APPENDIX IV.E Air Quality Technical Data

## HERALD EXAMINER Wintertime Area Source Emissions

	ROG	Nox	со	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	0.51		1101	0100	0100
12th Street					
Proce					
Fless					
12th Street					
12th Street					
Press					
Company and David and a					
Consumer Products	15 64				
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
Proce	0.01	0.00	0.07	0.00	0.00
Broadway	0.00	0.02	0.02	0.00	0.00
Bioadway	0.04	0.33	0.40	0.00	0.00
Subtotais	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
					2.2.2

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

Input Fields				
	Unmiti	gated Emiss	ions - Lbs. p	er Day
Land Use Emissions Based on URBEMIS2002 Version 8.7.0 Air Quality Modeling	CO	VOC	NO <sub>x</sub>	PM <sub>10</sub>
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

No.         MLASURES, EFFICIENCIES, AND REJUCTIONS         CO         VOC         NO.         PMail         CO         VOC         NO.         PMail         CO         VOC         NO.         PMail         MLASURES, EFFICIENCIES, AND REJUCTIONS         PMail         CO         VOC         NO.         PMail         MLASURES	Recomm	nended	(Measures already incorporated into Project are marked "No."	Em	ission Redu	ction Efficier	ncy	Reduced Emissions in Pounds per		per Day		
Instruct Set Microsoft Controls         CO         V/C         No.         PMa         CO         V/C         No.         PMa         DEC         D											Ì	REASONS FOR REJECTING MITIGATION
Nature Case Tensions Control         Image: Control of the cont	Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NOx	PM <sub>10</sub>	CO	VOC	NO <sub>x</sub>	$PM_{10}$	MEASURES
X       Use solar or how emission water heaters       100       107       9.57       4.57       0.0       0.	Natural	Gas Er	nissions Controls									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	All Resi	dential L	Ises									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Х		Use solar or low emission water heaters	10.0%	11.0%	9.5%	4.5%	0.2	0.0	0.4	0.0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Х		Use built-in energy-efficient appliances	3.0%	2.5%	3.0%	6.5%	0.1	0.0	0.1	0.0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Х	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 double-glass paned windows       4.5%       4.4%       4.0%       0.2%       0.1       0.0       0.22       0.01         X       Verify wide verifields systems for enclosed parking facilities       0.0% <th< td=""><td></td><td>Х</td><td>Use energy-efficient and automated controls for air conditioners</td><td>0.0%</td><td>0.0%</td><td>0.0%</td><td>0.5%</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>Measure does not reduce VOC emissions.</td></th<>		Х	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         Provide ventilation systems for enclosed parking facilities         0.0%	Х		Use double-glass paned windows	4.5%	4.5%	4.0%	2.5%	0.1	0.0	0.2	0.0	
X         Use lighting controls and energy efficient lighting         0.0%         0.0%         0.0%         0.5%         0.0 <th< td=""><td></td><td>х</td><td>Provide ventilation systems for enclosed parking facilities</td><td>0.0%</td><td>0.0%</td><td>0.0%</td><td>0.0%</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>Measure does not reduce VOC emissions.</td></th<>		х	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 full cells in midential auditivisions to produce heat and elec.         1.0%         0.0%         1.5%         7.0%         0.0         0.0         0.00         0.00         0.00           X         Orient buildings to the north         1.3%         1.40%         1.05%         0.0         0.0         0.00		Х	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.
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		х	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         Crient Puildings to the north         135%         140%         135%         155% <th< td=""><td></td><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Site design does not permit orientation of high rise</td></th<>			•									Site design does not permit orientation of high rise
X       Use light-control for of materials to reflect heat $15\%$ $10\%$		х	Orient buildings to the north	13.5%	14.0%	13.0%	10.5%	0.0	0.0	0.0	0.0	apartments to the north.
X         Comply with Title 24         13.0%         14.0%         13.0%         7.5%         0.2         0.0         0.0           Multi-Fermity Residential Uses         -         <	х		Use light-colored roof materials to reflect heat	1.5%	1.5%	1.5%	1.5%	0.0	0.0	0.1	0.0	1
Interview          Interview <t< td=""><td>х</td><td></td><td>Comply with Title 24</td><td>13.0%</td><td>14.0%</td><td>13.0%</td><td>7.5%</td><td>0.2</td><td>0.0</td><td>0.6</td><td>0.0</td><td></td></t<>	х		Comply with Title 24	13.0%	14.0%	13.0%	7.5%	0.2	0.0	0.6	0.0	
Null-Frimity Residential Uses       Image: Control heating systems       Style       Optimization       Control heating systems are not desired by the control of the style systems are not desired by the control were genuiti-family resident.         X       Use control water heating systems       0.5%       0.5%       0.5%       0.0       0.0       0.0       0.0         X       Use control were mission water heaters       0.5%       0.5%       0.5%       0.0       0.0       0.0       0.0       0.0       0.0       0.0         X       Use control were mission water heaters       0.5%       0.5%       0.5%       0.0 </td <td></td> <td></td> <td></td> <td></td> <td>- / -</td> <td></td> <td>- / -</td> <td></td> <td></td> <td></td> <td></td> <td></td>					- / -		- / -					
XUse central water heating systems $8.5\%$ $90\%$ $8.0\%$ $4.0\%$ $0.0$	Multi-F	amily Re	sidential Uses									
X         Use central water heating systems         8.5%         9.0%         8.0%         4.0%         0.0												Central heating systems are not desired by the
Commercial and Officer Uses         Commercial and Officer Uses         Commercial establishments to have central water           X         Use central water heating systems         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         heating           X         Use central water heating systems         0.5%         0.5%         0.5%         0.5%         0.0%         0.0         0.0         heating           X         Use encary-efficient and automated controls for air conditioners         1.0%         1.0%         1.0%         0.0         0.0         0.0         0.0           X         Use encary-efficient and automated controls for air conditioners         1.0%         1.0%         0.0%         0.0%         0.0%         0.00         0.0 <td></td> <td>х</td> <td>Use central water heating systems</td> <td>8.5%</td> <td>9.0%</td> <td>8.0%</td> <td>4.0%</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>average multi-family resident.</td>		х	Use central water heating systems	8.5%	9.0%	8.0%	4.0%	0.0	0.0	0.0	0.0	average multi-family resident.
Commercial and Office UsesvvvvvvXUse solar or low emission water heaters0.5%0.5%0.5%0.5%0.0%0.00.00.00.00.0XUse central water heating systems0.5%0.5%0.5%0.5%0.0%0.00.00.00.00.00.0XUse energy-efficient and automated controls for air conditioners1.0%1.0%1.0%1.0%0.0			0.7									0
XUse solar or low emission water heaters $0.5\%$ $0.5\%$ $0.5\%$ $0.5\%$ $0.0$ $0.0$ $0.0$ $0.0$ $0.0$ XUse central water heating systems $0.5\%$ $0.5\%$ $0.5\%$ $0.5\%$ $0.0$ <t< td=""><td>Commer</td><td>cial and</td><td>Office Uses</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Commer	cial and	Office Uses									
