROCESS BECAUSE IT IS IMPOSSIBLE TO DETERMINE ISSUES OF CUMULITIVITY BECAUSE PHASE ONE OF THE PROJECT IS UNDER CURRENT LITIGATION (BS073182) AS TO GROUNDWATER DEWATERING. UNTIL FINAL ADJUCICATION WHICH WILL SETTLE MATTERS OF GROUNDWATER DEWATERING AT PHASE ONE NO LAWFULLY VALID DETERMINATION OF CUMULITIVITY REGARDING GROUNDWATER DEWATERING AT PHASE TWO CAN BE MADE.

QUESTION: WHY DOES THE CITY FAIL TO WITHDRAW FROM THIS PROCESS UNTIL ADJUCIDICATION OF THE PHASE ONE LAWSUIT SO THAT IT WOULD BE POSSIBLE TO LAWFULLY EVALUATE CUMMULITIVITY RELATIVE TO GROUNDWATER DEWATERING AND ITS POTENTIAL TO CREATED NEW AND POTENTIALLY ADVERSE ON THE ENVIRONMENT AS CEQA COMMANDS?

COMMENT 2: PAGE 26 OF THE FEIR STATES "*LAND IMMEDIANTLY TO THE WEST AND EAST OF THE PROPSED PROJECT IS APPROVED FOR DEVELOPENT AS PART OF PLAYA VISTA FIRST PHASE DEVELOPMENT...* "

THIS IS SMIPLY A FALSE STATEMENT IN THAT THE CALIFORNIA COURT OF APPEAL ORDERED EITHER AND SEIR OR SEIR AND PROCEEDANCE IN ACCORDANCE WITH CEQA. PHASE ONE IS THERFORE UNDER LEGAL CHALLENGE. THE CITY AS RESPONDEDNT IS CLEARLY AWARE OF THE LITIGATION. THE LITIGATION IS NOT CITED IN THE HISTORY SECTOIN.

QUESTION 2: WHY DOES THE FEIR FAIL TO ADDRESS ONGOING PHASE ONE LITIGATION?

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-

COMMENT 3: THE CITY DID NOT COMPLETE THE MASTER FEIR PROCESS FOR PHASE ONE AND TWO, EVER. THE MANDATORY NOTICE OF COMPLETION WAS NEVER TRANSMITTED TO THE STATE OFFICE OF PLANNING AND RESEARCH THEREFORE A COMPLETE AND FAIRLY DONE FEIR NEVER EXISTED FOR PHASE ONE.
FURTHERMORE EVEN IF IT DID IT WAS IN THE FORM OF A MASTER EIR WHICH REQUIRES RECERTIFICATION BY THE CITY EVERY FIVE YEARS AND SINCE THE LAST CERTIFICATION WAS DONE BY THE CITY IN 1995 IT IS EXPIRED AND MAY NOT BE CITED FOR THIS PROJECT.

QUESTION 3: WHY HASN'T THE CITY BEGAN A NEW DRFAT MASTER EIR
PROCESS THAT LAWFULLY CONSIDERS THE CUMMULITIVE AFFECTS OF BOTH PHASES RATHER

THAN RELYING ON AN INCOMPLETE EXPIRED MASTER EIR FROM 2001 WHICH WOULD HAVE EXPIRED IN 1995 IF IT WAS COMPLETED?

COMMENT 4 : FEIR PDF PAGE 50 MAKES ONLY AN **ASSUMPTION** AS TO THE POTENTIAL ADVERSE CUMMULITVE AFFECTS OF GROUNDWATER DEWATERING WITHOUT EMPIRICAL EVIDENCE TO SUPPORT ITS CONCLUSION.

MAKING SUCH AN ASSUMPTION HAS LED THE CALIFORNIA COURT OF APPEAL TO REJECT THE GROUNDWATER DEWATERING FOR THE MASTER EIR WHICH GOVERNS BOTH PHASES OF THE PROJECT.

THE FEIR DOES NOT CONSIDER THE POTENTIAL ADVERSE AFFECTS FROM GROUNDWATER DEWATERING ON THE METHANE MITIGATION SYSTEMS THEMSELVES IN PHASE ONE, THE POTENTIAL TO CHANGE THE DIRECTIONAL FLOW OF GROUNDWATER, THE POTENTIAL TO DRAW CONTAMINATED GROUNDWATER FROM TWO SITES AT PLAYA VISTA TO AREAS THAT ARE NOT CONTAMINATED, THE POTENTIAL AFFECT ON THE THREE AQUIFERS INVOLVED AS IT RELATES TO SALTWATER INTRUSION – DISCHARGING THE WATER TABLE-CROSS CONTAMINATION THROUGH AQUIFER COMMUNICATION – AND OR SUBSIDANCE.

FURTHERMORE THE FEIR DOES NOT SPEAK TO THE CUMULITIVE AFFETS OF DEWATERING FROM ALL CONSTRUCTION DEWATERING ACTIVITIES ON BOTH PHASE ONE AND TWO WHICH ARE INTRINSICALLY RELATED PLUS THE DEWATERING ACTIVITY ASSOCIATED WITH ONE KNOWN SITE OF CONTAMINATION TO THE EAST PLUS ONE KNOWN SITE OF CONTAMINATED GROUNDWATER TO THE WEST, PLUS ALL DEWATERING ACTIVITIES IN THE ENTIRE PROJECT ASSOCIATED WITH GROUNDWATER DISCHARE PERMITS (INDUSTRIAL WASTE WATER PERMITS) ISSUED BY THE

-

-

CITY OF LOS ANGELES DEPARTEMENT OF SANITARY WASTEWATER IN COMBINATION. THE QUANTIES OF GROUNDWATER DISCHARGE AT THE ENTIRE PROJECT SITE ARE PARTIALLY QUANTIFIED BY THE REGIONAL WATER QUALITY CONTROL BOARD IN MY RECENT LETTER TO THE LARWQCB. THE LARWQCB DID NOT CONDUCT A "PEER REVIEW" UNDER THE CALIFORNIA HEALTH AND SAFTEY CODE AS IT CLAIMED THERERFORE NO DATA DERIVED FROM A FALSFIED "PEER REVIEW" WHICH REPRESENTS POTENTIAL AGENCY MISCONDUCT OR GROSS NEGLIANCE MAY BE CITED BY THE CITY AS A SOLID FOUNDATION TO WHICH **TO DRAW CONCLUSIONS.**

ATTACHMENT 1 – MY LETTER TO THE LARWQCB

HOWEVER THE ACTUAL AMMOUNTS OF DEWATERING FROM THE CONTAMINED FIRE PIT AREA IN PAHSE ONE AND OR DEWATERING DONE UNDER THE ALREADY ISSUED INDUSTRAL WASTEWATER PERMITS ARE UNKNOWN.

GIVEN THESE CIRCUMSTANCES THE CITY HAS FAILED TO ADDRESS THE CUMMULITIVE AFFECTS OF DEWATERING.

"HOWEVER DEWATERING ACTIVITIES DURRING CONSTTRUCTIONAND OPERATION OF URBAN DEVELOPMENT USES ARE ANTICIPATED TO RESULT IN A LESS-THAN –SIGNIFICANT IMPACT SINCE THEY WOULD NOT CAUSE OR ACCELARATE GEOLOGIC HAZARDS WIHC WOULD RESULT IN SUBSTANTIAL DAMAGE TO STRUCTURES OF INFRASRTRUCTURE, OR EXPOSE PEOPLE TO SUBSTANTIAL RISK OF INJURY; CONSTITUTE A GEOLOGIC NATURAL HAZARD OR OTHER PROPERTIES BY CAUSING OR ACCELARATING INSTABILITY FROM EROSION; OR ACCLERATE DEPOSITITION WICH WOULD NOT BE CONTAINED OR CONTROLLED ON-SITE."

QUESTION 4A: WHY IS THE CITY RELYING ON BLIND FAITH INSTEAD OF EMPHERICAL EVIDENCE WHICH CEQA COMMANDS?

QUESTION 4B: WHY DOES THE FEIR AVOID CONSIDERING THE ACTUCAL AMMOUNTS OF GROUNDWATER DEWATERING INSTEAD OF MERLEY PROGNOSTIGATING THE AFFECT (ANTICIPATE). CEQA DOES NOT RECONGNIZE ANTICIPATION OR PROGNOSTIGATION OR BLIND FAITH.

NOTE: INCORPORTATED BY REFERENCE ARE COMMENTS MADE TO THIS FEIR BY PATRICIA MCHPERSON OF GRASSROOTS INC. A NON- PROFIT CORPORATION. EMPHISIS IS MADE TO THE SPIDER MAP SHOWING THE LOCATION OF ALL INDUSTRAL WASTE PERMITS AND IDENTIFYING THEM.

COMMENT 5 : THE CITY CANNONT CIRCULATE AN FEIR FOR COMMENT. COMMENT MAY ONLY BE MADE TO A DRAFT EIR IN CONJUNCTION WITH THE MANDATORY NOTICE OF CIRCULATION OF DRAFT EIR WHICH MUST MANDATORLY BE FILED WITH THE STATE OFFICE OFO PLANNING AND RESEARCH. ONLY THE LEGISLATURE OF THE STAE OF CALIFORNIA MAY LIMIT THE SCOPE OF CEQA IN LAW. THE CITY COUNCIL MAY NOT THEREFORE LIMIT THE SCOPE OF CEQA WHICH IS REPRESENTED AS UNLAWFUL IN THIS FEIR.

THE CITY CANNOT USTILIZE A DEFEATED FEIR WHICH IS SIX YEARS OLD TO ELICIT COMMENTS FROM THE PUBLIC. IT MUST CIRCULATE A NEW DRAFT EIR THAT FULLY ENCOMPASES CURRENT CIRCUMSTANCES. EVEN THOUGH THE COURT EXPRESSED CERTAIN CONCERNS, THAT FACT DOES NOT EXCUSE THE CITY FROM CONDUCTING CEQA IN COMPLETION. CEQA MAY ONLY BE LIMITED BY THE LEGISLATURE OF THE STATE. THE CITY CANNONT MERLEY ASSUME NO SUBSTANTIAL CHANGES TO THE ENVIRONMENT SINCE 2003, IT MUST INVISTIGATE AND PROVDE PROOF INSTEAD OF OFFERING UNSUPPORTED CONCLUSIONS WHICH FAVOR PROJECT.

QUESTION 5: WHY DID THE CITY FAIL TO ADDRESS THE ISSUED THAT THE MASTER FEIR FOR BOTH PROJECTS EXPIRED BECAUSE IT WAS NOT RECERTIFIED BY THE CITY COUNCIL AS NECESSARY EVERY FIVE YEARS.

NOTE: THE EXPIRED MASTER FEIR GOVERNS CUMMULITIVITY ON BOTH PHASES.

COMMENT 6: THE REGOINAL WATER QUALITY CONTROL BOARD MAY NOT ISSUE ANY NEW NPDES PERMITS BECAUSE THE EFFECTS OF GROUNDWATER DEWATERING IN PHASE ONE OF THE PROJECT WILL NOT BE DETERMINED UNTIL FINAL ADJUDICATION OF THE LAWSUIT FOR PHASE ONE WHICH IN NOW IN THE COURT OF APPEAL. FURTHERMORE THE LARWQCB CANNONT ISSUE ANY PERMITS BECAUSE ALL OR A FRACTION PORTION OF THE WATER WELLS AT THE SITE ARE ILLEGAL IN THAT NO
WELL COMPLETION REPORTS HAVE EVER BEEN FILED FOR ALL OF THE WATER WELLS ON PHASE ONE AND TWO WITH THE STATE WATER RESOURCES AGENCY AS REQUIED BY LAW NOR HAS THE APPLICANT COMPLETED A WELL COMPLETION REPORT RELEASE AGREEMENT – ENVIRONMENTAL CLEANUP STUDY FORM FOR ANY WATER WELLS WITHING TWO MILES OF A KNOWN BODY OF CONTAMINATED GROUNDWATER AND THEREFORE THE LARWQCB HAS NOT YET INITIATED THE REQUIRED ENVIRONMENTAL STUDY REQIRED FOR EACH AND EVERY WELL WITHIN TWO MILES OF THE KNOWN CONTAMINATION. THE REQUIRED FORMS MAY BE REFRENCED AT:

http://www.groundwater.water.ca.gov/technical_assistance/gw_wells/gww_complrept/index.cfm

ALL DEWATERING ACTIVITIES COVERD BY INDUSTRAL WASTE PERMITS REPRESENT WATER WELLS AND MUST BE REPORTED ON AS SUCH.
THE LOGIC FOR THIS POSITITION IS EXTRACTED FROM A STATE OF COLORADO SUPREME COURT DECISION ATTACHED

QUESTION 6: WHY DOES THE CITY FAIL TO CONSIDER THE FACT THAT LAWFULLY REQUIRED ENVIRONMENTAL STUDIES FOR WATER WELLS WITHINN TWO MILES OF A CONTAMINATED GROUNDWATER SOURCE HAVE NOT YET BE COMPLETED BY THE LARWQCB AND COULD NOT BECAUSE THE WELL OWNER FAILED TO LAWFULLY FILL OUT THE REQUIED FORM THEN SUBMIT IT TO THE STATE WATER RESOURCES AGENCEY. WHY DOES THE CITY RELY ON DATA FROM SOURCES (WATER WELLS) THAT ARE LARGLEY OR COMPLETELY ILLEGAL SOURCES OF DATA. WHY DOES THE CITY FAIL TO REQUIE ALL OF THE DATA LINAGE AND PROFFS OF A SECURE CHAIN OF CUSTODY FOR ANY DATA USED TO CREATE COMPUTER GROUNDWATER MODELS. WHY DOES THE CITY INSTEAD OF EMPHIRCAL SCIENCE SUBSTUTIED BLIND FAITH?

SEE ATTACMENT 1

ATTACHEMT 2 – ARTICLE REGARDING COLARADO SUPREME COURT DECISION REGARDING WHAT CONSTUTES A WATER WELL.

ATTACHMENT 3 – RESPONSE FROM LARWQCB THAT NO COMPLEIOTN REPORT RELEASE AGREEMENT-ENVIRONMENTAL CLEAN UP STUDY FORM HAS BEEN UTILIZED BY THE LARWQCB TO INITIATE ENVIRONMENTAL STUDIES FOR WATER WELLS WITHIN 2 MILES OF A KNOWN SITE OF GROUNDWATER CONTAMINATION.

COMMENT 7; A LARGE VOLUME OF GROUNDWAER HAS BEEN DISCHARD SINCE 2003 – SEE ATTACHMENT 1. UNKNOWN AMMOUNTS OF GROUNDWATER HAVE BEEN DISCHAERGED FROM THE FIRE PIT TRAINING AREA IN PHASE ONE WHICH CONTAINS TOXIC MATERIALS BUT THE VOLUME IS UNKNOWN. UNKNOWN ACTUAL VOLUMES OF GROUNDWATER HAVE BEEN DISCHARDED UNDER INDUSTRAL WATE PERMITS BUT THE QUANTIY REMAINS UNKNOWN.

LONG TERM DEWATERING QUANTITIES HAVE NOT YET BEEN DETERMINED AS THOSE VOLUMES ARE IN A CONSTENT STATE OF FLUX.

GIVEN THE AMOUNT OF KNOWN DEWATERING AND THE TWO UNKNOWN QUANTITIES PREVIOULSLY REFERENCED IT IS IMPOSSIBLE FOR THIS FEIR TO ADDRESS EITHER THE QUANTIFIABLE VOLUMES AT ANY CERTAIN POINT IN TIME OR THE QUANTITIAVE VOLUMES IN THE PAST OR FUTURE.

SEE ATTACHEMENT 1

QUESTION 7: WHY HAS THE FEIR FAILED TO CONSIDER QUANTITATIVE GROUNDWATER DEWATER VOLUMES FROM ALL FOUR SOURCES PAST AND FUTURE TO MAKE ITS CALCULATIONS.

