

APPENDIX C-3

AIR MONITORING PROGRAMS

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT
TOXIC AIR CONTAMINANTS
2003 ANNUAL REPORT**

AIR MONITORING PROGRAMS

PM10		
<p>Agency: BAAQMD Sample medium: Quartz fiber filter Frequency: Every 6th day</p>		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Mass	Bethel Island	Napa
Chemicals:	Concord	Redwood City
Ammonium	Fremont	
Chloride	Livermore	
Nitrate	Napa	
Potassium	Pittsburg	
Sulfate	Redwood City	
	San Francisco - Arkansas St.	
	San Jose - Jackson St.	
	San Jose - Tully Rd.	
	San Pablo	
	San Rafael	
	Santa Rosa	
	Vallejo	
<p>Agency: CARB Sample medium: Quartz fiber filter Frequency: Every 6th day</p>		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Mass	San Francisco - Bayview/Hunter's Pt.	None
Chemicals:		
Ammonium		
Chloride		
Nitrate		
Potassium		
Sulfate		
PAH	Fremont	None
	San Francisco - Arkansas St.	
	San Francisco - Bayview/Hunter's Pt.	
	San Jose - Jackson St.	
<p>Agency: CARB Sample medium: Quartz fiber filter Frequency: One sample per month</p>		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Elemental carbon	San Francisco - Bayview/Hunter's Pt.	None

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TOXICS			
<p>Agency: BAAQMD Sample medium: Canister Frequency: Every 12th day</p>			
<u>Analysis</u>		<u>Site</u>	<u>Collocated site</u>
1,1,1-Trichloroethane		Bethel Island	San Francisco - Arkansas St.
1,1,2 Trichlorotrifluoroethane		Concord	
1,3-Butadiene		Crockett	
Acetone		Ft. Cronkhite	
Benzene		Livermore	
Carbon tetrachloride		Martinez	
Chloroform		Napa	
Dichloromethane		Oakland – Filbert St.	
Ethylbenzene		Pittsburg	
Ethylene dibromide		Redwood City	
Ethylene Dichloride		Richmond – 7th St.	
M/P Xylene		San Francisco - Arkansas St.	
Methyl ethyl ketone		San Jose – Jackson St.	
Methyl tertiary-butyl ether		San Leandro	
O-Xylene		San Pablo	
Perchloroethylene		San Rafael	
Toluene		Santa Rosa	
Trichloroethylene		Sunnyvale	
Trichlorofluoromethane		Vallejo	
Vinyl chloride			
<p>Agency: CARB Sample medium: Canister Frequency: Every 12th day</p>			
<u>Analysis</u>		<u>Site</u>	<u>Collocated site</u>
1,1,1-Trichloroethane	Dichloromethane	Fremont	None
1,3-Butadiene	Ethylbenzene	San Francisco – Arkansas St.	
Acetone	m/p-Xylene	San Jose – Jackson St	
Acetonitrile	Methyl tertiary-butyl ether		
Acrolein	o-Dichlorobenzene		
Acrylonitrile	o-Xylene		
Benzene	p-Dichlorobenzene		
Bromomethane	Perchloroethylene		
Carbon disulfide	Styrene		
Carbon tetrachloride	Toluene		
Chloroform	trans-1,3-Dichloropropene		
cis-1,3-Dichloropropene	Trichloroethylene		

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TOXICS (cont)			
Agency:	CARB		
Sample medium:	Canister		
Frequency:	Every 6th day		
<u>Analysis</u>		<u>Site</u>	<u>Collocated site</u>
Acetone	Dichloromethane	San Francisco - Bayview/Hunter's Pt.	None
Acetonitrile	Ethylbenzene		
Acrolein	m/p-Xylene		
Acrolylonitrile	o-Dichlorobenzene		
1,1,1-Trichloroethane	o-Xylene		
1,3-Butadiene	p-Dichlorobenzene		
Benzene	Perchloroethylene		
Bromomethane	Styrene		
Carbon disulfide	Toluene		
Carbon tetrachloride	trans-1,3-Dichloropropene		
Chloroform	Trichloroethylene		
cis-1,3-Dichloropropene	Perchloroethylene		

