APPENDIX IV.E
Air Quality Technical Data

HERALD EXAMINER
Wintertime Area Source Emissions

	ROG	Nox	CO	SO2	PM10
Multi-family					
Natural Gas					
12th Street	0.19	2.41	1.02	0.00	0.00
Press	0.15	1.93	0.82	0.00	0.00
Subtotals	**0.34**	**4.34**	**1.84**	**0.00**	**0.00**
Hearth					
12th Street	--	--	--	--	--
Press	--	--	--	--	--
Landcaping					
12th Street	--	--	--	--	--
Press	--	--	--	--	--
Consumer Products					
12th Street	15.61	--	--	--	--
Press	12.52	--	--	--	--
Subtotals	**28.13**				
Architectural Coatings					
12th Street	3.05				
Press	2.45				
Subtotals	**5.50**				
M-F SUBTOTALS	**33.97**	**4.34**	**1.84**	**0.00**	**0.00**
Commercial					
Natural Gas					
12th Street	0.01	0.08	0.07	0.00	0.00
Press	0.00	0.02	0.02	0.00	0.00
Broadway	0.04	0.55	0.46	0.00	0.00
Subtotals	0.05	0.65	0.55	0.00	0.00
Hearth					
12th Street	--	--	--	--	--
Press	--	--	--	--	--
Broadway	--	--	--	--	--
Landcaping					
12th Street	--	--	--	--	--
Press	--	--	--	--	--
Broadway	--	--	--	--	--
Subtotals	0.00	0.00	0.00	0.00	0.00
Consumer Products					
12th Street	0.00	--	--	--	--
Press	0.00	--	--	--	--
Broadway	0.00	--	--	--	--
Subtotals	0.00				
Architectural Coatings					
12th Street	0.11	--	--	--	--
Press	0.04	--	--	--	--
Broadway	0.96	--	--	--	--
Subtotals	1.11				
SUBTOTALS	**1.16**	**0.65**	**0.55**	**0.00**	**0.00**
TOTAL AREA SOURCE	**35.13**	**4.99**	**2.39**	**0.00**	**0.00**

Notes: No hearths proposed within project; no wintertime landscaping assumed.

ESTIMATED EMISSIONS REDUCTIONS EFFICIENCIES
Herald Examiner - Summertime Emissions

Input Fields

Land Use Emissions Based on URBEMIS2002 Version 8.7.0 Air Quality Modeling		Unmitigated Emissions - Lbs. per Day			
		CO	VOC	NO_x	PM_{10}
High Rise Apartments	Vehicular Sources	244.9	26.3	21.7	25.8
	Natural Gas	1.8	0.3	4.3	0.0
	Consumer Products		28.1		
	Wood Burning Fire Places and Stoves				
	Architectural Coatings		5.5		
	Landscaping Area Source	1.3	0.2	0.0	0.0
Commercial Uses	Vehicular Sources	174.1	15.8	16.4	15.3
	Natural Gas	0.6	0.1	0.7	
	Consumer Products				
	Architectural Coatings		1.1		
	Landscaping Area Source	2.7	0.4	0.0	
	Vehicular Sources	419.0	42.0	38.1	41.1
	Natural Gas	2.4	0.4	5.0	0.0
	Consumer Products	0.0	28.1	0.0	0.0
	Architectural Coatings	0.0	6.6	0.0	0.0
	Landscaping Area Source	4.0	0.6	0.0	0.0
	Wood Burning Fire Places and Stoves	0.0	0.0	0.0	0.0
	Total Emissions	**425.4**	**77.8**	**43.1**	**41.1**

ESTIMATED EMISSIONS REDUCTIONS EFFICIENCIES
Herald Examiner - Summertime Emissions