COMMENT 8: SINCE 2003 AN EARTHQUAKE OF MAGNITUDE 3+ WAS EPICENTERED ON THE CHARNOCK FAULT WHICH BISCETS THE PLAYA VISTA PROJECT. ANOTHER RECENT EARTHQUAKE WAS EPICENERED ON AN ACTIVE FAULT LOCATED IN VENICE CA. NEARBY WHICH WAS ALSO A MAGNITUDE 3+.

QUESTION 8: WHY IS THE FEIR SILENT ON THESE NEW AND CHANGED ENVIRNMENTAL CIRCUMSTANCES THAT WERE NOT AND COULD NOT HAVE BEEN KNOWN AT TIME OF THE ORIGNAL CERTIFICATION OF THE FEIR?

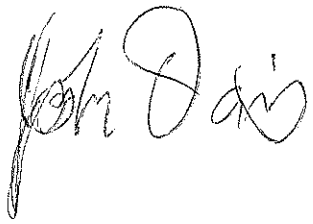
COMMENT 10: THE CITY IS AWARE THAT THE STATE OF CALIFORNIA IS FINALIZING NEW TSUNAMI INUNDATION MAPS FOR THE AREA AND THEY ARE DUE TO BE RELEASED THIS YEAR.

QUESTION 10: WHY DOES THE CITY FAIL TO EXTEND THE COMMENT PERIOD TO A DATE AFTER THE NEW INUNDATION EVACUATION MAPS CAN BE CONSIDERED?

NOTE: THE CITY IS AWARE OF THE NEW MAPS AND POCESSES A DRAFT COPY.

SINCERLEY,

John Davis
PO 10152 Marina del Rey Ca. 90295



ATTACHMENT 1

Los Angeles Regional Water Quality Control Board April 15, 2009
Att: Executive Officer Tracy Egoscue
Re: Board Letter of March , 2009

Dear Executive Officer Egoscue,

In regard to meeting with staff, I would like to express my comments and questions prior as requested. PLEASE PROVIDE COPIES OF THIS LETTER TO THE BOARD MEMBERS.

Patricia McPherson will as you know join the meeting.

COMMENT ONE – CEQA AND CURRENT LEGAL CHALLENGE TO PROJECT

The proposal suggested requires an action under CEQA. A Master EIR overarches any CEQA process for Phase One. The change proposed may cause an adverse affect and or have unknown impacts on the environment therefore CEQA must occur and be related to the Master EIR. The Master EIR is expired and was not renewed every five years as legally required. Therefore a new EIR is required and any CEQA process must fall under it.

The California Court of Appeal dispositition in case B174856 reads as follows:

"The judgment is reversed with directions to the superior court to grant the petition and issue a peremptory writ of mandate ordering the city to vacate its approval of the methane mitigation measures, for the purposed of determining whether a subsequent EIR or a supplemental EIR is required with respect to groundwater dewatering and proceed accordingly as required by CEQA."

On remand to Los Angeles Superior Court the case was adjudicated in favor of
The City of Los Angeles and Playa Capital LLC.

Two appeals were filed in February 2009.

LARWQCB staff cannot substitute its approval for the proposal in avoidance of the CEQA process. If and until the Appeals Court finds the Superior Court decision on remand is sound, LARWQCB must withhold its approval because such would clearly prejudice appellant's case before the Court and would be violative of the CEQA process.

Furthermore the City Council vacated the methane mitigations in word only while the City continually employed the systems which include dewatering in clear violation of the Court order and with the encouragement of the LARWQCB staff via its prior approvals
prior to the most recent court ruling..

QUESTION ONE – WHY HASENT THE LARWQCB ADDRESSED THE RAMIFICATIONS OF THE LAWSUIT THAT OVERSHADOWS THE MODIFICATIONS IT HAS ALREADY APPROVED AND IS CURRENTLY CONSIDERING? WHY IS CEQA IGNORED IN THIS PROPOSAL, IS THE LARWQCB EXEMPT FROM CEQA?

COMMENT TWO-POTENTIAL MIS-CONDUCT BY LARWQCB RELATED TO A "PEER REVIEW" ISSUED ON DECEMBER 16, 2005.

Page two item 2 states the following: "In the light of protecting water resources and the environment, a conservative approach (worse case scenario) should be taken in the evaluation." "Use the historical high water elevation for the impact simulation runs."

The current proposal abandons this standard in favor of a "site wide groundwater survey" which is not maximumly protective of water resources and the environment.

A "Peer Review" is a formal part of the regulatory process whereby RWQCB is required by the California Health and Safety Code to submit the scientific portions of proposed regulations for external scientific evaluation to ensure that the scientific assumptions are sound. The "Peer Review" was sent to various State and Federal Agencies.

The "Peer Review" was NOT a "Peer Review" but does either represent gross negliance or misconduct of a State Agency and or Employees of the State. **See Attachment**

I met with the Executive Officer and Deputy Executive Officer in 2008 and asked them to notify all agencies copied that NO PEER REVIEW OCCURRED as it may have a differing affect on their judgment.

The Executive Officer has failed to date to notify the Board itself or any entity copied on the falsified "Peer Review". This is clearly a matter of human health and safety which should not be swept under the rug.

Furthermore no data linage was presented to the LARWCB to validate a secure chain of custody of such to prove that inputs to the model were sound and not FABRICATED. It should also be stated that the governing Board was not informed of the process and it was only approved by Staff and paid for by the applicant. Approvals of the afore referenced "Peer Review" were made in a document dated January 10, 2006 entitled only a "REVIEW".

The California Department of Toxic Substance Control received and evaluated the falsified "Peer Review" and the approving "Review" along with two other documents provided by non-governmental entities. DTSC states in its letter of November 14, 2006 that it concurred with the requirements for a "worst case" modeling assessment and further stated "Overall the technical review by the LARWQCB appeared to be through and professional". **See Attachments**

QUESTION TWO – WHY DID THE EXECUTIVE OFFICER UPON LEARNING THE PEER REVIEW WAS FALSE FAIL TO INFORM THE PUBLIC, THE GOVERNNING BOARD, AND ALL AGENCIES COPIED ON THE ORIGINAL
"PEER REVIEW? WHY DID STAFF LEAD THE PUBLIC AND GOVERNMENT AGENCIES TO BELIEVE THAT A "PEER REVIEW" COUNDUCTED UNDER THE
STATE HEALTH AND SAFETY CODE OCCURRED WHEN BY ITS OWN ADMISSION NO SUCH "PEER" REVIEW OCCURRED?

COMMENT THREE – No water well completion reports have been sought by LARWQCB to validate that any and all types of water wells used to obtain data were lawful data sources. Faith alone is not a sufficient standard nor a substitute for empirical evidence commanded by CEQA and valid science. I believe that all or a fraction of the wells are illegal under State Law in that Well Completion Reports are required under the California Water Code Section 13751 but do not exist. As a government agency I requested that such reports be obtained by the LARWQCB but it has failed to do so to date, after repeated requests. To validate the legitimacy of such wells as legitimate data-sources I hereby request, again, that the Executive Officer obtain such reports for the entire project site phases one and two since each and every water well may have an affect on the proposal at hand in the aspect of cumulatively.

QUESTION THREE – WILL THE EXECUTIVE OFFICER AT MY REPEATED REQUEST OBTAIN WELL COMPLETION REPORTS FOR ALL WELLS AT THE SITE BY FILLING OUT THE REQIRED FORM AT THE DEPARTMENT OF WATER RESOUCRES? :

http://www.groundwater.water.ca.gov/technical_assistance/gw_wells/gww_complrept/index.cfm

IF AGAIN THE LARWQCB FAILS THIS REQUEST WHY AND HOW CAN VALIDATION OF THE WELLS AS LEGAL DATA SOUCRCES BE PROVEN TO THE LARWQCB, OTHER GOVERNMENT AGENCIES AND THE PUBLIC? DOES THE LARWQCB CHOOSE TO SUBSTUTITE FAITH FOR EMPHERICAL DATA?

COMMENT FOUR – The proposal does not take into consideration cumulatively as it relates to the potential affects from other nearby dewatering operations that could affect the proposal and the environment. **See Attachments**

QUESTION FOUR – Why has the LARWQCB failed to date to consider the potential cumulative affects from the surrounding dewatering operations as those operations may and probably do cause environmental effects regarding this proposal.

COMMENT FIVE – The applicant is utilizing a Tsunami Inundation Map produced by the State of California for land planning as it relates to this proposal.
Maps produced for this purpose carry a disclaimer at the bottom stating they are NOT TO BE USED FOR LAND PLANNING PURPOSES.

QUESTION FIVE – WHY IS THE APPLICANT USING THE MAP FOR THE PROHIBITED PURPOSE OF LAND PLANNING?

COMMENT SIX
At a meeting with RWQCB Staff in 2008 with myself and Patricia McPherson in attendance Staff stated that the water table drawdown for the project was between 8 and 12 feet.

QUESTION SIX-CAN THE RWQCB PROVIDE ANY AND ALL DATA ALONG WITH THE DATA LINAGE AND SECURE CHAIN OF CUSTODY PROOFS WHICH STAFF USED TO DETERMINE THE AFORE REFERENCED DRAW DOWN OF THE AQUIFER INCLUSIVE OF ALL COMPUTER MODELS, THE SOFTWARE USED TO RUN THE MODELS, AND MAPS OF ANY KIND.

IF NOT DOES THE RWQCM EXERCISE BLIND FAITH IN THE APPLICANTS CLAIMS AND IF SO WHY?

COMMENT SEVEN – The applicant and to date the LARWQCB have ignored potential adverse and predictable periodic floods of Ballona Creek that may cause a adverse effect on the environment. An air photo obtained from Spence Collection at the UCLA library indicates clearly the extent of such flood waters. Staff and the Executive Officer of the LARWQCB have been presented with the photograph but to date have ignored it as evidence. **See Attachment**

QUESTION SEVEN – WHY HAS STAFF TO DATE IGNORED THE AIR PHOTO AND POTENTIAL FOR OVERTOPPING FLOODWATERS FROM BALLONA CREEK WHICH WOULD INUNDATE THE PROPOSED PROJECT AND POTENTIALLY CAUSE AN ADVERSE AFFECT ON THE ENVIRONMENT?
WILL THE LARWQCB NOW CONSIDER THE PHOTO, WHICH IS A LEGITIMATE FORM OF DATA, OR IGNORE IT AGAIN. IF IGNORANCE IS THE OPTION PLEASE EXPLAIN WHY?

PLEASE FIND BELOW COMMENS BY PATRICA MCPHERSON REGARDING THIS PROPOSAL.
(Comments by P.McPherson have been transmitted with her permission.)

Grassroots Coalition acted as Intervener on behalf of the public in Application No. 99-05-029 as well as our Complaint Case 00-05-010(which we now have a settlement agreement re: CPUC adopted settlement regarding Monitoring and Reporting On Status of SOCALGAS's Del Rey Natural Gas Storage Operation).

These California Public Utilities Commission litigation cases which occurred starting in late 1999/early 2000 had to do with investigating SOCALGAS's oil/gas storage reservoir leakage and the inherent potentials of health hazards to the public and the environment.

During the City of LA's investigation of the newly discovered oilfield gases surfacing at Playa Vista- part of the inquiry was- from where was the gas originating. ETI stated at the time that they believed that there existed the Lincoln Blvd. Fault that was acting to allow the thermogenic gases to surface throughout the area including Playa Vista. Later ETI described the area as a "fracture zone", "high velocity gas zone" etc. _

Davis and Namson were working on behalf of Playa Capital and determined there was no evidence of a Lincoln Blvd. Fault.

Davis and Namson -at the same time they were employed by Playa Capital LLC were employed by SOCALGAS to review the potential of their gas storage leakage. This is evident via:

Before The Public Utilities Commission Of The State Of California , Application No. 99-05-029

SUPPLEMENTAL EXHIBITS IN SUPPORT OF PROPONENT'S ENVIRONMENTAL ASSESSMENT dated Nov. 21, 2000 REVIEW OF THE PLAYA DEL REY GAS STORAGE FIELD, Los Angeles, California Nov. 9. 2000.

"Executive Summary

In addition, I am in the process of completing an extensive subsurface study of the Playa Vista Project area that lies mostly to the east of the Gas Storage Field (Davis and Namson, 2000) , and Playa Vista has kindly allowed me to include their subsurface work under the Gas Storage Field in this review for The Gas Company."

Thus, when the City made its determination regarding the fault and any potential for gas reservoir leakage..they utilized a consultant that was not independent-there was a conflict of interest.

QUESTION
DOES THE LARWQCB CONSIDER THIS A CONFLICT AND IF NOT PLEASE EXPLAIN WHY AND STATE EXACTLY WHAT DATA THIS FIRM PROVIDED REGARDING THE EXISTING PROPOSAL?

We would like to meet with Staff ASAP.

You may contact me by email.

Sincerely,

John Davis
PO 10152 Marina del Rey Ca 90295
jd@johnanthonydavis.com

California Regional Water Quality Control Board

Los Angeles Region

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Dr. Alan Lloyd
Secretary for Environmental Protection

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.waterboards.ca.gov/losangeles

Arnold Schwarzenegger
Governor

December 16, 2005

Mr. Colin Kumabe
Los Angeles City, Department of Building & Safety
201 North Figueroa Street, 3rd Floor
Los Angeles, CA 90012

PEER REVIEW ON REPORT ENTITLED "EVALUATION OF POTENTIAL EFFECTS OF DEWATERING ASSOCIATED WITH METHANE MITIGATION SYSTEMS AT PLAYA VISTA PHASE 1 DEVELOPMENT, DATED NOVEMBER 23, 2005" PLAYA VISTA SITE, LOS ANGELES, CALIFORNIA [CAO NO. 8-125, FILE NO. 98-192, SLIC NO.07733, SITE ID NO. 2043W-00]

Dear Mr. Kumabe:

The California Regional Water Quality Control Board, Los Angeles Region ("Regional Board") has conducted a peer review on the report entitled "Evaluation of Potential Effects of Dewatering Associated with Methane Mitigation Systems at Playa Vista Phase 1 Development ("Report")," dated November 23, 2005, prepared by Camp Dresser & McKee, Inc. ("CDM"), on behalf of Playa Capital Company, LLC ("Playa"). The Report includes the results from a computer modeling study for the potential effects of the de-watering systems associated with the methane mitigation measures in the Phase 1 development of the Playa Vista project on groundwater quality, contaminant migration, and groundwater levels. Based on the results from the calibrated model impact simulations, the Report concludes, in part, that the operation of the methane system de-watering will results in no significant impact on groundwater levels and groundwater quality for the Phase 1 project area.

Our review has focused on model assumptions, parameter selections, model area and computation grid, boundary conditions, calibration procedures, impact simulations (scenario runs), and sensitivity analysis. We have the following comments:

1. In general, our review indicates that the selected MODFLOW-2000 (groundwater flow) and MT3DMS (solute transport) models are appropriate for the proposed evaluation. The site conceptual model used in the model setup covers all the major components in the model area. The boundary conditions and recharge assumptions are within the range for typical urban environment.

2. The parameters used in the model are from either field test data or published literatures. However, the uncertainty or ranges associated with these

parameters may change the model outcome. In the light of protecting water resources and the environment, a conservative approach (worse case scenario) should be taken in the evaluation. We suggest the model be re-calibrated by changing the following parameters:

i) Change the ratio of horizontal to vertical hydraulic conductivity for the Upper Bellflower and Lower Bellflower to 10;
ii) Use the historical high water elevation for the impact simulation runs;
iii) Assume 80 percent of the water discharge from the sump originates from groundwater; and
iv) Use a value of 2 years for the biotransformation half-life in the model assessment of Maximum Contaminant Level's (MCL) exceedances in groundwater.

3. To monitor potential migration of the contaminant plume(s), a sentinel groundwater monitoring well should be installed between the identified contamination plumes and the methane system de-watering sites at the Avalon residential complex. The groundwater monitoring well should be located in close proximity to the intersection of Kiyot Way and Pacific Promenade and be installed as a water table well in the upper Bellflower Aquaclude/Aquitard. Quarterly groundwater monitoring, for the first year, should include analysis for volatile organic compounds using USEPA Method 8260B.