XUse central water heating systems $0.5\%$ $0.5\%$ $0.5\%$ $0.5\%$ $0.5\%$ $0.0$ $0.0$ $0.0$ $10.0$	Х		Use solar or low emission water heaters	0.5%	0.5%	0.5%	0.5%	0.0	0.0	0.0	0.0	
XUse central water heating systems $0.5\%$ $0.5\%$ $0.5\%$ $0.5\%$ $0.5\%$ $0.0\%$ $0.0$ <												It is not feasible or desirable to require individual
X     Use central water heating systems     0.5%     0.5%     0.5%     0.5%     0.0%     0.0     0.0     0.0     Description       X     Provide shade trees to reduce heating/cooling needs     0.5%     0.5%     0.5%     0.5%     0.0%     0.0     0.0     0.0     0.0     0.0     0.0     state or infeasible.       X     Use energy-efficient and automated controls for air conditioners     1.0%     1.0%     1.5%     0.0     0.0     0.0     0.0       X     Use energy-efficient induction systems for enclosed parking facilities     0.0%     0.0%     0.0%     0.0%     0.0     0.0     0.0     0.0       X     Use light-colored nor materials to reflect heat     1.0%     1.0%     1.0%     0.5%     0.0     0.0     0.0     0.0       X     Use light-colored nor materials to reflect heat     1.0%     1.0%     1.0%     0.0%     0.0%     0.00     0.0       X     Use light-colored nor materials to reflect heat     1.0%     1.0%     1.0%     0.0%     0.0%     0.00     0.0       X     Use light-colored nor materials to reflect heat     1.0%     1.0%     1.0%     0.0%     0.0%     0.0%     0.0%       X     Use energy-efficient and automated controls for air conditioners     0.0% <td></td> <td>commercial establishments to have central water</td>												commercial establishments to have central water
XProvide shade trees to reduce heating/cooling needs $0.5\%$ $0.5\%$ $0.5\%$ $1.0\%$ $1.0\%$ $0.0$ $0.0$ Nature of the project is such that shade trees on theXUse energy-efficient and automated controls for air conditioners $0.5\%$ $0.5\%$ $0.5\%$ $0.5\%$ $0.0\%$ $0.0$ $0.0$ $0.0$ $0.0$ XUse energy-efficient on-solution parking lights $0.0\%$ $0.0\%$ $0.0\%$ $0.0\%$ $0.0$ $0.0$ XUse energy-efficient on-solution parking lights $0.0\%$ $0.0\%$ $0.0\%$ $0.0\%$ $0.0$ $0.0$ XProvide ventilation systems for enclosed parking facilities $0.0\%$ $0.0\%$ $0.0\%$ $0.0\%$ $0.0$ $0.0$ XProvide ventilation systems for enclosed parking facilities $0.0\%$ $0.0\%$ $0.0\%$ $0.0\%$ $0.0$ $0.0$ XUse light-colored roof materials to reflect heat $1.0\%$ $1.0\%$ $0.5\%$ $0.0$ $0.0$ $0.0$ XOrient buildings to the north $1.2\%$ $1.0\%$ $1.0\%$ $0.5\%$ $0.0$ $0.0$ $0.0$ XView energy-efficient and automated controls for air conditioners $0.0\%$ $0.0\%$ $0.0\%$ $0.0\%$ $0.0\%$ XUse energy-efficient and automated controls for air conditioners $0.0\%$ $0.0\%$ $0.0\%$ $0.0\%$ $0.0\%$ XUse energy-efficient and automated controls for air conditioners $0.0\%$ $0.0\%$ $0.0\%$ $0.0\%$ $0.0\%$ XUse energy-efficient and automated controls for air		х	Use central water heating systems	0.5%	0.5%	0.5%	0.5%	0.0	0.0	0.0	0.0	heating
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			0,7									Nature of the project is such that shade trees on the
X         Use energy-efficient and automated controls for air conditioners         1.0%         1.0%         1.5%         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           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         Use lighting controls and energy efficient low-sodium parking lights         0.0%         0.0%         0.0%         0.0%         0.0         0.0         0.0         0.0           X         Use lighting controls and energy efficient lighting         7.0%         3.0%         8.5%         19.5%         0.0         0.0         0.0         0.0           X         Use lighting controls and energy efficient lighting         7.0%         3.0%         8.5%         19.5%         0.0         0.0         0.0         0.0           X         Use lighting control and energy efficient lighting         7.0%         1.0%         1.5%         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0		х	Provide shade trees to reduce heating/cooling needs	0.5%	0.5%	0.5%	1.0%	0.0	0.0	0.0	0.0	site are infeasible.
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	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 energy-efficient low-sodium parking lights       0.0%	х		Use double-glass paned windows	3.0%	3.5%	3.0%	2.5%	0.0	0.0	0.0	0.0	
X         Provide ventilation systems for enclosed parking facilities         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       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 nod 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         Industrial Uses       Very old shade trees to reduce heating/cooling needs       0.0%       0.0%       0.0%       0.0%       0.0%       0.0       0.0       0.0       0.0       0.0         X       Provide shade trees to reduce heating/cooling needs       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%	0.5%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
X         Use light-colored roof materials to reflect heat         1.0%         1.0%         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         0.0         0.0           X         Orient buildings to the north         12.5%         11.0%         13.5%         17.5%         0.0         0.0         0.0         0.0           Industrial Uses           12.5%         11.0%         0.3%         0.0         0.0         0.0         0.0           X         Provide shade trees to reduce heating / cooling needs         0.0%         0.0%         0.5%         0.0         0.0         0.0         0.0         0.0           X         Bes energy-efficient and automated controls for air conditioners         0.0%         0.0%         0.0%         0.0%         0.0         0.0         0.0         0.0         0.0           X         Use energy-efficient and automated controls for air conditioners         0.0%         0.0%         0.0%         0.0%         0.0         0.0         0.0         0.0         0.0           X         Use energy-efficient and automated controls for air conditioners         0.0%         0.0%	x		Use lighting controls and energy efficient lighting	7.0%	3.0%	8.5%	19.5%	0.0	0.0	0.1	0.0	
XComply with Title 249.5%10.0%9.9%7.0%0.10.00.10.0Site design does not permit orientation of allIndustrial UsesIndustrial Uses $X$ Provide shade trees to reduce heating/cooling needs0.0%0.0%0.0%0.0%0.00.00.00.00.00.00.0XUse energy-efficient and automated controls for air conditioners0.0%0.0%0.0%0.0%0.0%0.000.0 <t< td=""><td>x</td><td></td><td>Use light-colored roof materials to reflect heat</td><td>1.0%</td><td>1.0%</td><td>1.0%</td><td>0.5%</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td></td></t<>	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	
N       Non-       Non- <t< td=""><td>x</td><td></td><td>Comply with Title 24</td><td>9.5%</td><td>10.0%</td><td>9.0%</td><td>7.0%</td><td>0.1</td><td>0.0</td><td>0.1</td><td>0.0</td><td></td></t<>	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       0.0       0.0         Industrial Uses       X       Provide shade trees to reduce heating/cooling needs       0.0%       0.0%       0.0%       0.0%       0.0%       0.00       0.0			F-)		2010/0		,.					Site design does not permit orientation of all
Indicating of a branching branching branching of a branching branching a branchi		х	Orient buildings to the north	12.5%	11.0%	13.5%	17.5%	0.0	0.0	0.0	0.0	commercial buildings to the north.