Recommended (Measures already incorporated into Project are marked "No."			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO_x	PM_{10}	CO	VOC	NO_x	PM_{10}	REASONS FOR REJECTING MITIGATION MEASURES
Natural Gas Emissions Controls											
All Residential Uses											
X		Use solar or low emission water heaters	10.0%	11.0%	9.5%	4.5%	0.2	0.0	0.4	0.0	
X		Use built-in energy-efficient appliances	3.0%	2.5%	3.0%	6.5%	0.1	0.0	0.1	0.0	
	X	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
X		Use double-glass paned windows	4.5%	4.5%	4.0%	2.5%	0.1	0.0	0.2	0.0	
	X	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Use lighting controls and energy efficient lighting	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Use fuel cells in residential subdivisions to produce heat and elec.	1.0%	0.0%	1.5%	7.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Orient buildings to the north	13.5%	14.0%	13.0%	10.5%	0.0	0.0	0.0	0.0	Site design does not permit orientation of high rise apartments to the north.
X		Use light-colored roof materials to reflect heat	1.5%	1.5%	1.5%	1.5%	0.0	0.0	0.1	0.0	
X		Comply with Title 24	13.0%	14.0%	13.0%	7.5%	0.2	0.0	0.6	0.0	
Multi-Family Residential Uses											
	X	Use central water heating systems	8.5%	9.0%	8.0%	4.0%	0.0	0.0	0.0	0.0	Central heating systems are not desired by the average multi-family resident.
Commercial and Office Uses											
X		Use solar or low emission water heaters	0.5%	0.5%	0.5%	0.5%	0.0	0.0	0.0	0.0	
	X	Use central water heating systems	0.5%	0.5%	0.5%	0.5%	0.0	0.0	0.0	0.0	It is not feasible or desirable to require individual commercial establishments to have central water heating
	X	Provide shade trees to reduce heating/cooling needs	0.5%	0.5%	0.5%	1.0%	0.0	0.0	0.0	0.0	Nature of the project is such that shade trees on the site are infeasible.
X		Use energy-efficient and automated controls for air conditioners	1.0%	1.0%	1.0%	1.5%	0.0	0.0	0.0	0.0	
X		Use double-glass paned windows	3.0%	3.5%	3.0%	2.5%	0.0	0.0	0.0	0.0	
	X	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
X		Use lighting controls and energy efficient lighting	7.0%	3.0%	8.5%	19.5%	0.0	0.0	0.1	0.0	
X		Use light-colored roof materials to reflect heat	1.0%	1.0%	1.0%	0.5%	0.0	0.0	0.0	0.0	
X		Comply with Title 24	9.5%	10.0%	9.0%	7.0%	0.1	0.0	0.1	0.0	
	X	Orient buildings to the north	12.5%	11.0%	13.5%	17.5%	0.0	0.0	0.0	0.0	Site design does not permit orientation of all commercial buildings to the north.
Industrial Uses											
	X	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	No industrial uses are proposed within the project.
	X	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	1.0%	0.0	0.0	0.0	0.0	
	X	Use double-glass paned windows	0.0%	0.0%	0.5%	1.0%	0.0	0.0	0.0	0.0	
	X	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Use lighting controls and energy efficient lighting	0.5%	0.0%	1.0%	2.5%	0.0	0.0	0.0	0.0	
	X	Use light-colored roof materials to reflect heat	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	
	X	Orient buildings to the north	2.5%	2.0%	3.0%	5.5%	0.0	0.0	0.0	0.0	
	X	Comply with Title 24	0.5%	0.0%	1.0%	3.0%	0.0	0.0	0.0	0.0	
	X	Improved storage and handling of source materials	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Materials substitution (e.g., use water-based paints, life cycle analysis)	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Utilize efficient manufacturing processes	1.5%	0.5%	2.0%	6.0%	0.0	0.0	0.0	0.0	
	X	Resource recovery systems	3.0%	3.5%	3.0%	1.5%	0.0	0.0	0.0	0.0	

ESTIMATED EMISSIONS REDUCTIONS EFFICIENCIES
Herald Examiner - Summertime Emissions