4. We recommend that the groundwater de-watering collection sump located within the Avalon residential complex, that discharges to the sanitary sewer, be monitored periodically for volatile organic compounds using USEPA Method 8260B.

If you have any questions or need additional information, please call Mr. David Bacharowski at (213) 576-6607, Dr. Arthur Heath at (213) 576-6725, or Mr. Adnan Siddiqui at (213) 576-6812.

Sincerely,

Jonathan S. Bishop
Executive Officer

cc: Mr. Gene A. Lucero, Latham & Watkins, LLP
Mr. Michael Smith, Camp Dresser & McKee, Inc.

California Regional Water Quality Control Board

Los Angeles Region

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Alan C. Lloyd, Ph.D.
Agency Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.waterboards.ca.gov/losangeles

Arnold Schwarzenegger
Governor

January 10, 2006

Mr. Colin Kumabe
Los Angeles City, Department of Building & Safety
201 North Figueroa Street, 8th Floor
Los Angeles, CA 90012

A REVIEW OF THE REPORT ENTITLED "EVALUATION OF WORSE-CASE SCENARIO – METHANE SYSTEM DEWATERING, IN RESPONSE TO LARWQCB COMMENTS," DATED JANUARY 4, 2006
PLAYA VISTA SITE, LOS ANGELES, CALIFORNIA [CAO NO. 98-125, FILE NO. 98-192, SLIC NO.07733, SITE ID NO. 2043W-00]

Dear Mr. Kumabe:

The California Regional Water Quality Control Board, Los Angeles Region ("Regional Board") has conducted a review on the report entitled "Evaluation of Worse-Case Scenario – Methane System Dewatering, In Response to LAQWQCB Comments" ("Report")," dated January 4, 2006, prepared by Camp Dresser & McKee, Inc. ("CDM"), on behalf of Playa Capital Company, LLC ("Playa"). The Report includes the results from a computer re-modeling in response to the Regional Board's comments, i.e., taking a more conservative approach (worse case scenario), listed in our previous letter dated December 16, 2005 (copy attached). The purpose of the model is to determine whether the methane dewatering systems specified in the Report may have an adverse impact on groundwater quality, contaminant migration, and groundwater levels at the site. Based on the results from the re-calibrated model impact simulations conducted under the worse case scenario, the Report concludes that the conclusions reached in the November 23, 2005 modeling report remain substantially unchanged.

The Regional Board staff are providing comments on the Report at the request of the Los Angeles Department of Building and Safety (LADBS) and as the lead agency for assessment, monitoring and cleanup at the Playa Vista site under Cleanup and Abatement Order No. 98-125 (CAO). As stated in our December 16, 2005 letter, our review focused on the model assumptions, parameter selections, model area and computation grid, boundary conditions, calibration procedures, impact simulations (scenario runs), and sensitivity analysis. Based upon these aforementioned assumptions and parameters, we have the following comments:

Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maureen F. Gorsen, Director
1011 North Grandview Avenue
Glendale, California 91201

Arnold Schwarzenegger
Governor

MEMORANDUM

TO: Dorothy Rice
Deputy Director
Site Mitigation and Brownfields Reuse Program

FROM: Richard L. Coffman, Ph.D., PG
Senior Engineering Geologist
Geological Services Unit, Glendale

Ning-Wu Chang, Ph.D., PE
Senior Hazardous Substances Engineer
Engineering Services Unit, Cypress

REGISTERED GEOLOGIST
RICHARD L. COFFMAN
No. 6614
Exp. 7-31-08
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
NING WU CHANG
No.: C043843
Exp.: 6-30-07
CIVIL
STATE OF CALIFORNIA

CONCUR : Michael Sorensen, PE
Branch Chief
Engineering and Geological Services Branch

DATE: November 14, 2006

SUBJECT: Review of Documents on Dewatering Associated with Methane Mitigation Systems at Playa Vista Phase 1 Development, Playa Vista Site, Los Angeles California

PCA 91115 Log No. 63030

The Engineering and Geological Services Branch (EGSB) reviewed four documents related to Dewatering Associated with Methane Mitigation Systems at the Playa Vista Phase 1 Development. Our reviewers were Dr. Richard Coffman (Senior EG) with the Glendale Geological Services Unit and Dr. Ning-Wu Chang (Senior HSE) with the Engineering Services Unit, Cypress.

The documents reviewed included:

- *Evaluation of Potential Effects of Dewatering Associated with Methane Mitigation Systems at Playa Vista Phase 1 Development, Playa Vista Site, Los Angeles California*, prepared by Camp, Dresser and McKee and sent to Mr. David Nelson, Playa Capital Company, LLC, on November 23,2005

- Peer Review on Report Entitled *"Evaluation of Potential Effects of Dewatering Associated with Methane Mitigation Systems at Playa Vista Phase 1 Development, Dated November 23, 2005"* authored by the Regional Board and sent to Mr. Colin Kumabe, Los Angeles City Department of Building and Safety, on December 16, 2006

- *Evaluation of Worse-Case Scenario – Methane System Dewatering in Response to LARWQCB Comments, Playa Vista Site, Los Angeles California*, prepared by Camp, Dresser and McKee and sent to Mr. Jonathan Bishop, Regional Board, on January 4, 2006

- *A Review of the Report Entitled "Evaluation of Worse-Case Scenario – Methane System Dewatering, in Response to LARWQCB Comments, Dated January 4, 2006,"* prepared by the Regional Board and sent to Mr. Colin Kumabe, Los Angeles City Department of Building and Safety, on January 10, 2006

The above documents were provided and accompanied by a letter from Mr. Jonathan Bishop, Executive Officer of the Los Angeles Region, California Regional Water Quality Control Board (LARWQCB), requesting a review of those documents by the DTSC.

Conclusions and Recommendations:

1. We concur with the requirements of the LARWQCB for a "worst case" modeling assessment and re-evaluating the model should site conditions change. We have no additional comments to add regarding the modeling documents or review comments by the LARWQCB. Overall, the technical review by the LARWQCB appeared to be thorough and professional.

2. Monitoring of the ongoing dewatering operations and aquifer behavior will be critical in validating the model predictions. To this end, LARWQCB required the installation of a sentinel groundwater monitoring well. Since we do not have background information on the existing monitoring network in the vicinity of Playa Vista, we can not comment on the adequacy of this recommendation. We do recommend a vigorous field monitoring and reporting program to ensure any future changes in the groundwater flow direction, extent of groundwater contamination, and dewatering system operations are detected.

Comments from Dr. Richard Goffman:

The review performed by the GSU focused on those aspects directly related to the groundwater flow and fate and transport modeling set up and input parameters used to model Potential Effects of Dewatering Associated with Methane Mitigation Systems at Playa Vista Phase 1 Development, and subsequent review comments from the staff of the LARWQCB.

Subject: Responses to your Questions re: Playa Vista
From: "Arthur Heath" <AHEATH@waterboards.ca.gov>(Add as Preferred Sender)
Date: Tue, Feb 26, 2008 10:16 am
To: <jd@johnanthonydavis.com>
Cc: "Adnan Siddiqui" <asiddiqui@waterboards.ca.gov>, "David Bacharowski" <Dbacharowski@waterboards.ca.gov>, "Michael Levy" <MLevy@waterboards.ca.gov>, "Tracy Egoscue" <tegoscue@waterboards.ca.gov>, "Weixing Tong" <wtong@waterboards.ca.gov>

Hi Mr. Davis,

We have included responses in regard to your specific questions as indicated below. If you have additional questions, or comments pertaining to the Playa Vista site, please provide a memo or letter expressing your comments.

1) Who authorized the Regional Board to act as a peer reviewer regarding groundwater level measurements and dewatering systems at Playa Vista?

As the lead regulatory agency overseeing the assessment and cleanup of soil and groundwater contamination, we were requested by the City of Los Angeles Building and Safety(City) to provide our comments in relation to groundwater level measurements and the dewatering systems at Playa Vista. The management team, David Bacharowski, Art Heath, and Adnan Siddiqui, decided to respond to the City's request. David brought in Dr. Weixing Tong from the UST section to review the groundwater model associated with the dewatering systems at Playa Vista. This does not constitute "peer review", as you have referenced. This is an ordinary part of our oversight of groundwater remediation efforts. "Peer Review" is formal part of our regulatory process whereby we are required by the Health and Safety Code to submit the scientific portions of our proposed regulations for an external scientific evaluation to ensure that our scientific assumptions are sound.

2) Under what circumstances would the Regional Board normally act as a peer reviewer?

The Regional Board would not act as peer reviewer per se. As a public and a lead environmental regulatory agency, however, Regional Board staff would provide appropriate reviews, comments and recommendations (e.g., in response to assessment, cleanup, modeling documents required either by DTSC, Los Angeles County Hazmat Department, Fire Departments overseeing USTs, USEPA, for specific contaminated sites) in relation to our expertise as a public regulatory agency.

Arthur G. Heath, Ph.D.
Environmental Program Manager I
Remediation Section Chief
California Regional Water Quality Control Board, Los Angeles
Phone: (213) 576-6725
Fax: (213) 576-6717
aheath@waterboards.ca.gov

California Regional Water Quality Control Board

Los Angeles Region

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

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Agency Secretary

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Arnold Schwarzenegger
Governor

May 15, 2007

Mr. John Davis
P.O Box 10152
Marina Del Rey, CA 90295

RESPONSE TO INQUIRY FOR PLAYA VISTA DEVELOPMENT PROJECT –5510 LINCOLN BLVD. PLAYA VISTA, CALIFORNIA (CLEANUP AND ABATEMENT ORDER NO. 98-125, FILE NO. 98-192, SLIC NO. 0773, SITE ID NO. 2043W-00)

Dear Mr. Davis:

The California Regional Water Quality Control Board, Los Angeles (Regional Board) has been acting as a lead agency in providing regulatory oversight for the characterization, cleanup, monitoring and No Further Action (NFA) determination for the contamination in soil and/or groundwater from historical industrial use at the Playa Vista Development Project (Site). At your request, Regional Board staff met with you on April 3, 2007. During the meeting you raised various issues regarding the Site. Subsequently you also sent electronic mails dated April 4, 2007 and April 6, 2007 (copies attached) to the Regional Board. This letter is in response to your inquiry to the Regional Board.

Question:
" Prior to the meeting I requested water well completion reports filed with State Water Resources be present at the meeting to validate the monitoring wells used in the model were legal data sources. No State Water Well Completion reports required by State law were presented to me at the meeting."

Response:
The groundwater monitoring wells at the Playa Vista site were installed at the request of the regulatory oversight agency since approximately 1980s. As a lead regulatory agency, Regional Board has required Playa Capital Company, LLC (Playa Capital) to install groundwater monitoring wells at various times all across the Site at appropriate locations. The primary purpose of these wells has been monitoring of the nature and extent of contaminant groundwater plumes originating at the Site. As required, Playa secured well permits from the appropriate agency prior to well installation. The Playa Vista site falls under the jurisdiction of Los Angeles County, Department of Health Services (LADHS). Upon completion of the work including the well installation Playa submitted a report to the Regional Board, which included a copy of the well permits obtained from the LADHS and other pertinent information such as screen intervals, boring logs, etc. As an example, a copy of the well permit was provided to you during our meeting on April 3, 2007.

The California Water Code (CWC) Section 13751 requires that a report made on forms called Well Completion Report be submitted to Department of Water resources (DWR) containing pertinent information. This report/form used to be called as "Well Drillers' Report" and is still referred to as such. The CWC Section 13750.5 requires that the well drilling contractor posses a C-57 water well contractor's license and it is the licensed drilling contractor who must file a Well Completion report with DWR.

Question:
"I asked to meet regarding letters of the RWQCB dated 12/16/05 and 1/10/06. The first letter suggested to Los Angele City Department of Building and Safety the following; ?We suggest the model be re-calibrated by changing the following scenarios??.ii) Use the historical high water elevation for the impact simulation."(worse case scenario)" I submitted the Ca Dept. Conservation Division of Mines and Geology Historic High Groundwater Level map and report upon which it was based. No person at the meeting could state what high historic groundwater level data was used in the model as input data. I was presented with a CDM report claiming to utilize high historic groundwater levels as input data for the model. I analyzed that report and it did not include historic high groundwater level data sourced from the State of California. After reading the second CDM Report it was apparent the historic high groundwater level was derived from 2005 only. Contrary to RWCQB suggestion of a "(worse case scenario)" (Historic High Groundwater Level). CDM used well observations cited ion the first CDM report that were obtained from 26 water monitoring well sites spanning in time from 2/14/05 to 10/3/05 excluding the period from 10/4/05 to 12/21/05 which were the months of highest rainfall."

Response:
Based on the information provided to the Regional Board by CDM, we concluded that the groundwater elevation data used in the model was collected between August 1999 and October 2005 from 22 groundwater monitoring wells present at the Site. Based on the records dating back to 1877, the rain fall observed during 2004/2005 season (37.96 inches) was used in the Model for the worst case scenario and assumed to continue forever. The Department of Conservation, Division of Mines and geology (Department) report you have referred is Seismic Hazard Zone Report 036 (Report) dated 1998. The Report summarizes the methods and sources of information used to prepare the Seismic Hazard Zone Map for the Venice 7.5-minute Quadrangle, Los Angeles County, California (Quadrangle), which covers approximately 62 square miles. The data used for depth to groundwater within the Quadrangle was relied heavily on turn of the century water-well logs and water measurements from borehole logs located within the study area. The map you provided is Plate 1.2 of the Report, which depicts a hypothetical and not the actual groundwater table within alleviated areas. According to Plate 1.2, the depth to groundwater within Playa Vista Site is depicted to be between 5 and 10 feet. In addition, all of the water measurements used in the Report were collected from boreholes are located outside Playa Vista site. The Report covers an area that spans 62 square miles while the Playa Vista site covers only 0.72 square miles located within the Quadrangle. In the model, CDM used the more reliable site- specific groundwater data measured from groundwater monitoring wells located on the Playa Vista site.

Question:
In addition, you have requested for review the information contained in Regional Board Playa Vista project files.

Response:
As you know, Regional Board maintains the Playa Vista project public file (approximately 35 boxes). Any person interested in reviewing the information contained in the file is welcome to do so at our office. According to our records, you made a file review request on March 9, 2007 and you came to our office and conducted the file review on March 12, 2007. You called back and requested to see the same file again and the requested material was placed in the public file review room for you; however, you never showed up to review it. In addition, in a telephone conversation with the on April 19, 2007, you specifically told Regional Board staff that you have completed your file review and that you would

request for file review in future, if needed. Please set up an appointment as you have done before to review the files at your convenience. In addition, the Regional Board established a document repository at Venice-Abbot Kinney Memorial Library and at Westchester Library where key reports such as remedial action plans and no further action determination requests are sent by the Regional Board public review. Furthermore, your name is on the list of interested parties that are provided a carbon copy of letters issued by the Regional Board regarding Playa Vista site.

We hope that our response will clarify your concerns. Please do not hesitate to contact the Regional Board staff, if you need further assistance. **If you have any questions regarding this matter, please contact Mr. Adnan Siddiqui at (213) 576-6812 or Dr. Arthur Heath, Remediation Section Chief at (213) 576-6725.**

Sincerely,

David A. Bacharowski

David A. Bacharowski
Assistant Executive Officer

Attachment: 1) E-mail from John Davis dated April 4, 2007
2) E-mail from John Davis dated April 6, 2007

cc: Patricia McPherson, Grassrrots Coalition
Colin Kumabe, LADBS
David Chernik, Playa Capital LLC
Gene Lucero Esq, Latham & Watkins LLP

From: Arthur Heath
To: Adnan Siddiqui
Date: 4/6/2007 9:38:55 AM
Subject: Fwd: RE: From John Davis Re Meeting of 4/3/07

fyi

Arthur G. Heath, Ph.D.
Environmental Program Manager I
Remediation Section Chief
California Regional Water Quality Control Board, Los Angeles
Phone: (213) 576-6725
Fax: (213) 576-6717
aheath@waterboards.ca.gov

>>> <jd@johnanthonydavis.com> 4/5/2007 12:02 PM >>>
Dear Dr. Heath,

Again thank you for meeting with me on 4/3.
Would it be possible to schedual a follow up meeting
on Monday of next week. This is an urgent matter.

