

**Countywide Recycling & Disposal Facility
Ambient Air Monitoring
Monthly Report #8
January 20, 2008**

**To Fulfill the Requirements Set Forth in Order 5.A. of the Ohio EPA
Director's Findings and Orders Dated March 28, 2007**

**Republic Services of Ohio II, LLC
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Countywide Recycling & Disposal Facility
Ambient Air Monitoring
Monthly Report #8
January 20, 2008
Monitoring Events #32 through 36

1.0 INTRODUCTION

Beginning on Monday May 21, 2007 ambient air sampling is being conducted every six days as mandated by Order 5.A. of the Ohio EPA Director's Findings and Orders dated March 28, 2007. This report covers the analytical results from the following Monitoring Events.

- Event #32: Monday November 26 to Tuesday November 27.
- Event #33: Sunday December 2 to Monday December 3.
- Event #34: Saturday December 8 to Sunday December 9.
- Event #35: Friday December 14 to Saturday December 15.
- Event #36: Thursday December 20 to Friday December 21.

Air samples were collected over a 24-hour period at four locations: Bolivar Elementary School; the cell tower on the Countywide facility; near the top of the hill at the KOA campground to the northeast of the landfill; and near the small bridge along the road that borders the wetland area immediately to the east of the landfill (Figure 1). The road is the specified route for the trucks entering Countywide facility. The wetland is consistently in the area of maximum impact predicted by the air model. Since there are no people working or residing in the wetland, it is being considered a temporary location until such time as the Agency specifies a fourth permanent monitoring location. The campground is also frequently in the area of impact predicted by the air model.

As specified by the Ohio EPA in Bryan Zima's March 28, 2007 letter to Jason Perdion of Baker & Hostetler, air samples were analyzed for the following groups of compounds:

- Volatile Organic Compounds (VOCs): EPA Method TO-15 modified with Tentatively Identified Compounds (TICs)
- Sulfur Compounds: EPA Method TO-15 modified
- Aldehydes and Ketones: EPA Method TO-11A
- Hydrogen Fluoride and Hydrogen Chloride: NIOSH Method 7903

All analyses were performed by Integrated Analytical Laboratory (IAL), Randolph, NJ. Certification numbers: ELAP-11402; NJDEP-14751; AIHA-100201.

As a conservative first evaluation, the concentrations of chemicals detected in the air samples were compared to the corresponding USEPA Region 9 Preliminary Remediation Goals (PRGs). The USEPA Region 9 PRG is the concentration of a chemical in the

ambient air that is estimated to be without significant risk to a person who would breathe that level of chemical continuously over many decades. The Region 9 PRGs are derived using conservative mathematical formulas and do not represent the level of a chemical in the air (or other environmental media) where health effects are likely to occur. Region 9 PRGs are generally accepted as conservative screening values, such that if the concentration of a chemical in the air is less than the corresponding PRG, most public health officials and regulators are confident that there is no risk to human health. On the other hand, an analytical result that exceeds the corresponding PRG does not mean that there is an unacceptable risk to public health. The chemical that were detected in these Monitoring Events are commonly found at low levels in ambient air. For some compounds such as benzene, the mathematically-derived Region 9 PRG of 0.25 ug/m³ is lower than the average background concentration of 1.96 ug/m³ in ambient air in Ohio (Ohio EPA, *Portsmouth Ohio Air Quality Study 2003*). Consequently, finding certain chemicals in ambient air at levels above PRGs that are very close to analytical detection limits is not uncommon and may simply reflect fluctuations in background sources. It should be noted that not all of the compounds found in the air samples have corresponding PRGs.

Ambient environmental/climate conditions are discussed in Section 2.0. Results of the monitoring are discussed in Section 3.0 and summarized in Section 4.0 of this report. Analytical results from the laboratory are provided in the Appendices.

2.0 AMBIENT CONDITIONS

The descriptions of ambient conditions are taken from the Daily Odor Monitoring Summary compiled by Countywide's consultant, Diversified Engineering. For those days when a Daily Odor Monitoring Summary was not available, ambient meteorological conditions were obtained from the "WeatherUnderground" website at <http://www.wunderground.com>.

Event #32, Monday/Tuesday November 26/27, 2007:

Average temperature in degrees F: 44, Max. 48, Min. 39

Prevailing winds were out of the NW ranging from calm to 16 mph, with gusts up to 39 mph.

Average relative humidity 89% with rain.

Complaints: A number of complaints were recorded during this time period including 5 from individuals traveling I-77 near mile marker #96, and one from an individual traveling on Gracemont Street. No specific potentially odor-causing activities were noted on the Daily Odor Monitoring Summary.

Event #33, Sunday/Monday December 02/03, 2007:

Average temperature in degrees F: 35, Max. 42, Min. 28

Winds were 9 mph out of the SSE.

Average relative humidity 82% with no precipitation recorded.

Complaints: There were no odor complaints during this time.

Event #34: Saturday/Sunday December 08/09, 2007:

Average temperature in degrees F: 33, Max. 40, Min. 26

Winds had a maximum speed of 12 mph out of the W.

Average relative humidity was 78% and 0.02-in of precipitation was recorded.