Industrial Uses                X         Provide shade trees to reduce heating/cooling needs $0.0\%$ $0.0\%$ $0.5\%$ $0.0$						2010/0						
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         No industrial uses are proposed within the project.           X         Use energy-efficient and automated controls for air conditioners         0.0%         0.0%         0.0%         0.0%         0.0         0.0         0.0         0.0           X         Use double-glass paned windows         0.0%         0.0%         0.0%         0.0%         0.0         0.0         0.0         0.0           X         Use double-glass paned windows         0.0%         0.0%         0.0%         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           X         Use lighting controls and energy efficient lighting         0.5%         0.0%         0.0%         0.0%         0.0         0.0         0.0           X         Use lighting controls and energy efficient lighting         0.5%         0.0%         0.0%         0.0         0.0         0.0           X         Use light-colored roof materials to reflect heat         0.0%         0.0%         0.0%	Industri	al Uses										
X       Use energy-efficient and automated controls for air conditioners       0.0%       0.0%       0.0%       1.0%       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       Use energy-efficient low-sodium parking lights       0.0%       0.0%       0.0%       0.0%       0.0%       0.0%       0.0       0.0       0.0         X       Use energy-efficient lighting       0.0%       0.0%       0.0%       0.0%       0.0       0.0       0.0         X       Dise lighting controls and energy efficient lighting       0.5%       0.0%       0.0%       0.0       0.0       0.0         X       Use lighting controls and energy efficient lighting       0.5%       0.0%       0.0%       0.0       0.0       0.0         X       Use lighting controls and energy efficient lighting       0.5%       0.0%       0.0%       0.0       0.0       0.0         X       Use lighting controls and energy efficient lighting       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		Х	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 double-glass paned windows       0.0%       0.0%       0.5%       1.0%       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         X       Provide ventilation systems for enclosed parking facilities       0.0%       0.0%       0.0%       0.0       0.0       0.0         X       Use lighting controls and energy efficient lighting       0.5%       0.0%       0.0%       0.0       0.0       0.0         X       Use light-colored roof materials to reflect heat       0.0%       0.0%       0.5%       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         X       Improved storage and handling of source materials       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         X       Improved storage storage namafacturing processes       1.5%       0.0%       0.0%       0.0%       0.0       0.0       <		х	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	1 1 1 ,
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       0.0         X       Use lighting controls and energy efficient lighting       0.5%       0.0%       1.0%       2.5%       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         X       Orient buildings to the north       2.5%       2.0%       3.0%       5.5%       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       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       Materials substitution (e.g., use water-based paints, life cycle analysis)       0.0%       0.0%       0.0%       0.0%       0.0       0.0		х	Use double-glass paned windows	0.0%	0.0%	0.5%	1.0%	0.0	0.0	0.0	0.0	
X         Provide ventilation systems for enclosed parking facilities         0.0%		х	Use energy-efficient low-sodium parking lights	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         X       Use light-colored roof materials to reflect heat       0.0%       0.0%       0.5%       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         X       Comply with Title 24       0.5%       0.0%       0.0%       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         X       Materials substitution (e.g., use water-based paints, life cycle analysis)       0.0%       0.0%       0.0%       0.0       0.0       0.0         X       Resource recovery systems       3.5%       3.0%       1.5%       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 light-colored roof materials to reflect heat         0.0%         0.0%         0.5%         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           X         Comply with Title 24         0.5%         0.0%         0.0%         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           X         Materials substitution (e.g., use water-based paints, life cycle analysis)         0.0%         0.0%         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	1	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       Orient buildings to the north       2.5%       2.0%       3.0%       5.5%       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         X       Improved storage and handling of source materials       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         X       Utilize efficient manufacturing processes       1.5%       0.5%       2.0%       6.0%       0.0       0.0       0.0         X       Resource recovery systems       3.0%       3.5%       3.0%       1.5%       0.0       0.0       0.0	1	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         Comply with Title 24         0.5%         0.0%         1.0%         3.0%         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           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           X         Utilize efficient manufacturing processes         1.5%         0.5%         2.0%         6.0%         0.0         0.0         0.0           X         Resource recovery systems         3.0%         3.5%         3.0%         1.5%         0.0         0.0         0.0	1	X Orient buildings to the north		2.5%	2.0%	3.0%	5.5%	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           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           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           X         Utilize efficient manufacturing processes         1.5%         0.5%         2.0%         6.0%         0.0         0.0         0.0           X         Resource recovery systems         3.0%         3.5%         3.0%         1.5%         0.0         0.0         0.0		X Comply with Title 24		0.5%	0.0%	1.0%	3.0%	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           X         Utilize efficient manufacturing processes         1.5%         0.5%         2.0%         6.0%         0.0         0.0         0.0           X         Resource recovery systems         3.0%         3.5%         3.0%         1.5%         0.0         0.0         0.0		х	Improved storage and handling of source materials	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           X         Resource recovery systems         3.0%         3.5%         3.0%         1.5%         0.0         0.0         0.0         0.0	1	х	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 Resource recovery systems 3.0% 3.5% 3.0% 1.5% 0.0 0.0 0.0 0.0	1	X Utilize efficient manufacturing processes		1.5%	0.5%	2.0%	6.0%	0.0	0.0	0.0	0.0	
	1	х	Resource recovery systems	3.0%	3.5%	3.0%	1.5%	0.0	0.0	0.0	0.0	