Thanks,
John Davis

> -------- Original Message --------
> Subject: From John Davis Re Meeting of 4/3/07
> From: jd@johnanthonydavis.com
> Date: Wed, April 04, 2007 2:20 pm
> To: aheath@waterboards.ca.gov
> Cc: jd@johnanthonydavis.com
>
> Los Angeles County Regional Water Quality Control Board
> Att: Dr. Arthur Heath
> Re: Meeting of April 3, 2007 4/4/07
> ?SUBJECT: PLAYA VISTA/Public Interest/Dewatering Model/ Historical
> Water Table?
> cited in the City of Los Angeles Cheif Legislative Anylists Report
>
> Dear Dr. Heath,
>
> Thank you for attending the meeting arranged by Adnan Siddiqui. I would
> like to provide you my overview of the meeting.
>
> I asked to meet regarding letters of the RWQCB dated 12/16/05 and
> 1/10/06. The first letter suggested to Los Angele City Department of
> Building and Safety the following; ?We suggest the model be
> re-calibrated by changing the following scenarios??.ii) Use the
> historical high water elevation for the impact simulation."(worse case
> scenario)"
>
> The latter letter indicated the re-calibrated model had been run. We all
> agreed.
>
> I submitted the Ca Dept. Conservation Division of Mines and Geology

> Historic High Groundwater Level map and report upon which it was based.
>
> No person at the meeting could state what high historic groundwater
> level data was used in the model as input data.
>
> I was presented with a CDM report claiming to utilize high historic
> groundwater levels as input data for the model.
>
> I analyzed that report and it did not include historic high groundwater
> level data sourced from the State of California.
>
> After reading the second CDM Report it was apparent the historic high
> ground water level was derived from observations of 2005 only. Contrary
> to RWCQB suggestion of a "(worse case scenario)" (Historic High
> Groundwater Level), CDM used
> well observations cited in the first CDM report that were obtained from
> 26 water monitoring well sites spanning in time from 2/14/05 to 10/3/05
> excluding the period from 10/4/05to 12/21/05 which were the months of
> highest rainfal.
>
> Prior to the meeting I requested water well completion reports filed
> with State Water Resources be present at the meeting to validate the
> monitoring wells used in the model were legal data sources.
>
> No State Water Well completion reports required by State Law were
> presented to me at the meeting.
>
> After the meeting,I contacted Norri Alari of the RWQCB. He stated to me
> in a telephonic conversation that afternoon that the RWQCB understood
> the source of the model input data for historic high groundwater
> levels. He also stated a meeting took place after I left to consider my
> submittal of the Dpt. Conservation information. He indicated to me that
> the RWQCB would discuss my submission and questions regarding the model
> and the RWQCB would discuss my submission with DTSC, the Peer Reviewers,
> and LADBS.
>
> I would like to,as discussed in the meeting, to have a follow up meeting
> next week.
>
> Sincerely,
> John Davis
> PO 10152 Marina del Rey Ca, 90295
> 310-795-9640

From: <jd@johnanthonydavis.com>
To: Adnan Siddiqui <asiddiqui@waterboards.ca.gov>
Date: 4/6/2007 5:06:30 PM
Subject: RE: Request for meeting on April 9, 2007

Hk Adnan,

Ok. Here is a link that will allow you to validate State Well Completion Reports
were filed to prove the wells are legal.

http://wwwdpla.water.ca.gov/sd/groundwater/wells.html#wcr

Also, it is clear that the input for historic high groundwater levels used in the model
were only derived from recent water monitering well observations and only for a period
of 2005 exclusive of observations from Oct 4- Dec 31 2005 durring which high amounts
of rainfall occured. My humble suggestion would be that the RWQCB re-evaluate the
report only after the historic high groundwater levels as measured by the State are
used and that any prior acknowlegements of adiquacy be recinded.

Sincerley,
John Davis

CC
Patricia McPherson - GrassRoots Coalition

> -------- Original Message --------
> Subject: Request for meeting on April 9, 2007
> From: "Adnan Siddiqui" <asiddiqui@waterboards.ca.gov>
> Date: Fri, April 06, 2007 3:32 pm
> To: <jd@johnanthonydavis.com>
> Cc: "Arthur Heath" <AHEATH@waterboards.ca.gov>, "Noori Alavi"
> <nalavi@waterboards.ca.gov>
>
> Dear John,
> Due to busy schedule next week, we are unable to meet with you next
> week on April 9, 2007. However, I am working on a response to the
> concerns you expressed in our meeting on April 3, 2007. Thank you.
> Adnan
>
> Adnan Siddiqui, R.G., C.HG.
> Senior Engineering Geologist
> Chief Site Cleanup Unit III
>
> Phone: (213) 576-6812
> Fax: (213)576-6717

CC: patricia mcpherson <patriciamcpherson@earthlink.net>

Response-2:

1- Based on the information provided by Playa, Tishman Speyer Properties, L.P. (Tishman), currently owns a majority of the Campus Area located east of Area D (Figure 1). The Campus Area is entitled for commercial land use (offices, retail and other commercial uses), and open space.

Since 1998, several rounds of environmental investigations including soil, soil gas, and groundwater sampling have been conducted within the Campus Area with particular focus on the former buildings and areas of historical operation. These investigations revealed nine source areas (SAs). More recently, two SAs have been identified within the Campus Area as a SA-10 and SA-11.

A total seven of the source areas (SA-2, 4, 5, 6, 7, 8, and 9) are located within Tishman Properties (Figure 1). Therefore active remedial actions including groundwater extraction and long term monitoring are ongoing.

Individual volumes of groundwater extracted through groundwater treatment or dewatering during construction activities for specific Tishman properties have not been recorded. However, as we indicated in our Response 1 of this letter, since the beginning of 1996, a total of **163,108,224 gallons** of groundwater were extracted through the site-wide interim groundwater remedial actions, site-wide groundwater investigation and monitoring program, and Campus Remedial System. All extracted water were treated through different groundwater treatment units and discharged to the Centinela Creek under CI No. 6839.

In addition, since the beginning of 2000, a total **31,911,538 gallons** of groundwater were extracted through site wide construction activities and subsequently treated, and discharged to different discharge location points as identified in CI No. 7648.

2- Tishman Speyer's address is Tishman Speyer Properties, L.P., 400 S. Hope Street, Suite 200, Los Angeles, CA 90071, and ATTN: Mr. Gary Toeller.

Question -3:

"Please provide / make available any and all data and information, studies that the Board has that determine the effect of actual dewatering upon the groundwater recharge rate and salt water intrusion"

Response -3

1- As a part of site characterization, and cleanup of the impacted soil and groundwater generated from historical industrial operations at the Site, Regional Board did not require Playa to conduct any specific study to evaluate the effect of dewatering upon the groundwater recharge rate. However, as we indicated in our earlier correspondence to you, the Evaluation of Potential Effect of Dewatering, Associated with MMS at Playa Vista Phase 1 Development was prepared by CDM on behalf of Playa and submitted to the LADBS on November 23, 2005. Based on the results from the calibrated model impact simulation,

From: Augustine Anijielo
To: patriciamcpherson@earthlink.net
CC: David Bacharowski; Egoscue, Tracy; Hung, David; Laura Gallardo
Date: 5/29/2008 8:58 AM
Subject: Playa Vista Actual Discharge Volume under General NPDES permit CI-6839 & CI-7648
Attachments: Augustine Anijielo.vcf

Dear Patricia,

This is an additional response to your March 17, 2008, Public Record Act Request, regarding the Playa Vista Facility in Marina Del Rey. My understanding is that you were previously contacted by our office on your request via email on April 25, 2008. As you may be aware we have two active general NPDES permits for the Playa Vista site, one for construction dewatering and the other for cleanup of volatile organic compounds impacted groundwater. You have been informed on how to obtain copies of the two permits from our website. We have reviewed the monitoring reports submitted by Playa Vista for the two permits. Based on the information available in our files we have complied for you in the tables below the actual yearly volumes of water discharged by Playa Vista under the two permits.

Please let us know at least 3 days in advance so that we can arrange the files for these projects for your review should you desire more information on these projects. Thanks Augustine

Playa Vista Construction Dewatering Permit,
NPDES No. CAG994004, Order No. 2003-0111,CI-7648

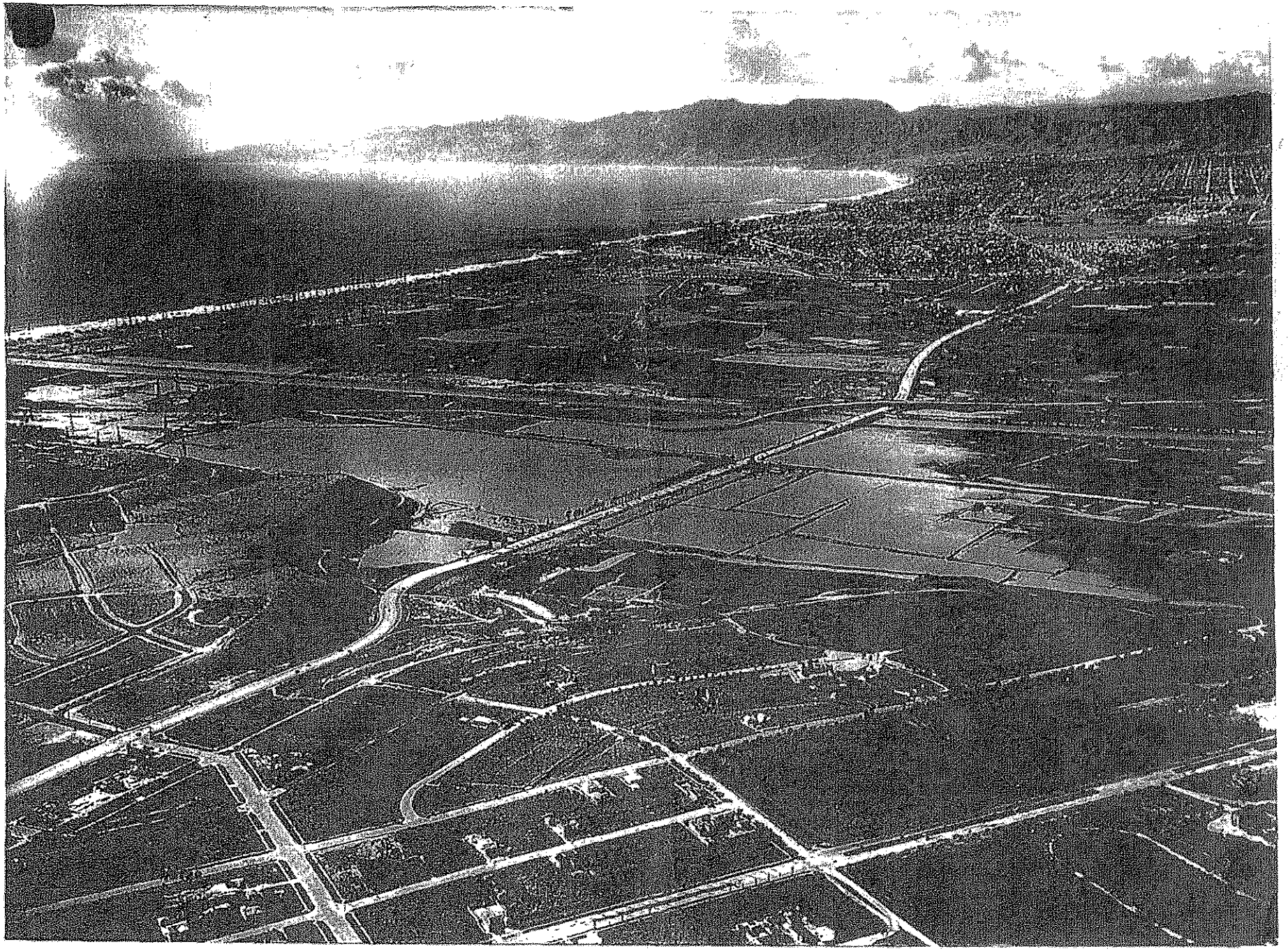
Year	Total Discharge in gallons
2007	1,680,000
2006	300,000
2005	1,992,000
2004	12,199,741
2003	-------
2002	893,151
2001	14,338,946
2000	507,700

Playa Vista Groundwater Cleanup Project
CAG914001; Order No. 2007-0022;CI-6839

Year	Total Discharge in gallons
1996	43,301,400
1997	8,863,200
1998	14,874,960

1999	3,545,100
2000	700,600
2001	1,520,288
2002	50,949
2003	42,966
2004	20,000
2005	80,000
2006	32,115,621
2007	45,443,762
2008	12,549,378

Augustine Anijielo, P.E., Chief
General Permitting/Special Projects Unit
Phone (213) 576-6657
Fax (213) 576-6660
aanijielo@waterboards.ca.gov



VIEW TOWARDS BALLONA WETLANDS

SPENCE COLLECTION, UCLA

ATTACHMENT 2

Producers wary as Colorado's oil, gas rules become law

OIL AND GAS JOURNEL

Nick Snow
OGJ Washington Editor

WASHINGTON, DC, Apr. 29 -- Colorado Gov. Bill Ritter Jr. said that new oil and gas regulations would allow the industry to grow in a sustainable way compatible with the state's economy as he signed them into law on Apr. 22. Producers remain concerned that the rules will simply create more delays and expenses.

"These rules were shaped with valuable input from people all across the state and unanimously adopted by the Colorado Oil & Gas Conservation Commission [COGCC]. They strike the right balance, a balance that recognizes the importance of a healthy industry and the importance of healthy communities, water supplies and wildlife," the governor said.

"In 1999, Colorado issued 1,000 drilling permits. Last year, the state issued more than 8,000. These new, modern rules recognize this increase in drilling activity as well as the technological changes that have occurred within the industry over the past decade. The rules also incorporate the forward-looking practices already being used by companies such as EnCana, Williams and Gunnison Energy," he said.

The regulations take effect May 1 on federal lands and began to apply Apr. 1 on all other lands in the state.

Several producers with operations in the state did not want to comment for attribution. "We've handed this off to the Colorado Oil & Gas Association [COGA] because we're going to have work under these new rules. I could speak for a good half hour if this was off-the-record," one company's official told OGJ on Apr. 27.

"Our primary message involved the business environment for oil and gas companies in Colorado. Obviously, with the economic downturn, the state government has created an uncertain business environment where companies might be more comfortable to Louisiana or Texas," said Nate Strauch, COGA communications coordinator.

'Second bite of the apple'
"Colorado's permitting already takes longer than the national average. Under the new rules, after the permit has been approved, different entities can come in and challenge the action. Surface owners can come in and second-guess the decision. So can the Department of Public Health and the Division of Wildlife. This gives them a second bite of the apple after being involved in the process already if they don't like the results," he told OGJ in an Apr. 24 phone interview.

Strauch and Jack Ekstrom, a COGA board member, separately expressed concern about the new regulations' impacts on smaller producers. "The investment in compliance involves whether you can afford to do it. The delays and difficulties in getting a rig and having to restart the clock because of some minor hiccup remain to be seen," said Ekstrom, who is executive director of investor relations and corporate communications at Whiting Petroleum Corp.

"You probably won't see evidence during this downturn because there are plenty of rigs available. But once there's an uptick, a company's difficulty in timing and contracting for services may be complicated by having to wait or stand by it hasn't jumped through all the hoops perfectly," he said on Apr. 27.