TOTAL METALS			
Agency:	CARB		
Sample medium:	Teflon filter		
Frequency:	Every 12th day		
<u>Analysis</u>		<u>Site</u>	<u>Collocated site</u>
Aluminum	Phosphorus	Fremont	None
Antimony	Potassium	San Francisco - Arkansas St.	
Barium	Rubidium	San Jose - Jackson St.	
Bromine	Selenium		
Calcium	Silicon		
Chlorine	Strontium		
Chromium	Sulfur		
Cobalt	Tin		
Copper	Titanium		
Iron	Uranium		
Lead	Vanadium		
Manganese	Yttrium		
Mercury	Zinc		
Molybdenum	Zirconium		
Nickel			

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TOTAL METALS (cont)		
Agency:	CARB	
Sample medium:	Teflon filter	
Frequency:	Every 6th day	
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Aluminum	Nickel	San Francisco - Bayview/Hunter's Pt. None
Antimony	Phosphorus	
Arsenic	Potassium	
Barium	Rubidium	
Bromine	Selenium	
Calcium	Silicon	
Chlorine	Strontium	
Chromium	Sulfur	
Cobalt	Tin	
Copper	Titanium	
Iron	Uranium	
Lead	Vanadium	
Manganese	Yttrium	
Mercury	Zinc	
Molybdenum	Zirconium	

HEXAVALENT CHROMIUM		
Agency:	CARB	
Sample medium:	Cellulose filter	
Frequency:	Every 12th day	
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Chromium VI	Fremont San Francisco - Arkansas St. San Jose - Jackson St.	None
Agency:	CARB	
Sample medium:	Cellulose filter	
Frequency:	Every 6th day	
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Chromium VI	San Francisco - Bayview/Hunter's Pt.	None

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CARBONYLS		
Agency: CARB		
Sample medium: Solid adsorbent cartridge		
Frequency: Every 12th day		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Acetaldehyde	Fremont	None
Formaldehyde	San Francisco - Arkansas St.	
Methyl Ethyl Ketone	San Jose - Jackson St.	
Agency: CARB		
Sample medium: Solid adsorbent cartridge		
Frequency: Every 6th day		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Acetaldehyde	San Francisco - Bayview/Hunter's Pt.	None
Formaldehyde		
Methyl Ethyl Ketone		

PM2.5		
Agency: BAAQMD		
Sample medium: Teflon filter		
Frequency: Every 6th day (summer) and every day (winter)		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Mass	Concord	(Met One BAM continuous PM2.5)
	San Francisco - Arkansas St.	Oakland - Filbert St.
	San Jose - Jackson St.	Livermore
	San Jose - Tully Rd.	San Francisco - Arkansas St.
		San Francisco - Bayview/Hunter's Pt.
		Redwood City
		San Jose - Jackson St.
		Vallejo
Agency: BAAQMD		
Sample medium: Teflon filter		
Frequency: Every 6th day (summer) and every 3rd day (winter)		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Mass	Fremont	See above
	Livermore	
	Redwood City	
	Santa Rosa	
	Vallejo	

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PM2.5 (cont)		
<p>Agency: BAAQMD Sample medium: Teflon filter Frequency: Every 6th day</p>		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Mass		Concord
<p>Agency: EPA Sample medium: Teflon filter Frequency: Every 3rd day</p>		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Mass	Cation San Jose - Jackson St.	None
Carbon	Ammonium	
Total	Sodium	
Organic	Potassium	
Elemental	Anion	
Carbonate	Nitrate	
	Sulfate	

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DIOXINS		
<p>Agency: CARB Sample medium: Polyurethane foam plug Frequency: 20-24 days every 28-day period</p>		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Polychlorinated dibenzo-p-dioxins	Livermore Richmond - 7th St. San Jose - JacksonSt.	None
<p>Sample medium: Quartz fiber filter Frequency: 20-24 days every 28-day period</p>		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Polychlorinated dibenzofurans Dioxin-like polychlorinated biphenyls	Livermore Richmond - 7th St. San Jose - JacksonSt.	None
<p>Agency: EPA Sample medium: Polyurethane foam plug Frequency: 24 days every 28-day period, four times/year</p>		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Polychlorinated dibenzo-p-dioxins	Fort Cronkhite San Francisco - Arkansas St.	None
<p>Sample medium: Quartz fiber filter Frequency: 24 days every 28-day period, four times/year</p>		
<u>Analysis</u>	<u>Site</u>	<u>Collocated site</u>
Polychlorinated dibenzofurans Dioxin-like polychlorinated biphenyls	Fort Cronkhite San Francisco - Arkansas St.	None