Recom	mended	(Measures already incorporated into Project are marked "No."	Em	ission Redu	ction Efficier	ncy	Reduce	ed Emissions	in Pounds	oer Day	
		i í í				-					REASONS FOR REJECTING MITIGATION
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	СО	VOC	NOx	PM <sub>10</sub>	СО	VOC	NO <sub>x</sub>	PM <sub>10</sub>	MEASURES
Mobil	e Source	Emission Controls									
Residen	tial Uses										
											Satellite telecommunications centers are
	х	Allow satellite telecommunications centers in residential subdivisions	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	superseded by other technology.
			012/0	012/0	012/0	012/0					Residences are proposed in walking distance to
	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	proposed commercial areas.
x		Construct hus passenger benches and shelters	0.2%	0.2%	0.2%	0.2%	0.5	0.1	0.0	0.1	F • F • • • • • • • • • • • • • • • • •
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	0.0	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	11	0.0	1.0	incustre does not reduce vide emissions.
x		Construct hickele trails	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	
~		construct bicycle trans	0.170	0.170	0.1/0	0.1/0	0.2	0.0	0.0	0.0	
Comme	rcial Hees										
X	renn cases	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	Sat 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.
	Ŷ	Implement home dispatching system for employees	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	v	Minimize use of fleet vehicles during smag alerts	0.170	0.0%	0.170	0.170	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	×	Unitimize use of neet vehicles during sinog alerts	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
	~	Use low emission neet venicles	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	There is notential for amplayoes to park in areas
											device a spotential for employees to park in areas
	v		0.10	0.10	0.10	0.10		0.0	0.0	0.0	designated for retail customers, thereby negating
	х	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	the intent of this measure.
			0.50	0.40	0.50	0.50					Food establishments located within walking
	х	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	distance for employees.
											Such programs are set up by and at the discretion
	х	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.0	0.0	0.0	0.0	of future occupants of the commercial uses.
											The requirement to achieve a specific AVR has been
	Х	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	ruled unlawful by the federal government.
											Such programs are set up by and at the discretion
	Х	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	of future occupants of the commercial uses.
											Such programs are set up by and at the discretion
	Х	Establish a home-based telecommuting program	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	of future occupants of the commercial uses.
											Such programs are set up by and at the discretion
	Х	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	of future occupants of the commercial uses.
											Such programs are set up by and at the discretion
	Х	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	of future occupants of the commercial uses.
		-									Food establishments located within walking
	Х	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	distance for employees.
											Residential uses are in close proximity and within
	х	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	walking distance to proposed commercial uses.
х		Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	0 1 1
		1 0									There is potential for employees to park in areas
											designated for retail customers, thereby negating
	x	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.0	0.0	0.0	0.0	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	07	0.6	
~		residential and strain of adjacent to commercial acterophenes	1.070	0.170	110/0	1.070	7.0	0.0	0.7	0.0	Excess parking is not expected to be available on
	x	Utilize excess parking as park-p-ride or contribute to park-p-ride	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	sito
Y	~	Construct bioycle facility improvements	0.1%	0.1%	0.3%	0.3%	0.5	0.0	0.0	0.0	Sic.
x		Construct pedestrian facility improvements	0.3%	0.2%	0.2%	0.3%	0.3	0.0	0.0	0.0	
~	Y	Shuttles to major rail transit conters 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 centers of intuiti-modal stations	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	Maasura doos not roduce VOC emissions
	~	Contribute to regional transit systems	0.070	0.070	0.070	0.070	0.0	0.0	0.0	0.0	Proposed on site uses are not conducive to charging
	v	Charge visitors to park	2.00	1 E0/	2.017	2.007	0.0	0.0	0.0		visitors to park
v	^	Charge visitors to park Sunchroniza traffic lights on streats impacted by development	2.0%	1.5%	2.0% 4.0%	2.0%	0.0	0.0	0.0	0.0	visitors to park.
^	v	Passhadula truck daliyarias and nickuns for off paak have	4.0%	4.0%	<b>41.0</b> %	4.0%	7.0	0.0	0.7	0.0	Maasura dags not raduse VOC emission
		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.
		nau parking at walkup klosks	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Measure does not reduce VOC emissions.
1	X	Un-sne truck todding zones	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Massure does not reduce VOC emissions.
v	х	implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	ivieasure does not reduce VOC emissions.
Х	1	roviae commuter information areas	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	