COGCC Director Dave Neslin said the agency received a wide range of input as the regulations were developed. "We incorporated a lot of input from both large and small operators, and we will continue to work with operators to help them comply successfully with these requirements," he said in an Apr. 24 phone interview.

"We intend to implement these changes in a reasonable and responsible manner. If there are issues we didn't anticipate or if further changes are needed, the commission will consider adjustments. That's the advantage of working through a

regulatory process instead of the courts," he told OGJ.

Downhole chemicals

The new regulations contain several significant provisions. Under Section 205, operators will be required to keep an inventory by well site of each chemical used downhole or stored for use downhole during drilling, completion, and workover operations, including fracture stimulation, in an amount exceeding 500 lb during any quarterly reporting period. They also will maintain an inventory of fuel stored at the well site in an amount exceeding 500 lb in a quarter.

When the composition of a chemical product is considered a trade secret by its vendor, operators will be required only to maintain the product's identity. The vendor or service provider will be required to supply COGCC with a list of the a trade secret chemical product's ingredients when the commission's director notifies them in writing that the information is necessary to respond to a spill or release, or a property owner registers a complaint about such a release.

COGCC's director or designee may disclose such information to other staff members, but only to the extent that it is necessary for spill response assistance. The director also may disclose this information to relevant county public health directors or emergency managers, and the Colorado Department of Public Health and Environment's environmental programs director. These individuals may then share this information with staff members under similar terms.

Vendors or service providers will also be required to provide a trade secret chemical product's chemical constituents to any health professional if that professional, in submitting a written request, also executes a confidentiality agreement stating that the information will not be used for other purposes.

Oil field product manufacturers expressed concern about possibly having to disclose such ingredients, which they consider proprietary information, during a US House Oversight and Investigations Committee hearing 18 months ago. It was not immediately clear whether they think this provision in Colorado's new regulations adequately addresses this issue.

Comprehensive drilling plans

Section 216 of the new regulations gives operators, for the first time, the opportunity to develop a comprehensive drilling plan. This is designed to identify foreseeable oil and gas activities in a given geographic area, facilitate discussions about potential impacts, and facilitate measures to mitigate adverse consequences. An operator's decision to initiate and enter into such a plan is voluntary.

"We're trying to encourage companies to work with us at the planning stage and effectively bundle a number of locations together for the regulatory review process. That can be more efficient both for the companies and for us as a regulator, and to better understand cumulative effects. The aim is to look at a broader landscape instead of a single well. We're trying to create incentives to use this rule, while trying to provide as much flexibility as possible so we're not create impediments to this broad planning," Neslin explained.

Several sections in the 300 series of the regulations revised the drilling permit process, he said. "First, we have differentiated between the downhole technical issues and the surface environmental issues, which will be addressed in a separate location assessment. The idea is that Form 2-A, the second form, would be submitted for an entire drilling pad. Again, this is an effort to create efficiency. Each well would still require a drilling permit," he said.

COGCC also will provide additional notice for public comment by posting the location assessment on its website and by supplying certain information from the drilling permit application to the local government, the surface owner and nearby landowners, according to Neslin.

"In certain instances, we will consult regarding the application with the state health and wildlife departments. We have tried to limit those to where they would provide added value. Consultation with the health department, for instance, would occur when an operator is seeking a variance, while the wildlife division would be consulted when an operator proposes drilling a well in sensitive wildlife habitat," he told OGJ.

Public water systems

Section 317-B provides special protection for public water systems, Neslin continued. "It creates a setback requirement

next to drinking water tributaries and imposes operating standards for an additional half mile from the tributary. These public drinking water tributaries have been mapped with these buffer and operating standard areas. This is a new requirement that deliberately incorporated a lot of language proposed by the industry. It's a lengthy requirement, but there are opportunities for operators to obtain exceptions and variances," he said.

Section 608 deals with coalbed methane wells. Its provisions include a requirement for operators to assess the risk of gas or produced water leaking to the ground surface or into subsurface water resources, taking into account plugging and cementing procedures in any recompletion or plugging-and-abandonment report filed with COGCC. Other subsections address water well sampling, coal outcrop and coal mine monitoring, a static bottom-hole pressure survey prior to production, bradenhead testing, and locally specific field orders.

Neslin said that another rule, Section 805, deals with odors. It was developed after the state and county governments in the Piceance Basin received several complaints. Operators will be required to install an emissions control device on certain kinds of production equipment which emit 5 tons or more of volatile organic compounds yearly within a quarter-mile of schools homes and hospitals. Constructions of pits which that amount of VOCs yearly also will be restricted, he said.

There are three new wildlife rules in the 1,200 sections of the new regulations. One allows the state's wildlife division to consult with the COGCC, operator and surface owner regarding wildlife impact mitigation. The agency will not be allowed to veto the drilling permit, but it can make suggestions, Neslin said. "These sensitive wildlife areas include elk winter range, big horn sheep winter range, elk calving areas, and grouse production areas," he said.

A second involves restricted occupancy areas, which the COGCC director described very small areas around the state's most critical wildlife areas such as within a half mile of a bald eagle nest or 300 ft of a cutthroat trout habitat. In these areas, operators will be required to avoid additional surface disturbance where technically and economically feasible to do so.

Not a 'no surface occupancy' requirement

"If an operator can develop the resource from outside the area, we expect them to do so. If they can't, they won't be required to. It's not a 'no surface occupancy' requirement. Operators can also consult with the Division of Wildlife and our staff on alternative mitigation within these areas," Neslin said. The third new wildlife rule involves operating practices, many of which were proposed by producers which are using them already, he added.

"We also updated our pit requirements to reflect the best current practices, including liners, soil standards and groundwater standards. The bonding requirements, which had not been changed in 12-14 years, were updated to reflect current costs. We have updated some of our safety requirements to reflect new information and current practices," he noted.

Neslin said COGCC thinks the new requirements strike a balance which allows the oil and gas industry to continue to operate in the state while protecting the environment and the public's safety and welfare. "The commission is sensitive to the need to facilitate a smooth transition. It grandfathered existing permits and permit applications. We've done training across the state to educate companies about the amendments and how they apply. We've tried to explain the amended permitting process. And we're working through issues as they arise with operators, the Department of Health and the Division of Wildlife to investigate environmental and wildlife issues," he told OGJ.

But COGA's Strauch said the new regulations fall short of what the legislature intended. "When it gave the commission authority to promulgate the rules, the directive include a requirement for them to be timely and efficient. The process proved to be neither," he maintained.

"The COGCC claimed the rules hadn't been altered for years. But if you go back through the records, there have been changes which we thought were reasoned and rational, and had the industry's input. With the latest rules, we were asked to comment and participate in a meaningful way. But it's my perception as a director of COGA that our serious and reasonable suggestions were, if not summarily dismissed, given short shrift. I found the process very disappointing," said Ekstrom.

"We talked about jobs. The western part of the state has experienced significant downturns in employment. Certainly the national financial malaise and crash in prices had something to do with it. But our company decided that with these new rules, we'd move our rig over to Utah," he told OGJ.

Contact Nick Snow at nicks@pennwell.com.

ATTACHMENT 3

Subject:

Subject: Public Records Request - Playa Vista/Parcel A/VOCs Vapor Monitoring
From: "Arthur Heath" <AHEATH@waterboards.ca.gov>(Add as Preferred Sender)
Date: Tue, Apr 28, 2009 3:12 pm
To: <jd@johnanthonydavis.com>

Mr. John Davis,

Per your April 27, 2009 public records request regarding the Playa Vista site/Test Site 2 Area in reference to the Well Completion Report Release Agreement - Environmental Cleanup Study Form (Form), we have reviewed our files, and do not have this Form for the Playa Vista site. In addition, Regional Board staff have not completed this Form for the Playa Vista site. If the Form has been filed for the Playa Vista site, a copy can be obtained from the State Department of Water Resources.

Thank you,

Arthur G. Heath, Ph.D.
Environmental Program Manager I
Remediation Section Chief
California Regional Water Quality Control Board, Los Angeles
Phone: (213) 576-6725
Fax: (213) 576-6717
aheath@waterboards.ca.gov

Letter No. 63

Steve Donell
5801 South Kiyot Way
#1
Playa Vista, CA 90094
(310) 207-8481 wk
(310) 439-2915 hm

VIA EMAIL & FACSIMILE

February 25, 2009

Gail Goldberg
Director of Planning
Los Angeles Planning Department
201 N. Figueroa Street
Los Angeles, CA 90012

Dear Ms. Goldberg:

I am writing to you regarding the comment period for the re-circulated sections of the Village EIR for Playa Vista. I am a very active member of the Playa Vista/Westchester community and have been tracking the Village issues since the original EIR was circulated in 2003. While I speak for myself only, I am an active member of the community at large and have/do serve on numerous boards as follows:

1. **Neighborhood Council of Westchester/Playa:**
    - District 14 Board Member Representative (Playa Vista)
    - Treasurer
    - Planning & Land Use Chairperson

2. **LAX Coastal Area Chamber of Commerce:**
    - 2006-2007 Chairman of the Board, former Treasurer

3. **Rotary Club of Playa Sunrise:**

    - Former board member/treasurer

4. **PVPAL (Playa Vista Parks & Landscape Corporation) – Playa Vista Master Homeowner's Association:**

    - CFO of the board of directors (over four years and a resident of Playa Vista for over five years

5. **PVCC (Playa Vista Community Committee)**

    - Chairperson

I understand that your office is considering a request for an extension of the comment period for the re-circulated sections of the Village EIR. I cannot think of any compelling reason why your office would grant such an extension. The community is well aware that the re-circulated sections are "on the street," as a result of the press coverage and wide distribution of information from many organizations in the West Los Angeles community. For example, I just chaired the Neighborhood Council Planning and Land Use Committee meeting last night to consider supporting the approval of the RS-DEIR. The agenda was circulated to the community and this is but one of a series of communications on this issue. Incidentally, the committee did vote unanimously to recommend approval to the full Neighborhood Council Board.

I have not heard from ***anyone*** who believes that 45 days is not enough time for review and comment, especially on a document that deals with only four narrow issues. Our community is aware of the RS-DEIR process, the time constraints associated therewith and the process in general. As a result, I encourage you to deny any such request to extend the 45-day comment period.

Thank you for your consideration in this matter. If you should have any questions, please feel free to contact me at (310) 207-8481 or you may email me at steve.donell@jalmar.com .

Sincerely,

Steve Donell

cc: David Somers via email

Letter No. 64

From: barbara eisenberg <barbeebarbvenice@yahoo.com>
To: <david.somers@lacity.org>
Date: 4/14/2009 12:56 PM
Subject: Playa Vista EIR

1705 Penmar Avenue
Venice, California
April 14, 2009

David Somers
City Planning Department
200 North Spring Street
Los Angeles, California

Dear Steven Somers,

I ask that your office reconsider the rather outdated statistics which are contained in the 2004 EIR for the Playa Vista Development Project in Marina del Rey.

The City needs to consider everything which has been built since then and determine the new impacts of continuing development on the existing infrastructure. This would include main thoroughfares, neighborhood roads, and air quality impacts and acknowledge new science regarding earthquakes and tsunamis which was not available five years ago.

The City also needs to look at the present and the future, with the age of the EIR and not get stuck on antiquated information.

Thank you,
Barbara Eisenberg

Letter No. 65

April 22, 2009

Mr. David Somers
City Planning Department
City Hall
200 N. Spring Street – Room 750
Los Angeles, CA 90012

Re: The Village Recirculated Sections of the EIR, # ENV-2002-6129-EIR

Dear Mr. Somers:

Playa Vista's opponents will say just about anything to try to stop the project, but the reality is that the development is good for the community. When the Playa Vista project was first announced, my biggest concern was traffic. Playa Vista proved that my fears were misguided—it has actually improved traffic in my neighborhood.

Playa Vista made significant commitments to improve traffic conditions and has delivered on those commitments. For example, the widening of Jefferson Boulevard has significantly reduced traffic on the street.

I am supportive of Playa's traffic plans for The Village. Importantly, there will be increased public transit that will enable residents to take buses from The Village to employment centers in West Los Angeles. Playa Vista has proven that it is a good neighbor with its Phase I development—and based on that history, I know that it will follow suit with The Village.

I urge the city to approve the plans for The Village and to hold other developers to the same standard that Playa Vista consistently meets.

Sincerely,

Diane Fecho

Diane Fecho
4351 Redwood Ave., #3
Marina del Rey, CA 90292

Letter No. 66

DATE: 3-16-09

1. DEAR SIR:
2. I moved, please
3. Remove my NAME
4. FROM YOUR MAILING
5. LIST, I TRIED twice
6. BY TELEPHONE BUT
7. IT WAS NOT
8. SUCCESSFUL.
9. I DO NOT LIVE IN
10. LOS ANGELES. (OVER)

MY OLD ADDRESS

DOROTHY FEINSTEIN

4250 VIA MARINA

MARINA DEL REY,

CALIF. 90292

THANK YOU

Letter No. 67

From: <GLENCOVE@aol.com>
To: <david.somers@lacity.org>
Date: 4/3/2009 1:57 PM
Subject: rs-deir

i object to the creation of village at Playa Vista due to overpopulation in the Westside.Mar Vista is experiencing an extreme increase in road traffic on crosstown roads like Inglewood and Centinela and Grandview. It is already unbearable. With additional population our lives will be unfairly and negatively impacted.Many neighborhoods need housing. The Westside is almost disfunctional. Traffic crawls on Olympic and Pico. This is your fault because you have allowed overbuilding.You are greedy and have no respect for the quality of life in Los Angeles.
**********Feeling the pinch at the grocery store? Make dinner for $10 or less. (http://food.aol.com/frugal-feasts?ncid=emlcntusfood00000001)

Letter No. 68

From: Howard Hackett <hhackett1@verizon.net>
To: <david.somers@lacity.org>
Date: 3/14/2009 3:01 PM
Subject: env-2002-6129-eir

Dear Mr Somers,
I agree that the City of LA has followed the guidelines for the
RS-DEIR mandated by the courts of California.

Therefore the Village at Playa Vista project should be allowed to proceed.

Sincerely,

Howard Hackett
Area resident.

Life is like riding a bicycle.
To keep your balance,
you must keep moving.

From: Amy Halpern-Lebrun <amyhalpern@mac.com>
To: <david.somers@lacity.org>
Date: 5/4/2009 12:57 PM
Subject: ENV-2002-6129-EIR - "the Village at Playa Vista"

Amy Halpern-Lebrun

Phone 310-745-0553 / Fax 310-821-0224

3711 Ocean View Avenue

Los Angeles, California 90066

amyhalpern@mac.com

David J. Somers
City Planning Department
david.somers@lacity.org

May 2, 2009
Re: EIR No. ENV-2002-6129-EIR
State Clearinghouse No. 2002111065

Dear David Somers,

(Sorry for this late contribution. We have been out of the country for 2 months until this weekend.)

In response for your solicitation for comments regarding "the Village at Playa Vista Project", which is very near to our home in Mar Vista, a block from Centinela Boulevard and a block and a half from Venice Boulevard, I submit the following:

I. Already Part One of the plan has had very negative impact on our major thoroughfares.
Traffic on Venice Boulevard, and especially on Centinela, which is the major route to the 10 freeway has more than doubled. It is virtually impassable at rush hours a.m. and p.m., even to cross Centinela north/south, and to travel on it is very unpleasant indeed.

It seems that a compulsory part of this plan ought to include an internal route within the Playa Vista Project to the 405 and the 10 freeways, and a designated on-ramp. This route should be persuasively better for residents, people who work there, and customers to prefer it to the street traffic on Centinela.

2. The small and apparently unsecured number (200) of assisted-living units in a complex designed to accommodate 2,600 dwelling units is shamefully small. Given normal percentages in a population of need for such dwellings, this unsecured 200 so gravely under-serves the theoretical community that it will clearly burden the surrounding neighborhoods, themselves already inadequate to help those already there who need such assisted-living units.

3. The 11.7 acres of green space in the development of a 99.3-acre site is entirely too tiny an allotment. This is especially true since 5 of those acres – the Westchester Bluffs – are mostly vertical, and unsuitable to building – or for recreation.

