

Davenport CrVI Ambient Air Monitoring Results
 Sampling for particulate matter less than 10 microns in diameter (PM10)

ERG Analysis

Big Creek Fire Station			CrVI concentration ⁷	Field Blank ⁷
Sample Date*	Day	ng/m ³	ng/filter	
11/5/2009	Thu	ND	ND	
11/4/2009	Wed	ND	-	
11/3/2009	Tue	0.0223	-	
8/13/2009	Thu	ND	ND	
8/12/2009	Wed	ND	-	
8/11/2009	Tue	ND	-	

ERG Analysis

Davenport School Air Monitoring Station			CrVI concentration ⁷	Field Blank ⁷
Sample Date*	Day	ng/m ³	ng/filter	
11/5/2009	Thu	0.115	ND	
11/4/2009	Wed	0.0178	-	
11/3/2009	Tue	ND	-	
8/13/2009	Thu	ND	ND	
8/12/2009	Wed	ND	-	
8/11/2009	Tue	ND	-	

Note 7:

- Limit of Detection = 0.0043 ng/m³
- Samples prepared by MBUAPCD staff and analyzed by ERG.

ERG Analysis

New Town			CrVI concentration ⁸	Field Blank ⁸
Sample Date*	Day	ng/m ³	ng/filter	
Single Samples:				
3/1/2009	Sun	0.0532		
2/28/2009	Sat	0.0291		
2/27/2009	Fri	ND		
Co-located samples:				
2/26/2009	Thur	ND		
2/26/2009	Thur	ND		
Average	Thur	ND		
Single Samples:				
2/25/2009	Wed	ND	<0.134	
2/24/2009	Tue	ND		
2/23/2009	Mon	0.0207		
2/22/2009	Sun	0.0253		
2/21/2009	Sat	ND		
2/20/2009	Fri	ND		
Co-located samples:				
2/19/2009	Thur	ND		
2/19/2009	Thur	ND		
Average	Thur	ND		
Single Samples:				
2/18/2009	Wed	ND	<0.138	
2/17/2009	Tue	ND		

Note 8:

- Limit of Detection = 0.0043 ng/m³
- Samples prepared by MBUAPCD staff and analyzed by ERG.

ERG Analysis

New Town			CrVI concentration ⁸	Field Blank ⁸
Sample Date*	Day	ng/m ³	ng/filter	
2/16/2009	Mon	ND		
2/15/2009	Sun	ND		
2/14/2009	Sat	ND		
Co-located samples:				
2/12/2009	Thur	ND		
2/12/2009	Thur	ND		
Average	Thur	ND		
Single Samples:				
2/10/2009	Tue	ND		
2/9/2009	Mon	ND		
2/8/2009	Sun	ND		
2/7/2009	Sat	0.0315		
2/6/2009	Fri	0.0315		
Co-located samples:				
2/5/2009	Thur	0.0192	<0.139	
2/5/2009	Thur	0.0175		
Average	Thur	0.0184		
Single Samples:				
2/4/2009	Wed	0.0211		
2/3/2009	Tue	0.0266		
2/2/2009	Mon	ND		
2/1/2009	Sun	ND		
1/31/2009	Sat	ND		
1/30/2009	Fri	0.0162		
Co-located samples:				
1/29/2009	Thur	0.0103		
1/29/2009	Thur	0.0071		
Average	Thur	0.0087		
Single Samples:				
1/28/2009	Wed	0.0110		
1/27/2009	Tue	0.0081	<0.281	
1/26/2009	Mon	ND		
1/25/2009	Sun	ND		
1/24/2009	Sat	0.0193		
1/23/2009	Fri	ND		
1/22/2009	Thur	ND		
1/21/2009	Wed	0.0263		
1/20/2009	Tue	0.0147		
1/19/2009	Mon	0.0124		
1/18/2009	Sun	0.0191		
1/17/2009	Sat	0.0276		
1/16/2009	Fri	0.0132		

Note 5:

- Limit of Detection = 0.0065 ng/m³
- Samples prepared by MBUAPCD staff and analyzed by ERG.
- The running average is calculated assuming that days with non-detect values are equal to 0.0065 ug/m³, beginning on 11-1-08.
- Actual values below the stated detection level of 0.0065 were recorded on 12/10,14,15/2008, the recorded values were applied.