Recommend	ed (Measures already incorporated into Project are marked "No."	Em	ission Redu	ction Efficien	cy	Reduce	ed Emissions	in Pounds p	oer Day	
										REASONS FOR REJECTING MITIGATION
Yes N	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NOx	PM10	CO	VOC	NOx	PM <sub>10</sub>	MEASURES
Industrial Use	15									
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	
х	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	
Х	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
Х	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.0	0.0	0.0	0.0	
Х	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	
						со	VOC	NOx	PM10	
			Total	Unmitigated	l Emissions	425.4	77.8	43.1	41.1	
	Reduc	tion in Natu	ıral Gas Emi	ssions (Poun	ds per day)	0.7	0.1	1.5	0.0	
	No Wood Burning Fire Places or Stoves in Residential U							0.0	0.0	
	Reductio	n in Mobile	Sources Emi	ssions (Poun	ds per day)	29.3	2.6	2.7	2.8	
		Total Redu	ction in Emi	ssions (Poun	ds per day)	30.0	2.8	4.2	2.8	
				Percentag	ge Reduced	7.0%	3.6%	9.7%	6.9%	
		Te	otal Reduced	l Area Source	e Emissions	5.7	35.6	3.5	0.0	
		Tota	al Reduced M	Aobile Source	Emissions	389.7	39.4	35.4	38.3	
			TOTAL	REDUCED E	MISSIONS	395.4	75.0	38.9	38.3	
				SCAQMD	Thresholds	550.0	55.0	55.0	150.0	
		NO	YES	NO	NO					