The selling points of "the Village at Playa Vista" include its green nature, but the 11.7 provision for parks and 0.4 acre of "passive open space" is inadequate to secure this green quality – either for people, or for the wildlife that has been inhabiting it for millennia.

4. The Plan seems not to include provision for a site museum and graveyard/ monument
for the exhumed archaic Indian village that has been displaced by Part One.
The very least that ought to be done is a 1 acre allotment for a small museum building of the Puvugna who lived there and a park with space for a monument for the exhumed dead village.

I sincerely submit these considerations to you, and am available for further comment.

Best regards,

Amy Halpern-Lebrun

Letter No. 70

April 2009

David J. Somers
City Planning Department
200 N. Spring Street – Room 750
Los Angeles, CA 90012

Dear Mr. Somers:

I am writing to you in reference to the re-circulated sections of the environmental impact report for case number ENV-2002-6129-EIR.

For years opponents of the Playa Vista project have been complaining that the Westchester Bluffs may be harder to see once the development is fully built. As a lifelong neighbor of the project, I can tell you that the property once used by Howard Hughes for industrial purposes has been an eyesore for years. It has been frustrating to watch these opponents pursue round after round of litigation, which has delayed the meaningful development of this property for far too long.

Phase I of Playa Vista substantially improved the area— no longer is the land something to turn your head from. Contrary to the claims of opponents, you can still see the bluffs, and the project has made the property much more beautiful, with enhancements such as the creation of the freshwater marsh and landscaping on the south side of Jefferson. The Village would bring more improvements to our area, adding new landscaping and much-needed retail space that would serve the needs of the local community.

The City now has the opportunity to finally approve The Village and transform an old industrial site into something much more aesthetic and useful for our community.

Sincerely,

Lloyd Hild Renate Hild

Lloyd & Renate Hild
7429 McConnell Avenue
Los Angeles, CA 90045

Letter No. 71

From: Phyllis Horning <pahorning@yahoo.com>
To: <david.somers@lacity.org>
Date: 5/4/2009 7:15 AM
Subject: ENV-2002-6129-EIR

April 30, 2009

David J. Somers
City Planning Department
Room 750, City Hall
200 N. Spring Street
Los Angeles, CA 90012

Dear Mr. Somers,
I would like submit a comment in regards to the re-circulated sections of the environmental impact report for case number: ENV-2002-6129-EIR.
As a resident of Playa Vista, I feel like a pioneer, knowing that our community will one day be held up as a model for urban living. We enjoy spacious, hi-tech homes, beautiful parks and a shared sense of pride in where we live. Playa Vista is the community I have previously not been able to find in all my years of living in Southern California.
Those of us who live at Playa Vista are very excited about The Village and hope that the City of Los Angeles will approve the project. The Village will result in the creation of new parks, shopping, and hiking trails nearby, and expand the community of people who are fortunate enough to call Playa Vista home.
The re-circulated sections of the environmental impact report for The Village shows that the three narrow issues that have held up this project have now been resolved. The City should allow this project to move forward so that the community of Playa Vista can finally be complete.
Yours truly,

Phyllis Horning

7100 Playa Vista Drive, #106
Playa Vista, CA 90094
Cc: Councilmember Bill Rosendahl

Letter No. 72

From: Mike Janis <mikej000@yahoo.com>
To: <david.somers@lacity.org>
Date: 2/3/2009 12:23 PM
Subject: Playa Vista Village Support

Hi David,
I just wanted to send you a quick note, I heard that the revised Environmental Impact Report was completed and wanted to share with you my complete and very hopefull support of the Playa Vista Village project.

Thank You,

Mike Janis
13020 Pacific Promenade #302
Playa Vista, CA 90094

Letter No. 73

From: Tom Kardashian <tomkar@msn.com>
To: Richard Walker <dick@rwwcompany.com>, <david.somers@lacity.org>, <joan@j...
Date: 2/4/2009 10:10 AM
Subject: RE: The Village at Playa Vista Project - EIR No. ENV-2002-6129-EIR

My wife, Joan, and I agree with Dick Walker's endorsement, and are in favor of moving on with this project also.

Tom Kardashian
6000 S. Para Way
Playa Vista, Ca. 90094
310-745 4377

From: dick@rwwcompany.comTo: david.somers@lacity.orgSubject: The Village at Playa Vista Project - EIR No. ENV-2002-6129-EIRDate: Wed, 4 Feb 2009 09:55:08 -0800

I have received the "Notice of Completion and Availability" of above referenced report and wholeheartedly endorse the results.

As a 3 year resident and homeowner in the Playa Vista community I am very much in favor of moving on with the completion of Phase II of this project. I believe I speak for the vast majority, if not all of the homeowners in Playa Vista.

Richard W. Walker
6099 Sea Bluff Drive
Playa Vista, CA 90094
Phone: 310-439-2840

Letter No. 74

From: <David.Kay@sce.com>
To: <david.somers@lacity.org>
Date: 2/5/2009 9:25 AM
Subject: ENV-2002-6129-EIR Village at Playa Vista

Dear David Somers,

I have reviewed the recirculated sections of the subject draft EIR and find that they sufficiently address deficiencies found by the Court of Appeals. I also find that they sufficiently address potential impacts and proposed mitigation measures for the proposed project as required by CEQA. The final EIR should be adopted and the project permitted to go forward.

David Kay
13060 Discovery Creek
Los Angeles, CA 90094

Letter No. 75

From: tom kelley <tfkiii@gmail.com>
To: <David.somers@lacity.org>
Date: 3/31/2009 7:27 AM
Subject: RS-DEIR Playa Vista

Mr. David Somers
I am deeply concerned about the issues surrounding Playa Vista. From what I know about this development it will bring only adverse effects to the environment and community which it surrounds. The people whom stand to benefit are neither locals, nor do they have any connection to this place beyond the money they hope to make. Please consider the future of this city when making decisions, and realize that when it comes to the issues which cloud Playa Vista's completion, Los Angeles is on very shaky ground already.

Please consider the following

Land Use:

CEQA guidelines require projects to be consistent with density limits in existing Community and Specific Plans, and failure in consistency is defined as a significant impact. Under the current Area D Specific Plan, only 108,050 sq. ft of office space is available for development by Playa Vista in the Phase II area. The proposed development calls for 2600 residential units, 175,000 sq. ft of office space, and150,000 sq. ft of retail space. To avoid the definition of this impact, the RS-DEIR requires that the Area D Specific Plan and Westchester/Playa del Rey Community Plan be amended to allow for increased density and different land uses. Why should well researched urban plans be changed to allow for density in excess of what is zoned for? Furthermore, the RS-DEIR does not assess traffic impacts due to development at this scale.

Wastewater:

The RS-DEIR does not fully address the true impacts from wastewater, either from a treatment capacity standpoint or from a water quality standpoint. It is unclear at what capacity Hyperion is currently operating and what the cumulative flows will be to the treatment system. Because it is relevant to the determination of significant impacts, the EIR must address the true capacity of Hyperion in relation to current flows into Hyperion for purposes of determining whether there is adequate capacity. On the demand side, the City appears to be using the Sewer Allocation Ordinance to assess treatment capacity only after project build-out. Because the City is not properly tracking capacity by reducing the available capacity by other project allocations, the RS-DEIR avoids a true discussion of impacts due to wastewater. Further, the public and decisionmakers cannot tell from the RS-DEIR whether or not the wastewater flows will cause significant impacts to the sewer collection system because the RS-DEIR's analysis of sewer line capacity is flawed.

Water Supply:

As aptly stated by Los Angeles Department of Water and Power's (LADWP) CEO and general manager David Nahai, "There are no more rivers to tap or aqueducts to build from hundreds of miles away." Given the finite water resources available; the state of emergency recently declared by the

Governor; the 8-year drought described as "most critical drought in the State's modern history"; groundwater contamination; the recent federal court decision curtailing water deliveries from northern California due to environmental factors in the Sacramento-San Joaquin Delta; the low Sierra Nevada snow-pack; and the impacts of global warming, the RS-DEIR is deficient for failing to address the availability of water for the project both individually and cumulatively. For the Second District Court of Appeals has stated: "An environmental impact report for a housing development must contain a thorough analysis that reasonably informs the reader of the amount of water available." (Santa Clarita Organization for Planning the Environment v. County of Los Angeles (2003) 106 Cal.App.4th 715, 717.)

Methane and Methane Mitigation:

Methane is not addressed in the RS-DEIR - a mistake, considering that new evidence has arisen highlighting the inadequacy of methane gas mitigation measures described in the Final EIR of 2004. Evidence of methane gas entering existing buildings has been presented by members of the public to Building and Safety. In addition, the City Controller's 2007 report found Playa Vista's methane mitigation methods to be inadequate. Single-family dwellings in the development are not consistently required to have methane detection systems, and responsibility for the design, installation, and testing of detection systems in single family homes was not assigned.

Archaeology:

Archaeological preservation in place is defined by CEQA as the preferred method to reduce impacts to archaeological sites. Two archaeological sites located in the project area were eligible for the National Register for Historic Places. The RS-DEIR maintains preservation in place of these sites was not possible, but never adequately states why. Alternative designs to restore in place the archaeological sites are not fully described and are dismissed without adequate exploration of their potential. The possibility for replacement of Native American remains in their original location is not addressed, the preferred option as expressed by the Gabrielino Tongva in original project documents. The failure to address placing remains back in their original place is a violation of the Court of Appeal's 2007 order.

Global Warming:

California's interagency Climate Action Team (CAT) recently projected that if rising sea levels follow their current trajectory, the project area (as well as much of the surrounding coast line) may be under water by the end of the century ("California panel urges immediate action to protect against rising sea levels." Los Angeles Times, March 12, 2009). While no one can predict exactly when sea levels will rise to this height, the research summarized by the CAT indicates that a rise of between 1 and 1.4 meters not unlikely over this time period. Limiting coastal development in areas at risk from sea rise was one proposed strategy included in the report. With growing consensus on the effects of climate change, and state-led imperatives already initiated to deal with coastal decline, it is irresponsible to allow the development of Playa Vista's Phase II.

In summary, with such serious project deficiencies, breaches of City, State and Federal environmental and planning guidelines, and looming environmental

realities, allowing Playa Vista's Phase II project to proceed would be highly irresponsible. In this era of increased threats to water supply, air quality, and open land, alternate uses for remaining open land need to be explored. More development in the last remaining section of open coastal land in the city will only hasten our community on the way to environmental failure.

--
Thomas Kelley
4100 Wade St.
Los Angeles, CA 90066

Letter No. 76

G.T.L.

Mr. David Somers
City Planning Department
200 N. Spring Street
Los Angeles, CA 90012

April 24, 2009

Dear Mr. Somers

I am writing to you to voice my satisfaction with proposal for The Village at Playa Vista, and to voice my support for the improvements that Playa Vista has already brought to our neighborhood and our community. I look forward to seeing more of the well-planned kinds of improvements that Playa Vista has provided in recent years, including the completion of The Village, which will hopefully be approved soon.

With a workday drive from Playa del Rey to downtown LA, I greatly appreciate the new landscaping along the medians on Jefferson Boulevard, and the widening of the street, which has improved traffic flow and made the area more beautiful. The public parks in Playa Vista's Phase I area are also a great community resource, not just for Playa Vista residents but also for those of us who live in adjacent communities. Personally, I use them frequently to walk my dog and enjoy the breezes of the nearby Pacific Ocean...often followed by a quick stop at the Coffee Bean & Tea Leaf.

Having lived in Playa del Rey (above Playa Vista) for 24 years, and having witnessed the birth of the vibrant community of Playa Vista, I believe that the construction of The Village will bring additional improvements to our community, and will provide amenities and services that make it a complete, vibrant community. As such, I urge the City of Los Angeles to approve this project.

Thank You,

Gail Teller Levy

7718 West 81st Street, Playa del Rey, CA 90293-7909
(310) 821-7306 home • (310) 213-4245 fax

Letter No. 77

From: "Meg Linton" <mlinton@otis.edu>
To: <david.somers@lacity.org>
Date: 4/27/2009 3:29 PM
Subject: Playa Vista/The Village

Mr. David Somers
Los Angeles City Hall
City Planning
200 N. Spring Street, Rm. 750
Los Angeles, CA 90012

Re: The Village at Playa Vista

Dear Mr. Somers:

Like many Angelenos-I was long skeptical of "master-planned" communities. Then I took a look at Playa Vista, where developers have taken a piece of former industrial land and turned it into a thriving and futuristic community.

I have never been happier with my home. My house is wired for the latest in technology. The local parks are beautiful. The Westside is right at my doorstep. I feel connected to my neighbors.

To make Playa Vista even better, we need The Village. Providing a mix of housing, retail, office and open space, The Village will allow Playa Vista to become a true mixed-use community.

The residents of Playa Vista have waited years to see The Village completed. I urge you to approve this project.

Sincerely yours,

Meg Linton & Marc Meredith
13045 Pacific Promenade, #129
Playa Vista, CA 90094

Meg Linton, Director
Ben Maltz Gallery and Public Programs
mlinton@otis.edu <mailto:mlinton@otis.edu> 310 665 6907 (T) 310 665 6908 (F)
www.otis.edu/benmaltzgallery <http://www.otis.edu/benmaltzgallery>

OTIS College of Art and Design
9045 Lincoln Blvd, Los Angeles, CA 90045

On view April 18-June 13, 2009
3 Solo Projects: Lynn Aldrich, Jessica Rath, Carrie Ungerman

Letter No. 78

From: Jessica Peppard <jessica.peppard@gmail.com>
To: <david.somers@lacity.org>
Date: 2/3/2009 9:04 AM
Subject: Support for Playa Vista Villiage

Hi David,

I have been a homeowner in Playa Vista since 2005 and completely support the completion of the Village. I bought my home expecting the entire development to be complete.

Good luck!

-Jessica

--
Jessica Logan
jessica.peppard@gmail.com
310-279-3037

Letter No. 79

From: Gordon Hamilton [Gordon.Hamilton@lacity.org]
Sent: Thursday, March 19, 2009 2:51 PM
To: David Somers
Subject: Fwd: duplicate notices

fyi

>>> Planning Info 3/19/2009 2:47 PM >>>
FYI..

>>> <Lindalucks@aol.com> 3/18/2009 11:38 AM >>>
I have received 6 notices on the same issue: The Village at Playa Vista Project. I am happy to have one, but since each written document is 3 pages long and sent in 6 different envelopes, all addressed to me, this is a gigantic waste of City Funds. I am mailing them back in one envelope to Gail Goldberg.

I hope this prompts the department to review mailing lists for duplicates.

Thank you.

Linda Lucks
30 Wave Crest Avenue
Venice, CA 90291

** President, Board of Neighborhood Commissioners (for purposes of Id only)
**********Great Deals on Dell 15" Laptops - Starting at $479
(http://pr.atwola.com/promoclk/100126575x1220433363x1201394532/aol?redir=http:%2F%2Fad.doubleclick.net%2Fclk%3B212935224%3B34245239%3Bb)

Letter No. 80

From: Lindalucks@aol.com
Sent: Thursday, March 19, 2009 3:10 PM
To: David Somers
Subject: Re: duplicate notices

That was fast! I only mailed the envelope yesterday. Any future mailings can be sent to mu email address. I was happy to learn that the City does not bear the financial burden. Have you considered offering an opt in or opt out email delivery system?
------Original Message------
From: David Somers
Sender:
To: Linda Lucks
Sent: Mar 19, 2009 3:01 PM
Subject: duplicate notices

Ms. Lucks,

Thank you for bringing the multiple mailings issue to our attention. The multiple mailings are a function of address redundancies on distribution lists that have been maintained and updated by multiple parties involved in the Village at Playa Vista EIR over the years. While the Planning Department is always trying to reduce the waste of resources, all distributions for EIR notices are born at the applicants expense and not City revenue. Though, we share your concern regarding the wasted paper, it is regular protocol for the Planning Department to review and distribute documents in electronic formats when at all possible, and to reduce mailing redundancies. This is a unique circumstance, and again is not born at the cost of City revenue. I will ensure that you receive only one notice in future noticing on this case. As a side note, I maintain a practice of printing only when necessary and if so, using the double sided default.