Recommended (Measures already incorporated into Project are marked "No."			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO_x	PM_{10}	CO	VOC	NO_x	PM_{10}	REASONS FOR REJECTING MITIGATION MEASURES
Mobile Source Emission Controls											
Residential Uses											
	X	Allow satellite telecommunications centers in residential subdivisions	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Satellite telecommunications centers are superseded by other technology.
	X	Shuttle service from res. subdivisions to commercial core areas	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Residences are proposed in walking distance to proposed commercial areas.
X		Construct bus passenger benches and shelters	0.2%	0.2%	0.2%	0.2%	0.5	0.1	0.0	0.1	
X		Construct pedestrian facility improvements	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	
X		Retail services within or adjacent to residential subdivisions	1.3%	1.0%	1.3%	1.3%	3.2	0.3	0.3	0.3	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Transit already exists in the project area.
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
X		Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	9.8	1.1	0.9	1.0	
X		Construct bicycle trails	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	
Commercial Uses											
X		Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Provide separate windows for fast-food restaurants	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Provide video-conference facilities	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Lunch shuttle service from a worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.0	0.0	0.0	0.0	Food establishments located within walking distance for employees.
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.0	0.0	0.0	0.0	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	The requirement to achieve a specific AVR has been ruled unlawful by the federal government.
	X	Utilize satellite offices rather than regular worksite to reduce VMT	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Establish a home-based telecommuting program	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Offer travel incentives such as discounts on purchases for transit riders	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	0.0	0.0	0.0	0.0	Food establishments located within walking distance for employees.
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Residential uses are in close proximity and within walking distance to proposed commercial uses.
X		Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.0	0.0	0.0	0.0	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
X		Residential units within or adjacent to commercial developments	4.0%	3.1%	4.0%	4.0%	7.0	0.5	0.7	0.6	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Excess parking is not expected to be available on site.
X		Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.5	0.0	0.0	0.0	
X		Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.3	0.0	0.0	0.0	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Transit already exists in the project area.
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Charge visitors to park	2.0%	1.5%	2.0%	2.0%	0.0	0.0	0.0	0.0	Proposed on-site uses are not conducive to charging visitors to park.
X		Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	7.0	0.6	0.7	0.6	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Paid parking at walkup kiosks	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
X		Provide commuter information areas	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	

ESTIMATED EMISSIONS REDUCTIONS EFFICIENCIES
Herald Examiner - Summertime Emissions

Recommended (Measures already incorporated into Project are marked "No."			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO_x	PM_{10}	CO	VOC	NO_x	PM_{10}	REASONS FOR REJECTING MITIGATION MEASURES
Industrial Uses											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	No industrial uses are proposed within the project.
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Provide commuter information areas	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.0	0.0	0.0	0.0	
	X	Offer loans or other incentives to employees who move locally	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	0.0	0.0	0.0	0.0	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.0	0.0	0.0	0.0	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.0	0.0	0.0	0.0	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.0	0.0	0.0	0.0	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	0.0	0.0	0.0	0.0	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Lunch shuttle system from worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.0	0.0	0.0	0.0	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Install aerodynamic add-on devices to heavy-duty trucks	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Reduce ship cruising speeds in the inner harbor	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Use low-emission fuels or electrify airport ground service vehicles	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Engine tuning for marine vessels	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Reduce number of aircraft engines used during idling	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Install monitoring system to control airport shuttles	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Use centralized ground power systems for airport service vehicles	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	

	CO	VOC	NOx	PM10
Total Unmitigated Emissions	425.4	77.8	43.1	41.1
Reduction in Natural Gas Emissions (Pounds per day)	0.7	0.1	1.5	0.0
No Wood Burning Fire Places or Stoves in Residential Units	0.0	0.0	0.0	0.0
Reduction in Mobile Sources Emissions (Pounds per day)	29.3	2.6	2.7	2.8
Total Reduction in Emissions (Pounds per day)	30.0	2.8	4.2	2.8
Percentage Reduced	7.0%	3.6%	9.7%	6.9%
Total Reduced Area Source Emissions	5.7	35.6	3.5	0.0
Total Reduced Mobile Source Emissions	389.7	39.4	35.4	38.3
TOTAL REDUCED EMISSIONS	395.4	75.0	38.9	38.3
SCAQMD Thresholds	550.0	55.0	55.0	150.0
ProjectAir Quality Impacts Significant?	NO	YES	NO	NO

ESTIMATED EMISSIONS REDUCTIONS EFFICIENCIES
Herald Examiner - Wintertime Emissions