Input Fields				
	Unmiti	gated Emiss	ions - Lbs. pe	er Day
Land Use Emissions Based on URBEMIS2002 Version 8.7.0 Air Quality Modeling	CO	VOC	NO <sub>x</sub>	PM <sub>10</sub>
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

Recom	mended	(Measures already incorporated into Project are marked "No."	Emi	ssion Redu	ction Efficie	ncy	Reduced Emissions in Pounds per D			er Dav	
									l İ		REASONS FOR REJECTING MITIGATION
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NOx	$PM_{10}$	СО	VOC	NOx	$PM_{10}$	MEASURES
Natura	l Gas En	hissions Controls									
All Resi	dential U	ses									
Х		Use solar or low emission water heaters	10.0%	11.0%	9.5%	4.5%	0.2	0.0	0.4	0.0	
х		Use built-in energy-efficient appliances	3.0%	2.5%	3.0%	6.5%	0.1	0.0	0.1	0.0	
	х	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.
х		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
	~	bie ruer ceno in reordenniar oub arviororio to produce neur ana erec.	110/0	0.070	11070	7.070	0.0	0.0	0.0	0.0	Site design does not permit orientation of high rise
	Y	Orient buildings to the porth	13.5%	14.0%	13.0%	10.5%	0.0	0.0	0.0	0.0	apartments to the north
Y	~	Use light-colored reaf materials to reflect heat	15%	1 5%	15%	1 5%	0.0	0.0	0.0	0.0	apartments to the north.
v		Comply with Title 24	12.00/	14.0%	12.0%	7 50/	0.0	0.0	0.1	0.0	
^		Comply with file 24	13.070	14.070	13.076	7.570	0.2	0.0	0.0	0.0	
Multi-F	amilu Ra	sidantial Heac									
iviuiii-r	umuy Ke										Central heating systems are not desired by the average
	v	Use control water besting systems	9 507	0.007	8.007	4.0%	0.0	0.0	0.0	0.0	multi-family resident
	^	Ose central water heating systems	0.570	9.070	0.070	4.070	0.0	0.0	0.0	0.0	inditi-failing festdent.
Commo	reial and	Office Here									
Y	ciui unu	Use solar or low omission water beaters	0.5%	0.5%	0.5%	0.5%	0.0	0.0	0.0	0.0	
^		Use solar of low emission water neaters	0.570	0.570	0.576	0.5%	0.0	0.0	0.0	0.0	It is not fossible or desirable to require individual
											commorgial ostablishments to have control water
	v	I les entrel conten hasting england	0.5%	0 507	0 507	0.5%	0.0	0.0	0.0	0.0	heading
	~	Use central water neating systems	0.5%	0.5%	0.5%	0.5%	0.0	0.0	0.0	0.0	Nations of the maximatic much that the de trace on the
	v		0.5%	0 50	0.50	1.00	0.0	0.0	0.0	0.0	Nature of the project is such that shade trees of the
24	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	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	
х		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.
	х	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.
Х		Use lighting controls and energy efficient lighting	7.0%	3.0%	8.5%	19.5%	0.0	0.0	0.1	0.0	
Х		Use light-colored roof materials to reflect heat	1.0%	1.0%	1.0%	0.5%	0.0	0.0	0.0	0.0	
х		Comply with Title 24	9.5%	10.0%	9.0%	7.0%	0.1	0.0	0.1	0.0	
											Site design does not permit orientation of all
	х	Orient buildings to the north	12.5%	11.0%	13.5%	17.5%	0.0	0.0	0.0	0.0	commercial buildings to the north.
Industri	ial Uses		0.000			0.70					
	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	
	х	Use double-glass paned windows	0.0%	0.0%	0.5%	1.0%	0.0	0.0	0.0	0.0	
	х	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	х	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	
	Х	Use light-colored roof materials to reflect heat	0.0%	0.0%	0.0%	0.5%	0.0	0.0	0.0	0.0	
	Х	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	
	<ul> <li>X Materials substitution (e.g., use water-based paints, life cycle analysis)</li> </ul>		0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	Х	Utilize efficient manufacturing processes	1.5%	0.5%	2.0%	6.0%	0.0	0.0	0.0	0.0	
	Х	Resource recovery systems	3.0%	3.5%	3.0%	1.5%	0.0	0.0	0.0	0.0	