Thanks again

David J. Somers
Environmental Review Coordinator, EIR Unit Department of City Planning 200 North Spring Street, Room 750
Los Angeles, CA 90012

Tel: (213) 978-1355
Fax: (213) 978-1343
david.somers@lacity.org

Mail Stop 395

Sent from my BlackBerry® smartphone with SprintSpeed

Letter No. 81

Nora H. MacLellan

8324 Delgany Avenue
Playa del Rey, CA 90293

Phone: (310) 301-7728
Cel: (310) 489-0160
DougNora@aol.com

April 22, 2009

David J. Somers
City Planning Dept.
200 North Spring Street, Suite 750
Los Angeles, CA 90012

Dear Mr. Somers,

I have reviewed the re-circulated sections of the environmental impact report for The Village at Playa Vista, case number ENV-2002-6129-EIR, and believe that this project's benefits far outweigh the minor unmitigated impacts it will have on the area.

As a longtime resident of the neighborhood, I can attest to the value of having Playa Vista nearby. Traffic improvements, such as the widening of Jefferson Boulevard, have helped to create smoother traffic flow during my morning commute. The concerts at Playa Vista's community center, which my husband and I frequently attend, are fantastic. On sunny California days, we love to walk our dogs in Playa Vista's parks and along the new riparian corridor.

The Village will bring new benefits, including more transportation improvements, parks, and shops. Just as importantly—at a time when our economy is in serious trouble, I understand that it will create thousands of construction jobs and millions of dollars in tax revenue for the City of Los Angeles every year.

After reviewing the re-circulated sections of the environmental impact report for The Village, the issues with this project are very small compared to the overwhelming tangible benefits of new jobs, sustainable housing, and increased revenue and infrastructure improvements for our community.

I support The Village and hope the City will too.

Sincerely,

N H MacLellan

Nora MacLellan

Letter No. 82

March 26, 2009

Mr. David Somers, EIR Unit
City Planning Dept, Rm 750
City Hall, 200 N. Spring St
LA., CA 90012

And
Mr. Vincent Bertoni
Deputy Director

How wasteful can you folks be? Many people our neighborhood got multiple (average 6-10) copies of the same thing.

There was 42 cents postage on each envelope
Each envelope had to be stuffed
Each page had to be printed

There no reason for this. Regardless of a complaint that **ONE** person did not get correspondence previously, just do you homework and add that person.

You owe the taxpayers money!

ARTMENT OF CITY PLANNING
ronmental Review Unit
N. Spring Street, Room 750
Angeles, CA 90012

7 labels
all inside

016H26512880
Hasler
$00.42º
03/13/2009
Mailed From 90071
US POSTAGE

Martin, Glenn & Lyndell
11860 Beatrice St.
Culver City, CA 90230-6209

OK OK

How wasteful

90230+6209 C036

onmental Review Unit
N. Spring Street, Room 750
Angeles, CA 90012

all labels inside
6

Hasl
03/13/2009
Mailed From 90071
US POSTAGE

Logan, Russ & Marie
11821 Beatrice St.
Culver City, CA 90230-6209

OK

How wasteful

90230$6208 C036

EPARTMENT OF CITY PLANNING
nvironmental Review Unit
00 N. Spring Street, Room 750
os Angeles, CA 90012

016H26512880
Hasler
$00.42º
03/13/2009
Mailed From 90071
US POSTAGE

11816 Juniette St Del Rey
Homeowners
11816 Juniette Street
Culver City CA 90230

How wasteful

90230$6228 C036

Letter No. 83

April 19, 2009

David J. Somers
City Planning Department
Room 750, City Hall
200 N. Spring Street
Los Angeles, CA 90012

Re: EIR for The Village at Playa Vista, Case # ENV-2002-6129-EIR

Mr. Somers:

I recommend that any person who wants to state an opinion about Playa Vista first take a walk through the community— it's nothing like the opponents say. There are parks, a library, a variety of home styles and prices and a community center. There is abundant open space, and a clear sensitivity to the needs of nature. It's a wonderful and smart design that promotes "community" and instills a sense of safety, security and common sense. My husband and I commute daily on our bicycles through Playa Vista on our way to work in Culver City, we look forward to the completion of this project with the Village phase.

The Village will complete Playa Vista and result in the creation of thousands of construction jobs and millions of dollars in new tax revenues for the City of Los Angeles annually.

After years of delay, it is time to make The Village a reality. I urge the City to approve this project.

Best Regards,

Linda McNally

Linda McNally
7423 W. 83rd St.
Los Angeles, CA 90045

Letter No. 84

From: Matthew Menzie <matthewsharpmenzie@yahoo.com>
To: <david.somers@lacity.org>
Date: 2/3/2009 11:14 AM
Subject: Support for Village at Playa Vista

To whom it may concern:

I have been an owner/resident of Playa Vista for 3 years, and I have been waiting the entire time for the Village to open. My wife and I definitely would do much of our shopping and dining there without driving, using gas, causing traffic, etc. We also plan to investigate job opportunities there so we would not have to commute to downtown and Encino anymore. In addition, the entire area would benefit from the gentrification, jobs, housing, dining, shopping, entertainment, and outdoor opportunities. This should be a no-brainer.

The opponents don't even believe their own arguments. They are just against development of any kind for any reason -- right after their own home, neighborhood, grocery store, etc. is built. They fail to consider the benefits that come with smart, multi-use development that adds jobs and housing, while mitigating traffic and bringing needed services to residents who are already there, pay their taxes, and need and deserve these things. The current residents have more at stake, feel more strongly for better reasons, and should receive more weight than outsiders just looking to protest something for the sake of protesting.

Thank you for your time and consideration.

Matthew and Molly Menzie
13020 Pacific Promenade #308
Playa Vista, CA 90094
310-745-1914

Letter No. 85

From: Kathy and Wally <kpmiglin@gmail.com>
To: <david.somers@lacity.org>
Date: 2/18/2009 11:32 AM
Subject: comment on revised environmental impact

---------- Forwarded message ----------
From: Mail Delivery Subsystem <MAILER-DAEMON@cwmsmtpw.ci.la.ca.us>
Date: Feb 18, 2009 11:23 AM
Subject: Returned mail: see transcript for details
To: kpmiglin@gmail.com

----- The following addresses had permanent fatal errors -----
<david.sommers@lacity.org>
(reason: 550 No such recipient)

----- Transcript of session follows -----
... while talking to [10.32.127.237]:
>>> RCPT To:<david.sommers@lacity.org>
<<< 550 No such recipient
550 5.1.1 <david.sommers@lacity.org>... User unknown

Final-Recipient: RFC822; david.sommers@lacity.org
Action: failed
Status: 5.1.1
Remote-MTA: DNS; [10.32.127.237]
Diagnostic-Code: SMTP; 550 No such recipient
Last-Attempt-Date: Wed, 18 Feb 2009 11:23:34 -0800 (PST)

---------- Forwarded message ----------
From: Kathy and Wally <kpmiglin@gmail.com>
To: david.sommers@lacity.org
Date: Wed, 18 Feb 2009 11:23:33 -0800
Subject: comment on revised environmental impact
David,

I beg you to do all you can to downsize everything. I drive through Playa Vista area to visit my son and the congestion is horrendous. I can't imagine it getting any worse but it will with this development. People would rather pay higher taxes than have more density. Thank you, kathy miglin

Letter No. 86

From: Tim Myer <mumed@earthlink.net>
To: <david.somers@lacity.org>
Date: 3/18/2009 12:18 PM
Subject: ENV-2002-6129-EIR

Too much confused text in the notice sent out. BUT one thing is for certain-Congestion, traffic, and poor air quality is getting worse and worse in this area due to these new Ballona developments, and will become a worse version of the gridlock on Lincoln Blvd that we already have. This is in direct relationship to the housing developements on south Lincoln and Jefferson. The roads are far inadequate for increased development in this area.

sincerely, Tim Myer

a concerned resident

Letter No. 87

Sun, 3/22/09

Re; ENV-2002-6129-EIR

RECEIVED
CITY OF LOS ANGELES
MAR 26 2009
ENVIRONMENTAL
UNIT

Mr. David G. Somers,

Have your people lost your minds? Do you have any idea what a mess Lincoln Blvd. is - all the way from Santa Monica to the Playa Vista project is?

I just returned from spending 20 minutes on less than a 1/4 mile trip on Lincoln Blvd. It should only be a 5 minute journey!

It's a bumper to bumper crawl all the way from Rose Ave. south on Lincoln Blvd. to Playa Vista - caused in part by that project.

What do you suppose is going to happen if this new phase is allowed to go thru?

It's ridiculous - and all developers greed. I know my letter isn't going to change anything. But the whole thing is unbelievable + ugly. Everyone I speak to feels the same way + we are all disgusted!

Dorothy M. Nicholson

Dorothy M. Nicholson
1083 Marco Pl.
Venice, CA 90291-3935

LOS ANGELES CA 900
23 MAR 2009 PM 3 L

Mr. David G. Somers
City Planning Dept. Rm. 75
City Hall,
200 N. S

Letter No. 88

From: Kate Oakland <kateoakland@ca.rr.com>
To: <david.somers@lacity.org>
Date: 3/14/2009 7:43 PM
Subject: Playa Vista Project

Just wanted to let you know that I received three copies of the same report in the mail today. In an effort to reduce waste, save trees and city money, please only send me one report. Not sure how or why I am getting three of these, but I certainly don't need all of them.

Thank you!
Kate Oakland
7806 Airlane Ave
Los Angeles, CA 90045

_____
Kate Oakland
Health & Nutrition Consultant
www.cancerproject.com

Letter No. 89

April 30, 2009 Comments re: Playa Vista Phase 2 RS-DEIR

David Somers
Los Angeles City Planning Dept.
200 No. Spring St., Los Angeles, CA 90012

Dear Mr. Somers:

Regarding the Playa Vista Phase 2 RS-DEIR – it is not compliant under CEQA, is defective, and a Supplemental or Subsequent EIR should be done to further address the following issues:

- Methane and toxic plume underlying the site--health and safety issue, particularly with a proposed school, in Phase 1 area adjacent.

- Viability/habitability of riparian corridor project as it is constructed—narrow and concrete channel through much of Phase 2.

- Validity of CA Dept. of Fish and Game Streambed Alteration Agreement, which allowed the moving of the historic Centinela Creek channel toward the base of the bluff, and thus allowed for the removal of several hundreds of burials in Phase 1 and 2, with no adequate review.

- The mis-use of Mello-Roos bond monies to pay (in large part retroactively) for the digging up of Indian human remains, placing them in buckets, and in storage facilities. Mello-Roos (infrastructure) bonds were not intended by the legislature to pay for such activity. Playa Capital asked for the $11 million Mello-Roos funds after they had presented Phase 2 to the City Council, misrepresenting that they were paying for the archaeology themselves.

- Per Gov Code § 65560, 65562.5: Consultation with Native Americans on Open Space: Includes protection of Native American **cultural places** as an acceptable designation of open space. **Requires local governments to conduct meaningful consultation** with California Native American tribes on the contact list maintained by the Native American Heritage Commission for the purpose of protecting cultural places located within open space. (Has LA City done required consultation to protect Indian sites here?)

- § 65352.3- 65352.4: Consultation with Native Americans on General Plan Proposals Requires local governments to conduct meaningful consultation with California Native American tribes on the contact list maintained by the Native American Heritage Commission **prior to the adoption or amendment of a city or county general plan** for the **purpose of protecting cultural places on lands affected by the proposal**. (Has LA City, with the upzoning of the specific plan, done the required consultation to protect Gabrielino/Tongva cultural places on lands affected by the Phase 2 proposal?)
- Greenhouse gas and global warming issues must now be addressed; creating a dense and

high-rise zone will contribute to additional heat and pollution in the area. Leaving open space and recreating a wetland/upland habitat will help to cool and filter the air and water, and will be a highly beneficial use for this land.

Leslie Purcell
2399 Katari St.
Ventura, CA 93001

Letter No. 90

From: "Jhoiey Ramirez" <JRAMIREZ2@us.westfield.com>
To: <david.somers@lacity.org>
Date: 2/13/2009 9:48 PM
Subject: Re: Yes!

I am a resident of Playa Vista and....

Yes, I support the completion of Playa Vista's The Village. That was the primary reason I moved to Playa Vista, and it has been a shame that the project has been stalled, especially after all the infrastructure was invested into it already. Now, it's just partially developed vacant land that is ready for continued development between the already developed Playa Vista homes and the offices (being built) near Centinela.

Let's get going on this last phase of the project. It will also create jobs and stimulate the economy, which is greatly needed at this time! No more delays, please. Build it!

Jhoiey Ramirez, LEED(r) AP / Senior Retail Design Manager / Airport Retail Design

11601 Wilshire Blvd., 11th Floor / Los Angeles, CA 90025

T 310.575.5974 / F 310.689.3860 / C 310.985.4137 / JhRamirez@westfield.com <mailto:JhRamirez@westfield.com>

Letter No. 91

From: Craig Russell <Craig.Russell@fox.com>
To: <david.somers@lacity.org>
Date: 2/2/2009 7:21 PM
Subject: Playa Vista Village

I support the Playa Vista Village & am anxiously awaiting the completion of the Village to the east of our development, including completion of the walking trail and park to the east to Centinela.

Best Regards,

Craig Russell

Letter No. 92

RE ENV-2002-6124-EIR

12059 Jurietta St
Culver City, CA 90230

Feb 21, 2009

Dear Mr. Somers,

This is regards "The Village at Playa Vista Project."

In this same area they are building three or four large office buildings. - So far there doesn't seem to be a need for more offices.

One big question - What about the increased traffic? In the morning starting at 6:00 AM Centinela Ave and Inglewood Ave are at about capacity for cars and trucks. Again in the evening it is dangerous to enter either of these Blvds. - In order to avoid the traffic signals cars are cutting through the residential streets at over the speed limits and ignoring all the stop signs. I never see any traffic control nor have I been able to get the police to check the

ignoring of stop signs.

An increase in traffic from this project would spoil a nice neighborhood.

There is also an elementary school on Jeanette St. on the corner of Centinela. Still no one observes the stop signs - what is the plan to protect these living in this area.? -

Sincerely

Mrs. Jacquelyn Herrera
12059 Jeanette St
Culver City, Ca 90230

3. The buildings there now block any view of the Westchester Bluffs that we had. - The angles of the windows reflect the traffic & lights into our homes.

J

Letter No. 93

April 22, 2009

David J. Somers
City Planning Department
Room 750, City Hall
200 N. Spring Street
Los Angeles, CA 90012

RE: Re-Circulated Sections of Environmental Impact Report for The Village at Playa Vista, Case # ENV-2002-6129-EIR

Dear Mr. Somers,

I am a longtime resident of the Westside and have been impressed by the thriving community that Playa Vista has been able to build in such a short time. This has occurred because of smart planning - diverse residences offered at a variety of price levels that are located close to shopping, entertainment, and jobs.

The Village will continue this concept and will help complete the vision of Playa Vista by adding more stores, open spaces and residences to the development. After years of litigation, the City has an opportunity to finally approve the project.

Playa Vista offers a sustainable model for development that promises a better future for Los Angeles. I encourage the City to approve it.

Cordially,

Gary P. Smith

Gary Smith
6757 W. 86th Place
Westchester, CA. 90045

Letter No. 94

4.20.09

David J. Somers
City Planning Department
Room 750, City Hall
200 North Spring Street
Los Angeles, CA 90012

Dear Mr. Somers:

WeI would like to commend the City for its excellent analysis on the recirculated sections of the environmental impact report for The Village at Playa Vista, case number ENV-2002-6129-EIR.