Input Fields

Land Use Emissions Based on URBEMIS2002 Version 8.7.0 Air Quality Modeling		Unmitigated Emissions - Lbs. per Day			
		CO	VOC	NO_x	PM_{10}
High Rise Apartments	Vehicular Sources	233.8	20.5	31.3	25.8
	Natural Gas	1.8	0.3	4.3	0.0
	Consumer Products		28.1		
	Wood Burning Fire Places and Stoves				
	Architectural Coatings		5.5		
	Landscaping Area Source	0.0	0.0	0.0	0.0
Commercial Uses	Vehicular Sources	177.7	16.9	23.4	15.3
	Natural Gas	0.6	0.1	0.7	
	Consumer Products				
	Architectural Coatings		1.1		
	Landscaping Area Source	0.0	0.0	0.0	
	Vehicular Sources	411.5	37.4	54.7	41.1
	Natural Gas	2.4	0.4	5.0	0.0
	Consumer Products	0.0	28.1	0.0	0.0
	Architectural Coatings	0.0	6.6	0.0	0.0
	Landscaping Area Source	0.0	0.0	0.0	0.0
	Wood Burning Fire Places and Stoves	0.0	0.0	0.0	0.0
	Total Emissions	**413.9**	**72.6**	**59.7**	**41.1**

ESTIMATED EMISSIONS REDUCTIONS EFFICIENCIES
Herald Examiner - Wintertime Emissions

Recommended (Measures already incorporated into Project are marked "No."			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO_x	PM_{10}	CO	VOC	NO_x	PM_{10}	REASONS FOR REJECTING MITIGATION MEASURES
Natural Gas Emissions Controls											
All Residential Uses											
X		Use solar or low emission water heaters	10.0%	11.0%	9.5%	4.5%	0.2	0.0	0.4	0.0	
X		Use built-in energy-efficient appliances	3.0%	2.5%	3.0%	6.5%	0.1	0.0	0.1	0.0	
	X	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
X		Use double-glass paned windows	4.5%	4.5%	4.0%	2.5%	0.1	0.0	0.2	0.0	
	X	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Use lighting controls and energy efficient lighting	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Use fuel cells in residential subdivisions to produce heat and elec.	1.0%	0.0%	1.5%	7.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Orient buildings to the north	13.5%	14.0%	13.0%	10.5%	0.0	0.0	0.0	0.0	Site design does not permit orientation of high rise apartments to the north.
X		Use light-colored roof materials to reflect heat	1.5%	1.5%	1.5%	1.5%	0.0	0.0	0.1	0.0	
X		Comply with Title 24	13.0%	14.0%	13.0%	7.5%	0.2	0.0	0.6	0.0	
Multi-Family Residential Uses											
	X	Use central water heating systems	8.5%	9.0%	8.0%	4.0%	0.0	0.0	0.0	0.0	Central heating systems are not desired by the average multi-family resident.
Commercial and Office Uses											
X		Use solar or low emission water heaters	0.5%	0.5%	0.5%	0.5%	0.0	0.0	0.0	0.0	
	X	Use central water heating systems	0.5%	0.5%	0.5%	0.5%	0.0	0.0	0.0	0.0	It is not feasible or desirable to require individual commercial establishments to have central water heating
	X	Provide shade trees to reduce heating/cooling needs	0.5%	0.5%	0.5%	1.0%	0.0	0.0	0.0	0.0	Nature of the project is such that shade trees on the site are infeasible.
X		Use energy-efficient and automated controls for air conditioners	1.0%	1.0%	1.0%	1.5%	0.0	0.0	0.0	0.0	
X		Use double-glass paned windows	3.0%	3.5%	3.0%	2.5%	0.0	0.0	0.0	0.0	
	X	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
X		Use lighting controls and energy efficient lighting	7.0%	3.0%	8.5%	19.5%	0.0	0.0	0.1	0.0	
X		Use light-colored roof materials to reflect heat	1.0%	1.0%	1.0%	0.5%	0.0	0.0	0.0	0.0	
X		Comply with Title 24	9.5%	10.0%	9.0%	7.0%	0.1	0.0	0.1	0.0	
	X	Orient buildings to the north	12.5%	11.0%	13.5%	17.5%	0.0	0.0	0.0	0.0	Site design does not permit orientation of all commercial buildings to the north.
Industrial Uses											
	X	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	No industrial uses are proposed within the project.
	X	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	1.0%	0.0	0.0	0.0	0.0	
	X	Use double-glass paned windows	0.0%	0.0%	0.5%	1.0%	0.0	0.0	0.0	0.0	
	X	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Use lighting controls and energy efficient lighting	0.5%	0.0%	1.0%	2.5%	0.0	0.0	0.0	0.0	
	X	Use light-colored roof materials to reflect heat	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	
	X	Orient buildings to the north	2.5%	2.0%	3.0%	5.5%	0.0	0.0	0.0	0.0	
	X	Comply with Title 24	0.5%	0.0%	1.0%	3.0%	0.0	0.0	0.0	0.0	
	X	Improved storage and handling of source materials	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Materials substitution (e.g., use water-based paints, life cycle analysis)	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Utilize efficient manufacturing processes	1.5%	0.5%	2.0%	6.0%	0.0	0.0	0.0	0.0	
	X	Resource recovery systems	3.0%	3.5%	3.0%	1.5%	0.0	0.0	0.0	0.0	