Recom	mended (	(Measures already incorporated into Project are marked "No."	Em	ission Reduct	ion Efficien	cy	Reduced Emissions in Pounds per		per Day		
									1		REASONS FOR REJECTING MITIGATION
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO.	$PM_{10}$	CO	VOC	NO.	$PM_{10}$	MEASURES
Mobile	Source	Emission Controls				10				10	
Residen	tial Uses										
											Satellite telecommunications centers are superseded
	x	Allow satellite telecommunications centers in residential subdivisions	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	by other technology
	~	Thiow succine electonantalications centers in residential subdivisions	0.170	0.170	0.170	0.170	0.0	0.0	0.0	0.0	Posidoneses are proposed in walking distance to
	N		0.40	0.40	0.40	0.40			0.0		Residences are proposed in warking distance to
	Х	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	proposed commercial areas.
х		Construct bus passenger benches and shelters	0.2%	0.2%	0.2%	0.2%	0.5	0.0	0.1	0.1	
х		Construct pedestrian facility improvements	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	
Х		Retail services within or adjacent to residential subdivisions	1.3%	1.0%	1.3%	1.3%	3.0	0.2	0.4	0.3	
	Х	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.
	Х	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.
Х		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	
				- /-	- /-	- /-					
Comme	rcial Hses										
Y	l aller	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	
Л	v	Interest an eite singulation plan in marking late	0.170	0.170	0.170	0.170	0.2	0.0	0.0	0.0	Maanuna daan natura VOC amianiana
	X		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.
	Х	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.
	Х	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.
	Х	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.
	Х	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.
											There is potential for employees to park in areas
											designated for retail customers, thereby negating the
	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	intent of this measure
	~	reduce employee parking spaces for alose basiness not ander rate 2202	0.170	0.170	0.170	0.170	0.0	0.0	0.0	0.0	Food astablishments located within walking distance
	v		0.50	0.407	0 50	0.50	0.0	0.0	0.0	0.0	food establishments located within walking distance
	X	Lunch snuttle service from a worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.0	0.0	0.0	0.0	for employees.
											Such programs are set up by and at the discretion or
	Х	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.0	0.0	0.0	0.0	future occupants of the commercial uses.
											The requirement to achieve a specific AVR has been
	Х	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	ruled unlawful by the federal government.
											Such programs are set up by and at the discretion of
	х	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	future occupants of the commercial uses.
		5	-								Such programs are set up by and at the discretion of
	x	Establish a home-based telecommuting program	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	future occupants of the commercial uses
	~	zouonori u nome ouocu telecommunity program	0.170	0.170	0.170	0.170	0.0	0.0	0.0	0.0	Such programs are set up by and at the discretion of
	v	Dennide an emptribute to shild some and after school facilities	0.107	0.107	0.107	0.107	0.0	0.0	0.0	0.0	fortune assuments of the seminantial uses
	~	r rovide 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	future occupants of the continercial uses.
											Such programs are set up by and at the discretion of
	Х	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	future occupants of the commercial uses.
											Food establishments located within walking distance
	Х	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	for employees.
											Residential uses are in close proximity and within
	Х	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	walking distance to proposed commercial uses.
х		Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	0 11
		······································		- /-	- /-	- /-					There is potential for employees to park in areas
											designated for retail customers thereby negating the
	v	Dei sin a stavatora (sa sinala sananan ay analana malaina	2.007	1 50/	2.007	2.007	0.0	0.0	0.0	0.0	intent of this measure
24	~	Fricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.0	0.0	0.0	0.0	intent of this measure.
Х		Residential units within or adjacent to commercial developments	4.0%	3.1%	4.0%	4.0%	7.1	0.5	0.9	0.6	
	Х	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.
Х		Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.5	0.0	0.1	0.0	
Х	1	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.4	0.0	0.0	0.0	
	Х	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.
	Х	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.
	1										Proposed on-site uses are not conducive to charging
	х	Charge visitors to park	2.0%	1.5%	2.0%	2.0%	0.0	0.0	0.0	0.0	visitors to park.
x		Synchronize traffic lights on streets impacted by development	4 0%	4.0%	4.0%	4.0%	71	0.0	0.0	0.6	
^	x	Reschedule truck deliveries and nickups for off-peak hours	1.0/0	1.070	1.070	1.0/0	0.0	0.7	0.9	0.0	Massura daas not raduce VOC amissions
	v v	Paid parking, at walkup kiecka	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	Magura daga pat raduce VOC emissions.
	X	r au parking at waikup klosks	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.
1	Х	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	ivieasure does not reduce VOC emissions.
Х	1	Provide commuter information areas	0.1%	0.1%	0.1%	0.1%	0.2	0.0	0.0	0.0	