The roadway improvements, water quality enhancements, public parks, addition of open space and neighborhood retail area are all needed and appropriate for this vacant piece of land that once served as an airplane runway for Howard Hughes.

Having generally reviewed this document, it seems to us that the City has adequately addressed The Village's three potential areas of impact that are up for review. First, the report shows that the upzoning of the property is consistent with all applicable land use policies and plans. Second, the document shows that the Hyperion Wastewater Treatment Plant will have the capacity to handle the future waste from the development. Third, the careful analysis of potential locations for the Riparian Corridor shows that the current location is the best suited to both avoid damage to archeological resources and prevent impacts on water quality, habitat and wildlife. Finally, the discussion of Global Climate Change shows that Playa Vista's sustainable design is part of the solution, not part of the problem.

Construction on The Village has been delayed for too long. We support this next stage of development at Playa Vista and encourage the City of Los Angeles to approve it.

Sincerely,

Thomas M Tyrrell
Catherine A Tyrrell
5721 Crescent Park West, #213
Playa Vista, CA 90094

Letter No. 95

From: "Walker, Daniel" <daniel.walker2@boeing.com>
To: <david.somers@lacity.org>
Date: 2/20/2009 11:10 PM
Subject: Revised EIR The Village at Playa Vista comments

Dear Mr. Somers,

Below are our comments on the revised EIR for The Village at Playa Vista:

We support The Village at Playa Vista and recommend swift EIR approval by the LA city council. The revised EIR now adequately addresses issues with the project's effects on the Hyperion wastewater treatment plant, the treatment of human remains and artifacts, etc.

As there would be within any substantial housing and commercial development, there are some adverse environmental impacts and many more positive impacts for our community. During this recession, the construction of The Village at Playa Vista would provide a significant number of good jobs for several years and the commercial properties would provide additional long term jobs for local residents.

We like Playa Vista phase 1 results especially the improved roads (i.e. Lincoln Blvd., Jefferson Blvd., etc.) and the new local bike paths. We believe the Ballona freshwater marsh is great. We like the proposed phase 2 riparian corridor habitat creation / restoration component.

The LA Unified School District Board on Feb. 10, 2009 approved funding for construction of Playa Vista Elementary School, ideally located adjacent to the riparian corridor and just east of the Playa Vista Sports Park. We hope our twin babies will be able to attend Playa Vista school when construction is finished in a few years.

Although not specifically covered in this revised EIR, our only concern with Playa Vista phase 2 The Village is adequate funding for traffic / transportation mitigation in region surrounding Playa Vista. Traffic in our community (especially north / south along 405 freeway and Lincoln) was gridlocked even before Playa Vista began construction. We hope additional funding will be secured by Los Angeles, Caltrans, MTA and / or Playa Vista to improve Lincoln Blvd. north of Jefferson (i.e. widen bridge over Ballona Creek with room for bikes and pedestrians too). We recommend funding to build a safer link from Playa Vista to the Ballona Creek bike path. We also support funding to extend the Marina Freeway west to Admiralty Way in Marina Del Rey. We support plans to extend Green Line Light Rail north to LAX and further north.

Thanks,
Lucia and Daniel Walker
7416 West 82nd Street
Westchester, CA 90045

Letter No. 96

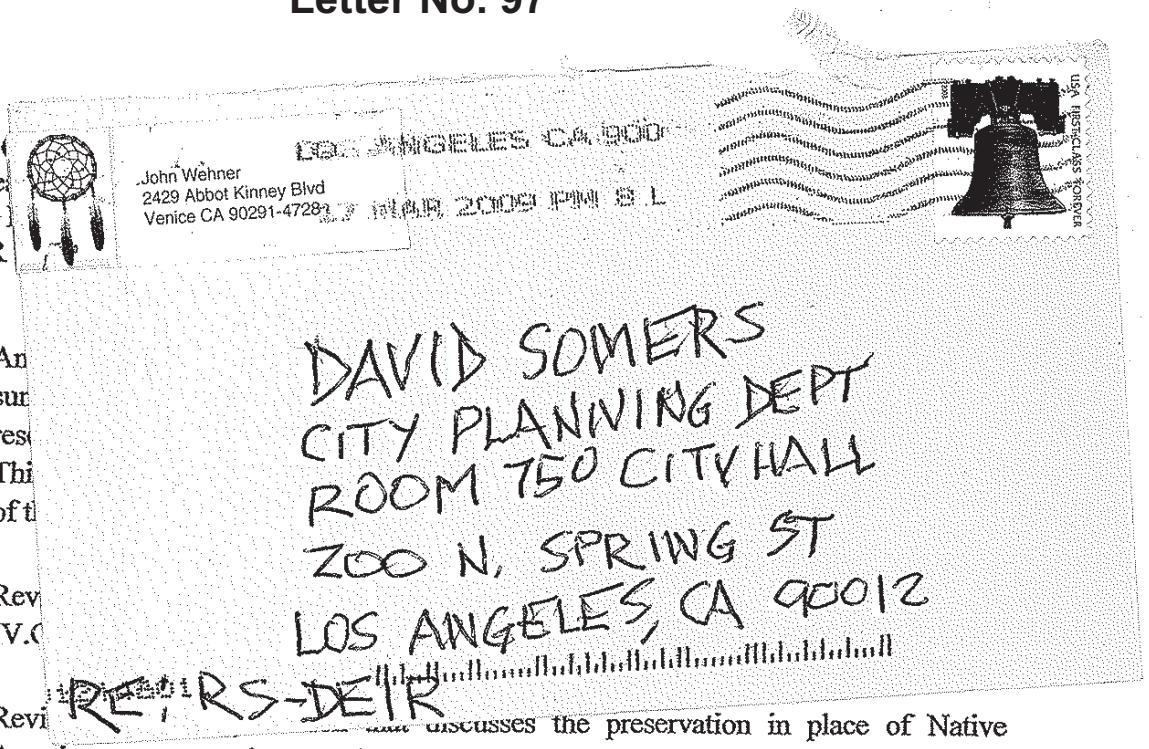
From: "Richard Walker" <dick@rwwcompany.com>
To: <david.somers@lacity.org>
Date: 2/4/2009 9:55 AM
Subject: The Village at Playa Vista Project - EIR No. ENV-2002-6129-EIR

I have received the "Notice of Completion and Availability" of above referenced report and wholeheartedly endorse the results.

As a 3 year resident and homeowner in the Playa Vista community I am very much in favor of moving on with the completion of Phase II of this project. I believe I speak for the vast majority, if not all of the homeowners in Playa Vista.

Richard W. Walker
6099 Sea Bluff Drive
Playa Vista, CA 90094
Phone: 310-439-2840

Letter No. 97



RECEIVED
CITY OF LOS ANGELES
MAR 18 2009
ENVIRONMENTAL UNIT

RS-DEIR SE
Court of Appe
circulated this
This RS-DEIR
comment:

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(2) Rev
IV.C

(3) Revi discusses the preservation in place of Native American resources in accordanee with Guidelines section 15126.4, subdivisions (a)(1)(B) and (b)(3), which supersedes and replaces in full Section IV.P.2, Cultural Resources, of the Original DEIR.

(4) Revised wastewater section that identifies the intended and likely measures to dispose of the Proposed Project's wastewater and analyzes the environmental impacts of employing those measures to dispose of the wastewater generated by the Proposed Project, including any cumulative impacts to the Santa Monica Bay, which section supersedes and replaces in full Section IV.N.2, Wastewater, of the Original DEIR.

In addition to the above sections required to address deficiencies in the Original FEIR, this RS-DEIR contains an analysis of the Proposed Project's impacts regarding global climate change. While neither the appellate opinion nor the writ of mandate directed the City to include such an analysis, California has adopted new legislation since the certification of the Original FEIR that requires State agencies to implement regulations designed to address climate change by, among other things, reducing the amount of greenhouses gases emitted. In addition, the research and public interest regarding this subject matter has advanced to the point where many lead agencies are now including analyses of the topic in CEQA documents. Therefore, even though not required by the Court of Appeal's decision and case law concerning the effect of that decision, the City has analyzed global climate change in this RS-DEIR for the Proposed Project given the recent State legislation and regulations concerning climate change and the absence of any analysis of climate change in the Original FEIR. The discussion of global climate change may be found in Section II.D. of this RS-DEIR.

All of the potential impacts with regard to the four issues analyzed in this RS-DEIR (including Land Use, Archeology, Wastewater and Global Climate Change) are concluded to be less than significant,

OVER

except that the projects contribution to cumulative archeological resources impacts is concluded to be significant and cumulatively considerable

DOCUMENT REVIEW AND COMMENT:

Please submit any comments on the RS-DEIR, in writing and reference the EIR file number above, by **April 30th, 2009** to **David J. Somers, City Planning Department, Room 750, City Hall, 200 N. Spring Street, Los Angeles, CA 90012,** or email david.somers@lacity.org. Copies of the documents referenced in the RS-DEIR, and the RS-DEIR, are available for review in the City Planning Department. Copies of the RS-DEIR are also at the following branch libraries: (1) Central Library: 630 W. Fifth St, Los Angeles, CA 90071; (2) Culver City Library: 4975 Overland Ave, Los Angeles, CA. 90230; (3) Westchester/Loyola Village Library: 7114 W. Manchester Ave., Los Angeles, CA 90045; (4) Mar Vista Library: 12006 Venice Blvd., Los Angeles, CA 90066; (5) Venice Library: 501 S. Venice Blvd., Venice, CA 90291 (6) Marina del Rey Library: 4533 Admiralty Way, Marina del Rey, CA 90292; (7) UCLA Library: Reference Department, A4510 Young Research Library, Los Angeles, CA 90095; and (8) Playa Vista Branch Library: 6400 Playa Vista Dr., Los Angeles, 90094

The RS-DEIR is also available online at the Department of City Planning's website [http://cityplanning.lacity.org/ (click on "Environmental" and then "Draft Environmental Impact Reports")]. To purchase the RS-DEIR on cd-rom, or hard copy contact:

CopyPage,
5418 McConnell Ave.
(310) 822-1640

A price list to purchase the RS-DEIR is as follows:

Hard Copy:	
Volume 1: RS-DEIR (Main Document):	$35
Volumes 2 and 3 (Technical Appendices):	$120
CD:	
Volumes 1 through 3 (All Documents):	$7.50

If a public hearing is required for the proposed Project, a separate hearing notice will be mailed at a later date for such purpose.

Vincent P. Bertoni, AICP
Deputy Director

David J. Somers, EIR Unit
Division of Land/Environmental Review

DEAR MR BERTONI
RE: RS-DEIR
I AM STRONGLY AGAINST
THIS PROJECT!
John M. Wehner

PS: STOP PAVING OVER THE MARINA & VENICE AREA!

John Wehner
2429 Abbot Kinney Blvd
Venice CA 90291-4728

Letter No. 98

April 23, 2009

David J. Somers
City Planning Department
200 N. Spring Street, #750
Los Angeles, CA 90012

Dear Mr. Somers,

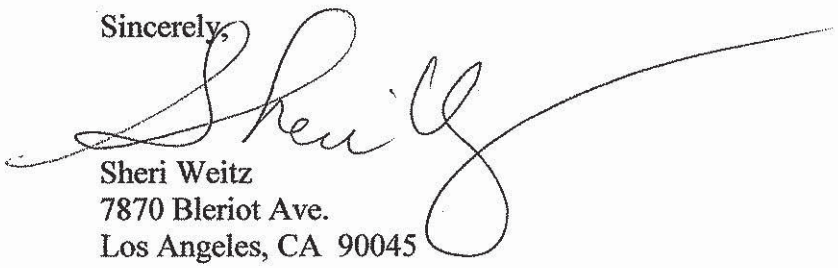
As an avid hiker and longtime resident of a nearby community, I am writing to urge the City of Los Angeles to approve The Village, which currently has the re-circulated sections of the environmental impact report up for review (ENV-2002-6129-EIR).

I have enjoyed expanding my walks along the freshwater marsh to include the riparian area that Playa Vista created at the base of the bluffs, near the future site of The Village. Together with sections to the east and west, the completion of the riparian area created a continuous 25-acre habitat corridor that is now home to native plants and dozens of species of birds and other wildlife.

If The Village project is approved, I will be able to enjoy more improvements in the area during my walks. Five acres of the Westchester Bluffs will be restored, with native coastal sage replacing non-native grasses and iceplant, which will make the bluffs more stable and far more attractive than what exists today.

I encounter many other people on my walks who also look forward to the day when The Village is built and the Westchester Bluffs are restored. This project has been delayed for too long—I hope the City of Los Angeles will approve it.

Sincerely,



Sheri Weitz
7870 Bleriot Ave.
Los Angeles, CA 90045

Letter No. 99

From: Mary Westcott <mmwestcott@mac.com>
To: <David.somers@lacity.org>
Date: 3/30/2009 5:41 PM

As a resident of Venice... I frequent the Playa beaches every day and am greatly concerned about Playa Vista's Phase II project.

With such serious project deficiencies, breaches of City, State and Federal environmental and planning guidelines, and looming environmental realities, allowing Playa Vista's Phase II project to proceed would be highly irresponsible. In this era of increased threats to water supply, air quality, and open land, alternate uses for remaining open land need to be explored. More development in the last remaining section of open coastal land in the city will only hasten our community on the way to environmental failure.

Sincerely,
Mary Westcott
Venice, California

Letter No. 100

From: Jo Ellen Young <joellen@youngcanine.com>
To: <David.somers@lacity.org>
Date: 3/30/2009 5:50 PM
Subject: Comment on Village at Playa Vista

Dear Mr. Somers:

I agree with the Ballona Wetlands Land Trust finding that Playa Vista's Re-circulated Sections of the Draft Environmental Impact Report (RS-DEIR) is an insufficient and inaccurate document, and misrepresents the true environmental effects of the Playa Vista Phase II project in each subject area covered by the RS-DEIR.

Land Use:

CEQA guidelines require projects to be consistent with density limits in existing Community and Specific Plans, and failure in consistency is defined as a significant impact. Under the current Area D Specific Plan, only 108,050 sq. ft of office space is available for development by Playa Vista in the Phase II area. The proposed development calls for 2600 residential units, 175,000 sq. ft of office space, and150,000 sq. ft of retail space. To avoid the definition of this impact, the RS-DEIR requires that the Area D Specific Plan and Westchester/Playa del Rey Community Plan be amended to allow for increased density and different land uses. Why should well researched urban plans be changed to allow for density in excess of what is zoned for? Furthermore, the RS-DEIR does not assess traffic impacts due to development at this scale.

Wastewater:

The RS-DEIR does not fully address the true impacts from wastewater, either from a treatment capacity standpoint or from a water quality standpoint. It is unclear at what capacity Hyperion is currently operating and what the cumulative flows will be to the treatment system. Because it is relevant to the determination of significant impacts, the EIR must address the true capacity of Hyperion in relation to current flows into Hyperion for purposes of determining whether there is adequate capacity. On the demand side, the City appears to be using the Sewer Allocation Ordinance to assess treatment capacity only after project build-out. Because the City is not properly tracking capacity by reducing the available capacity by other project allocations, the RS-DEIR avoids a true discussion of impacts due to wastewater. Further, the public and decisionmakers cannot tell from the RS-DEIR whether or not the wastewater flows will cause significant impacts to the sewer collection system because the RS-DEIR's analysis of sewer line capacity is flawed.

Water Supply:

As aptly stated by Los Angeles Department of Water and Power's (LADWP) CEO and general manager David Nahai, "There are no more rivers to tap or aqueducts to build from hundreds of miles away." Given the finite water resources available; the state of emergency recently declared by the Governor; the 8-year drought described as "most critical drought in the State's modern history"; groundwater contamination; the recent federal court decision curtailing water deliveries from northern California due to environmental factors in the Sacramento-San Joaquin Delta; the low Sierra Nevada snow-pack; and the impacts of global warming, the RS-DEIR is deficient for failing to address the availability of water for the project both individually and cumulatively. For the Second District Court of Appeals has