ESTIMATED EMISSIONS REDUCTIONS EFFICIENCIES
Herald Examiner - Wintertime Emissions

Recommended (Measures already incorporated into Project are marked "No."			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO_x	PM_{10}	CO	VOC	NO_x	PM_{10}	REASONS FOR REJECTING MITIGATION MEASURES
Mobile Source Emission Controls											
Residential Uses											
	X	Allow satellite telecommunications centers in residential subdivisions	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Satellite telecommunications centers are superseded by other technology.
	X	Shuttle service from res. subdivisions to commercial core areas	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Residences are proposed in walking distance to proposed commercial areas.
X		Construct bus passenger benches and shelters	0.2%	0.2%	0.2%	0.2%	0.5	0.0	0.1	0.1	
X		Construct pedestrian facility improvements	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	
X		Retail services within or adjacent to residential subdivisions	1.3%	1.0%	1.3%	1.3%	3.0	0.2	0.4	0.3	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Transit already exists in the project area.
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
X		Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	9.4	0.8	1.3	1.0	
X		Construct bicycle trails	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	
Commercial Uses											
X		Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Provide separate windows for fast-food restaurants	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Provide video-conference facilities	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Lunch shuttle service from a worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.0	0.0	0.0	0.0	Food establishments located within walking distance for employees.
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.0	0.0	0.0	0.0	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	The requirement to achieve a specific AVR has been ruled unlawful by the federal government.
	X	Utilize satellite offices rather than regular worksite to reduce VMT	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Establish a home-based telecommuting program	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Offer travel incentives such as discounts on purchases for transit riders	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	0.0	0.0	0.0	0.0	Food establishments located within walking distance for employees.
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Residential uses are in close proximity and within walking distance to proposed commercial uses.
X		Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.0	0.0	0.0	0.0	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
X		Residential units within or adjacent to commercial developments	4.0%	3.1%	4.0%	4.0%	7.1	0.5	0.9	0.6	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Excess parking is not expected to be available on site.
X		Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.5	0.0	0.1	0.0	
X		Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.4	0.0	0.0	0.0	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Transit already exists in the project area.
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Charge visitors to park	2.0%	1.5%	2.0%	2.0%	0.0	0.0	0.0	0.0	Proposed on-site uses are not conducive to charging visitors to park.
X		Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	7.1	0.7	0.9	0.6	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Paid parking at walkup kiosks	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
X		Provide commuter information areas	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	