Recom	nended	(Measures already incorporated into Project are marked "No."	Emission Reduction Efficiency			Reduced Emissions in Pounds per D			er Dav		
									Ì	, , , , , , , , , , , , , , , , , , ,	REASONS FOR REJECTING MITIGATION
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NOx	$PM_{10}$	CO	VOC	NOx	$PM_{10}$	MEASURES
Industr	al Uses										
	Х	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.
	Х	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	Х	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	
	Х	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	Х	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	Х	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	Х	Provide commuter information areas	0.0%	0.0%	0.0%	0.0%	0.0	0.0	0.0	0.0	
	Х	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	
	Х	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.0	0.0	0.0	0.0	
	Х	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	
	Х	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	
	Х	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	
	Х	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	
	Х	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	
	Х	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.0	0.0	0.0	0.0	
	х	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.0	0.0	0.0	0.0	
	Х	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	
	х	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.0	0.0	0.0	0.0	
	х	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.0	0.0	0.0	0.0	
	х	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	
	х	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	
			01070	0.070	0.070	01070	0	VOC	NOv	PM10	
				Total	Unmitigator	Emissions	/13.9	72.6	59.7	41.1	
		Poduc	tion in Matu	rol Coc Emi	cione (Pour	de por day)	413.9	72.0	1.5	41.1	
		No Wood P	uon ni Natu	lacos or Sto	sions (roun	us per uay)	0.7	0.1	1.5	0.0	
	No wood burning the riskes of sloves in Residential								0.0	0.0	
		Keductio	m nt woonle S	ources Emis	sions (roun	us per uay)	29.0	2.4	3.8	2.8	
			Iotal Reduc	tion in Emis	sions (Poun	ds per day)	29.7	2.6	5.3	2.8	
					Percenta	ge Reduced	7.2%	3.5%	8.9%	6.9%	
			To	tal Reduced	Area Source	e Emissions	1.7	35.0	3.5	0.0	
			Tota	l Reduced N	lobile Source	e Emissions	382.5	35.0	50.9	38.3	
				TOTAL	REDUCED E	EMISSIONS	384.2	70.0	54.4	38.3	
					SCAQMD	Thresholds	550.0	55.0	55.0	150.0	
			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				

August '06	Sept. '06	Oct '06	Nov '06	Dec '06	Jan. '07
VOC: 3.76 PM: 2.22	NO: 27.78	CO: 30.37	SO: 0.14		
					VOC:14.65
3.7 27 7	6 3.7 8 27 7	76 3.7 78 27 7	76 3.76 78 27 78	3.83	14.65 24 13
30.3 0.1 2.2	7     30.3       4     0.1       2     2.2	37         30.3           .4         0.1           .22         2.2	27.763730.37140.14222.22	32.2 0.96	34.27 0

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 24.12 34.27 ( 0.86	5 14.6 3 24.1 7 34.2 0 ( 5 0.8	5 14.65 3 24.13 7 34.27 0 0 5 0.86	20.27 84.25 74.34 0.06 7.65	20.27 84.25 74.34 0.06 7.65	26.74 153.16 120.53 0.14 178.55

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
26.74 153.10 120.53 0.14 178.55	4 26.74 5 153.16 3 120.53 4 0.14 5 178.55	26.74 153.16 120.53 0.14 178.55	18.86 47.43 71.35 0 1.79	4.21 23.3 37.08 0 0.93	14.68 112.53 118.27 0.07 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
14.68 112.53 118.27	14.68 112.53 118.27	14.68 112.53 118.27	8.47 45.36 75.24	8.47 45.36 75.24	7 8.47 5 45.36 4 75.24
98.53	98.53	98.53	1.68	1.68	3 1.68

August '08 Se	ept. '08 Oc	t. '08 🛛 🕅	Nov. '08	Dec. '08	Jan '09
+ +	+	-	+ ·	+	VOC:168.05
SO: 0 PI	M:.85 +	-	+ ·	+	VOC: 4.24
8.47	8.47	8.47	8.47	8.47	172.29
45.36 75.24	45.36 75.24	45.36 75.24	45.36 75.24	45.36 75.24	45.7 80.25
0 1.68	0 1.68	0 1.68	0 1.68	0 1.68	0 1.69

Feb '09	March '09	April '09	May '09	June '09	July '09

NO: 22.27	CO: 38.01	SO: 0	PM: 0.80	+	+

PM: 0.89 +

+

NO: 23.43 CO: 42.24 SO: 0

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

August '09	Sept '	09 Oct '	09 N	lov '09	Dec '09	Jan '10
+	+	+	-	F	+	
+	+	+	4	F	+	VOC: 56.76
						PM: 0.78
170	29	172 20	172 20	177.70	177 70	56.76
4	5.7	45.7	45.7	45.7	45.7 x x x x x x x x x x x x x x x x x x x	23.54
80	0	0	00.25	00.25	) (	40.9
1	.9	1.69	1.69	1.65	1.65	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