ERG Analysis

Davenport School Air Monitoring Station		CrVI concentration ⁵	running average CrVI concentration (beginning 11-1-08)	Field Blank ⁵
Sample Date*	Day	ng/m ³	ng/m ³	ng/filter
Single Samples:				
3/1/2009	Sun	0.318		
2/28/2009	Sat	0.0429		
2/27/2009	Fri	0.0332		
2/26/2009	Thur	0.0546		
2/25/2009	Wed	ND		
Co-located samples:				
2/24/2009	Tue	0.0251		
2/24/2009	Tue	0.0065		
Average	Tue	0.0158		
Single Samples:				
2/23/2009	Mon	0.0244		<0.139
2/22/2009	Sun	0.0282		
2/20/2009	Fri	ND		
2/18/2009	Wed	ND		
Co-located samples:				
2/17/2009	Tue	ND		
2/17/2009	Tue	ND		
Average	Tue	ND		
Single Samples:				
2/16/2009	Mon	ND		<0.137
2/15/2009	Sun	ND		
2/14/2009	Sat	ND		
2/13/2009	Fri	ND		
2/12/2009	Thur	ND		
2/11/2009	Wed	ND		<0.141
Co-located samples:				
2/10/2009	Tue	ND		
2/10/2009	Tue	ND		
Average	Tue	ND		
Single Samples:				
2/9/2009	Mon	ND		<0.138
2/8/2009	Sun	ND		
2/7/2009	Sat	0.0169		
2/6/2009	Fri	0.0273		
2/5/2009	Thur	0.0690		
2/4/2009	Wed	0.0304		
2/3/2009	Tue	0.0283		
2/2/2009	Mon	ND		<0.141
2/1/2009	Sun	0.0246		
1/31/2009	Sat	0.0198		
1/30/2009	Fri	0.0417		
1/29/2009	Thur	0.0308		
1/28/2009	Wed	ND		
Co-located samples:				
1/27/2009	Tue	0.0118		
1/27/2009	Tue	0.0149		
Average	Tue	0.0134		
Single Samples:				
1/26/2009	Mon	ND		<0.140
1/25/2009	Sun	0.0382		
1/24/2009	Sat	0.0289		
1/23/2009	Fri	ND		
1/22/2009	Thur	ND		
Co-located samples:				
1/21/2009	Wed	0.0308		
1/21/2009	Wed	0.0340		
Average	Wed	0.0324		
Single Samples:				
1/20/2009	Tue	0.0206		
1/19/2009	Mon	0.0469		<0.136
1/18/2009	Sun	ND		
1/17/2009	Sat	0.0224		
1/16/2009	Fri	0.0192		
1/15/2009	Thur	0.0255		
1/14/2009	Wed	0.0331		
Co-located samples:				
1/13/2009	Tue	0.0198		
1/13/2009	Tue	0.0173		
Average	Tue	0.0186		
Single Samples:				
1/12/2009	Mon	0.0089		<0.140
1/11/2009	Sun	0.0074		
1/10/2009	Sat	0.0071		
1/9/2009	Fri	0.0068		
1/8/2009	Thur	0.0085		
1/7/2009	Wed	0.0137		
Co-located samples:				
1/6/2009	Tue	0.0081		
1/6/2009	Tue	0.0072		
Average	Tue	0.0077		
Single Samples:				
1/5/2009	Mon	ND		<0.139
1/4/2009	Sun	ND		
1/3/2009	Sat	ND		
1/2/2009	Fri	ND		
1/1/2009	Thur	ND		
12/31/2008	Wed	ND		
Co-located samples:				
12/30/2008	Tue	ND		
12/30/2008	Tue	ND		
Average	Tue	ND		

Single Samples:

12/29/2008	Mon	0.0151		<0.140
12/28/2008	Sun	ND		
12/27/2008	Sat	0.031		
12/24/2008	Wed	ND		

Co-located samples:

12/23/2008	Tue	ND		
12/23/2008	Tue	ND		
Average	Tue	ND		

Single Samples:

12/22/2008	Mon	ND		<0.141
12/21/2008	Sun	0.0215		
12/20/2008	Sat	0.0151		
12/19/2008	Fri	ND		
12/18/2008	Thur	0.031		
12/17/2008	Wed	ND		

Co-located samples:

12/16/2008	Tue	0.0108		
12/16/2008	Tue	0.0078		
Average	Tue	0.0093		

Single Samples:

12/15/2008	Sun	ND		<0.141
12/14/2008	Sat	ND		
12/13/2008	Fri	0.0474		
12/12/2008	Thur	0.0160		
12/11/2008	Wed	0.0253		

Co-located samples:

12/10/2008	Tue	0.0022		
12/10/2008	Tue	0.0014		
Average	Tue	0.0018		

Single Samples:

12/9/2008	Mon	0.0125		
12/8/2008	Mon	0.0496		<0.137
12/6/2008	Sat	0.0198		
12/5/2008	Fri	0.0823		
12/4/2008	Thur	ND		
12/3/2008	Wed	ND		

Co-located samples:

12/2/2008	Tue	0.0100		
12/2/2008	Tue	0.0124		
Average	Tue	0.0112		

Single Samples:

11/30/2008	Sun	0.0166		<0.139
11/29/2008	Sat	ND		
11/28/2008	Fri	ND		
11/27/2008	Thur	0.0437		
11/26/2008	Wed	0.0223		
11/25/2008	Tue	ND		
11/24/2008	Mon	ND		

Co-located samples:

11/23/2008	Sun	0.019		
11/23/2008	Sun	0.0248		
11/23/2008	Sun	0.0219		

Co-located samples:

11/22/2008	Sat	0.0200		
11/22/2008	Sat	0.0200		
Average	Sat	0.0200		

Co-located samples:

11/21/2008	Fri	0.0252		
11/21/2008	Fri	0.0208		
Average	Fri	0.0230		

Co-located samples:

11/20/2008	Thur	0.0239		<0.139
11/20/2008	Thur	0.0202		
Average	Thur	0.0221		

Single Samples:

11/14/2008	Fri	0.0244		
11/13/2008	Thur	0.0199		
11/12/2008	Wed	0.0638		
11/11/2008	Tue	0.0139		
11/10/2008	Mon	0.0135		
11/9/2008	Sun	0.0125		
11/8/2008	Sat	ND		
11/7/2008	Fri	0.0156		
11/5/2008	Wed	ND		
11/4/2008	Tue	0.022		
11/3/2008	Mon	ND		
11/2/2008	Sun	ND		
11/1/2008	Sat	ND		

Note 4:

- Samples taken by Santa Cruz County Health Department contractor from 11-1-08 to 11-14-08.
- Limit of Detection = 0.0065 ng/m3
- Samples were analyzed by ERG.

SCAQMD Analysis

Davenport School Air Monitoring Station		CrVI concentration ²	running average CrVI concentration	Field Blank ²
Sample Date*	Day	ng/m ³	ng/m ³	ng/filter
10/13/2008	Mon	0.09		
10/12/2008	Sun	0.08		
10/11/2008	Sat	0.11		
10/11/2008	Sat	0.08		
10/10/2008	Fri	0.15		
10/10/2008	Fri	0.13		
10/9/2008	Thur	0.12		
10/8/2008	Wed	0.13		
10/7/2008	Tues	0.08		
10/6/2008	Mon	0.11		
10/5/2008	Sun	<0.28		
8/4/2008	Mon	0.319		
8/3/2008	Sun	1.194		
7/28/2008	Mon	0.667		
7/27/2008	Sun	0.500		
7/21/2008	Mon	0.444		
7/20/2008	Sun	0.389		0.6
7/14/2008	Mon	0.278		
7/13/2008	Sun	0.278		
6/11/2008	Wed	1.236		

* "Sample Date" is the date the 24 hour monitoring started.

Note 2:

- Limit of Detection = 0.05 ng/m³
- Samples prepared by MBUAPCD staff and analyzed by SCAQMD.

SCAQMD Analysis

Big Creek Fire Station		CrVI concentration ²	Field Blank ²
Sample Date*	Day	ng/m ³	ng/filter
8/4/2008	Mon	0.056	
8/3/2008	Sun	0.056	
7/28/2008	Mon	0.056	0.5
7/27/2008	Sun	0.069	
7/21/2008	Mon	0.125	
7/20/2008	Sun	0.111	
7/14/2008	Mon	0.069	0.5
7/13/2008	Sun	0.097	0.2
6/11/2008	Wed	0.056	

SCAQMD Analysis

Davenport Fire Station		CrVI concentration ²	Field Blank ²
Sample Date*	Day	ng/m ³	ng/filter
10/13/2008	Mon	0.14	
10/12/2008	Sun	0.08	
10/11/2008	Sat	0.19	
10/10/2008	Fri	0.19	
10/8/2008	Wed	0.11	
10/7/2008	Tues	0.19	
10/6/2008	Mon	0.15	
10/5/2008	Sun	ND	
8/4/2008	Mon	0.694	
8/3/2008	Sun	1.042	
7/28/2008	Mon	0.694	
7/27/2008	Sun	0.431	0.7
7/21/2008	Mon	0.653	0.6
7/20/2008	Sun	0.500	
7/14/2008	Mon	0.556	
7/13/2008	Sun	0.278	
6/11/2008	Wed	0.792	

General Notes:

- To determine lifetime cancer risk, apply the following formula:
Cancer risk per million = (CrVI concentration, ng/m³) (conversion factor, 1000 ng/ug) (CrVI unit risk factor, 0.15 (ug/m³)⁻¹)
 The cancer risk formula above is based on an exposure averaged over seventy years, or 25,550 days.
 For additional information regarding cancer risks go to http://www.epa.gov/ttn/atw/3_90_024.html
- The samples taken from the fire station and the school during this period of 6/11/2008 to 10/14/2008 were analyzed by the South Coast Air Quality Management District lab, which has a limit of detection (LOD) of 0.05 ng/m³.
- The samples taken from both locations on 10/5/2008 were analyzed by McCambell Analytical. The level of detection was 0.28 ng/m³, ND entered in the cell represents a concentration <0.28 ng/m³.
- The samples taken between 6/11/2008 and 8/4/2008 were during a period when the cement plant was in full operation.
- The samples taken between 10/5/2008 and 10/13/2008 were during a period when the plant was not operating except for periodic truck loadout operations.