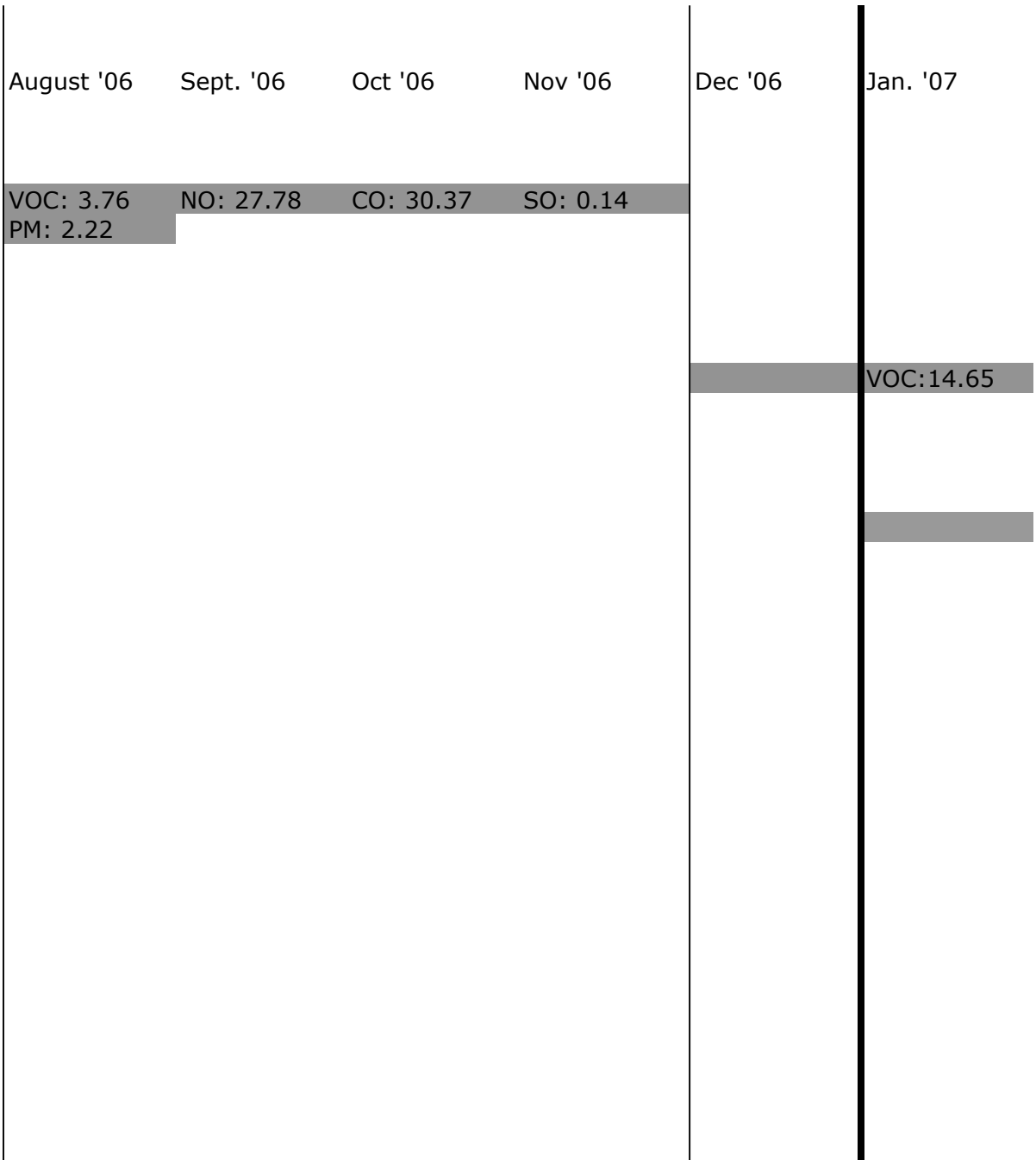
ESTIMATED EMISSIONS REDUCTIONS EFFICIENCIES
Herald Examiner - Wintertime Emissions

Recommended (Measures already incorporated into Project are marked "No."			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO_x	PM_{10}	CO	VOC	NO_x	PM_{10}	REASONS FOR REJECTING MITIGATION MEASURES
Industrial Uses											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	No industrial uses are proposed within the project.
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Provide commuter information areas	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.0	0.0	0.0	0.0	
	X	Offer loans or other incentives to employees who move locally	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	0.0	0.0	0.0	0.0	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.0	0.0	0.0	0.0	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.0	0.0	0.0	0.0	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.0	0.0	0.0	0.0	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	0.0	0.0	0.0	0.0	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Lunch shuttle system from worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.0	0.0	0.0	0.0	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Install aerodynamic add-on devices to heavy-duty trucks	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Reduce ship cruising speeds in the inner harbor	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Use low-emission fuels or electrify airport ground service vehicles	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Engine tuning for marine vessels	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Reduce number of aircraft engines used during idling	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Install monitoring system to control airport shuttles	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	X	Use centralized ground power systems for airport service vehicles	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	

	CO	VOC	NOx	PM10
Total Unmitigated Emissions	413.9	72.6	59.7	41.1
Reduction in Natural Gas Emissions (Pounds per day)	0.7	0.1	1.5	0.0
No Wood Burning Fire Places or Stoves in Residential Units	0.0	0.0	0.0	0.0
Reduction in Mobile Sources Emissions (Pounds per day)	29.0	2.4	3.8	2.8
Total Reduction in Emissions (Pounds per day)	29.7	2.6	5.3	2.8
Percentage Reduced	7.2%	3.5%	8.9%	6.9%
Total Reduced Area Source Emissions	1.7	35.0	3.5	0.0
Total Reduced Mobile Source Emissions	382.5	35.0	50.9	38.3
TOTAL REDUCED EMISSIONS	384.2	70.0	54.4	38.3
SCAQMD Thresholds	550.0	55.0	55.0	150.0
ProjectAir Quality Impacts Significant?	NO	YES	NO	NO

Constrution Flow Chart

	April '06	May '06	June'06	July '06
Broadway Site				
Abatement				
Demolition				
Demo Emissions				
Grading				
Grading Emissions				
Construction				
Construction Emissions				
Hill Street Site				
Abatement				
Demolition				
Demo Emissions				
Grading				
Grading Emissions				
Construction				
Construction Emissions				
12th Street Site				
Grading				
Grading Emissions				
Construction				
Construction Emissions				
TOTALS:				
VOC				
NOX				
CO				
SOX				
PM10				



3.76	3.76	3.76	3.76	3.83	14.65
27.78	27.78	27.78	27.78	23.72	24.13
30.37	30.37	30.37	30.37	32.2	34.27
0.14	0.14	0.14	0.14	0	0
2.22	2.22	2.22	2.22	0.96	0.86

Febrary '07	March '07	April '07	May '07	June '07	July '07
NO: 24.13	CO: 34.27	SO: 0	PM: 0.86	+	+
			VOC: 5.62 CO: 40.07 PM: 6.79	NO: 60.12 SO: 0.06	
					VOC: 12.19 PM: 177.69

14.65	14.65	14.65	20.27	20.27	26.74
24.13	24.13	24.13	84.25	84.25	153.16
34.27	34.27	34.27	74.34	74.34	120.53
0	0	0	0.06	0.06	0.14
0.86	0.86	0.86	7.65	7.65	178.55

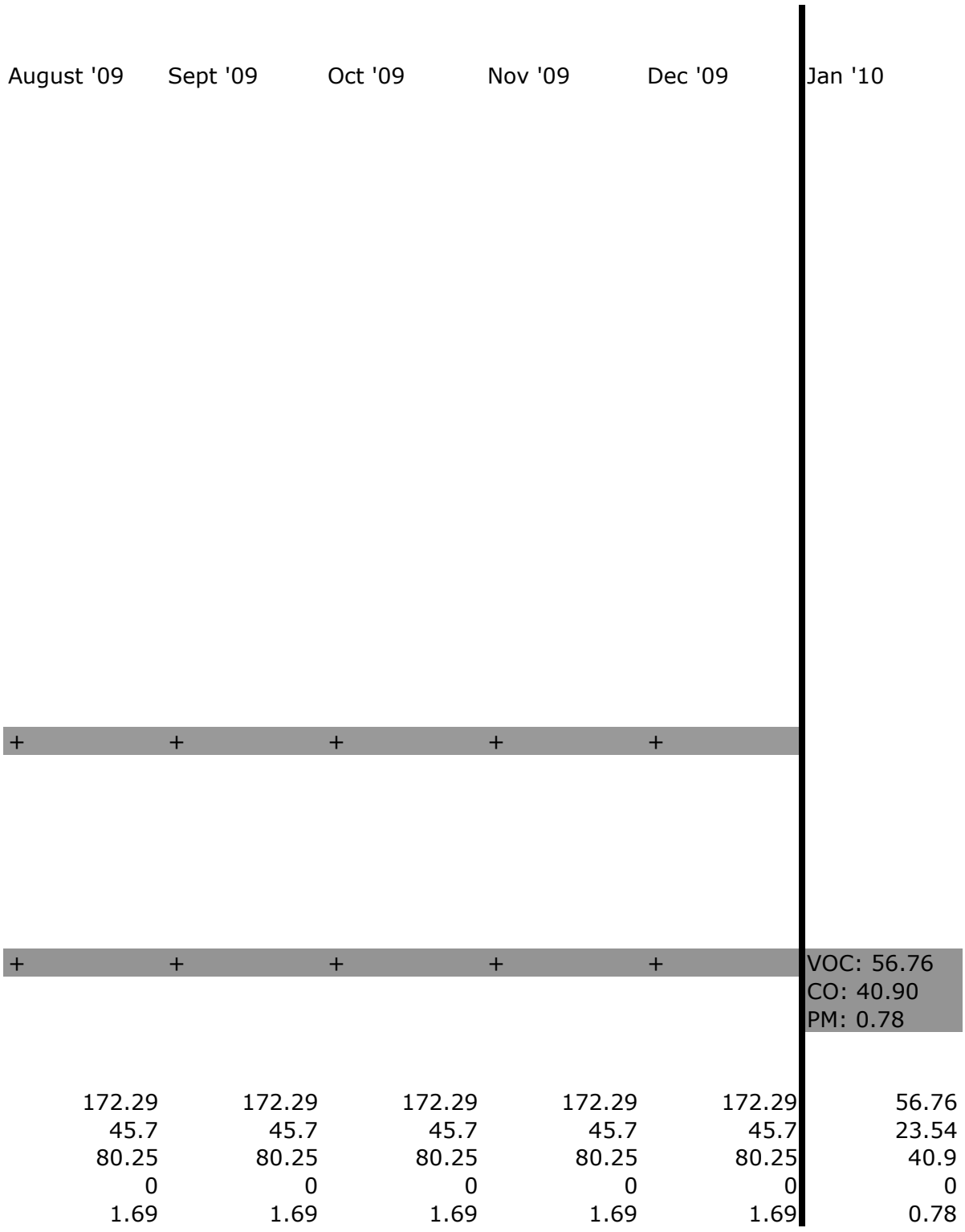
August '07	Sept. '07	Oct. '07	Nov. '07	Dec. '07	Jan. '08
+	+	+	+		
NO: 129.03	CO: 86.26	SO: 0.14			
			VOC: 4.21 CO: 37.8 PM: 0.93	NO: 23.30 SO: 0	VOC: 4.17
					VOC: 10.51 PM: 97.70
26.74	26.74	26.74	18.86	4.21	14.68
153.16	153.16	153.16	47.43	23.3	112.53
120.53	120.53	120.53	71.35	37.08	118.27
0.14	0.14	0.14	0	0	0.07
178.55	178.55	178.55	1.79	0.93	98.53

Feb. '08	March '08	April '08	May '08	June '08	July '08
NO: 22.64	CO: 36.80	SO: 0	PM: 0.83	+	+
NO: 89.89	CO: 81.47	SO: 0.07			
			VOC: 4.30	NO: 22.72	CO: 38.44
14.68	14.68	14.68	8.47	8.47	8.47
112.53	112.53	112.53	45.36	45.36	45.36
118.27	118.27	118.27	75.24	75.24	75.24
0.07	0.07	0.07	0	0	0
98.53	98.53	98.53	1.68	1.68	1.68

August '08	Sept. '08	Oct. '08	Nov. '08	Dec. '08	Jan '09
+	+	+	+	+	VOC:168.05
SO: 0	PM:.85	+	+	+	VOC: 4.24
8.47	8.47	8.47	8.47	8.47	172.29
45.36	45.36	45.36	45.36	45.36	45.7
75.24	75.24	75.24	75.24	75.24	80.25
0	0	0	0	0	0
1.68	1.68	1.68	1.68	1.68	1.69

Feb '09	March '09	April '09	May '09	June '09	July '09
NO: 23.43	CO: 42.24	SO: 0	PM: 0.89	+	+
NO: 22.27	CO: 38.01	SO: 0	PM: 0.80	+	+

172.29	172.29	172.29	172.29	172.29	172.29
45.7	45.7	45.7	45.7	45.7	45.7
80.25	80.25	80.25	80.25	80.25	80.25
0	0	0	0	0	0
1.69	1.69	1.69	1.69	1.69	1.69



172.29	172.29	172.29	172.29	172.29	56.76
45.7	45.7	45.7	45.7	45.7	23.54
80.25	80.25	80.25	80.25	80.25	40.9
0	0	0	0	0	0
1.69	1.69	1.69	1.69	1.69	0.78


Feb '10
March '10
April '10
May '10
June '10
July '10
NO: 23.54
SO: 0

August '10 Sept '10 Oct. '10 Nov. '10 Dec '10