Complaints: Although no odor complaints were reported on the days of the sampling, there were numerous complaints on the preceding two days during which time well head maintenance, Flare #9 maintenance, extraction well sampling and pump maintenance were taking place.

Event #35: Friday/Saturday December 14/15, 2007:

Average temperature in degrees F: 32, Max. 36, Min. 30

Winds had a maximum speed of 12 mph out of the ESE.

Average relative humidity was 71% and 0.51-in of precipitation was recorded.

Complaints: Two complaints were recorded from individual traveling along I-77 near mile markers #95 & 96. Flare #4 was undergoing maintenance during this time period.

Event #36: Thursday/Friday December 20/21, 2007:

Average temperature in degrees F: 32, Max. 39, Min. 24

Winds were 5 mph out of the E.

Average humidity was 55% with no precipitation recorded.

Complaints: A complaint was received from Sherman Church Avenue in East Sparta at 9:25am. A complaint was received from a traveler on I-77 between markers 95 and 96 at 9:48am. One complaint was received from 4310 Ungler Lane in East Sparta at 10:45am stating odor was present the previous three days. Multiple comments were received from a resident regarding multiple locations including Sherman Church Avenue, Haut Street, Beth intersections, and I-77 adjacent to the landfill. Cell 7 pipeline repair, flare #7 repair, pump maintenance, extraction well sampling, pump installation, and temporary cap maintenance were occurring at the time.

3.0 ANALYTICAL RESULTS

The laboratory analyzed the air samples for a large number of chemicals. Only those results that exceeded Region 9 PRGs will be discussed in the body of the report. Other compounds may have been detected in a sample, but were quantified at concentrations below the respective PRG. All of the analytical results from the laboratory are provided in the Appendices.

3.1 Volatile Organic Compounds

Compounds detected by Method TO-15 modified are summarized in Tables 1 through 5. Method TO-15 analyzes air samples collected in a summa canister for the presence of an extensive list of volatile organic compounds. In addition to a "standard analyte" list, this method also has the capability to tentatively identify and estimate the concentration of numerous compounds that are not on the "standard" list. These Tentatively Identified Compounds (TICs) include some compounds for which there are other specific analytical

methods. Of particular relevance to interpreting the data from this monitoring effort is the fact that Method TO-15 identifies acetaldehyde, a carbonyl compound that is a specific target for Method TO-11A. All results for acetaldehyde will be discussed in Section 3.3. Data reports from the analytical laboratory are provided in the Appendices. Results that exceeded corresponding Region 9 PRGs and any other relevant findings are discussed below. Chemicals that were detected below PRGs will not be discussed unless those particular results help to explain other findings.

Event #32, November 26/27, 2007:

Analytical results for Method TO-15 for Event #32 are summarized in Table 1 and provided in Appendix A. Four compounds were measured at levels above their respective PRG.

Event #32: VOCs Detected Above PRGs
Concentrations in ug/m3

Compound	PRG	School (Crosswind)	Cell Tower (Upwind)	Campground (Crosswind)	Wetland (Crosswind)
Benzene	0.25	58	53	71	36
1,2,4-Trimethylbenzene	6.2	ND	10	9.2	13
Acetaldehyde (TIC)	0.87	ND	9.9	ND	ND
Acetonitrile (TIC)	62	8.7	126	39	ND

Event #33, December 02/03, 2007:

Analytical results for Method TO-15 for Event #33 are summarized in Table 2 and provided in Appendix B. Three compounds were measured at levels above their respective PRG.

Event #33: VOCs Detected Above PRGs
Concentrations in ug/m3

Compound	PRG	School (Crosswind)	Cell Tower (Downwind)	Campground (Crosswind)	Wetland (Upwind)
Benzene	0.25	2.1	170	ND	ND
1,2,4-Trimethylbenzene	6.2	4.2	9.7	ND	ND
Acetaldehyde (TIC)	0.87	ND	13	ND	ND

Event #34, December 08/09, 2007:

Analytical results for Method TO-15 for Event #34 are summarized in Table 3 and provided in Appendix C. Two compounds were measured at levels above their respective PRG.

Event #34: VOCs Detected Above PRGs
Concentrations in ug/m3

Compound	PRG	School (Crosswind)	Cell Tower (Upwind)	Campground (Crosswind)	Wetland (Downwind)
Benzene	0.25	4.4	1.6	2.5	2.8
Acetaldehyde (TIC)	0.87	ND	ND	4.5	5.4

Event #35, December 14/15, 2007:

Analytical results for Method TO-15 for Event #35 are summarized in Table 4 and provided in Appendix D. Five compounds were measured at levels above their respective PRG.

Event #35: VOCs Detected Above PRGs
Concentrations in ug/m3

Compound	PRG	School (Crosswind)	Cell Tower (Downwind)	Campground (Crosswind)	Wetland (Upwind)
Benzene	0.25	7.5	12	11	30
Methylene Chloride	4.1	ND	ND	ND	133
1,2,4-Trimethylbenzene	6.2	4.3	8.7	3.0	20
Acetaldehyde (TIC)	0.87	ND	ND	7.6	ND
Acetonitrile (TIC)	62	14	545	11	ND

Event #36, December 20/21, 2007:

Analytical results for Method TO-15 for Event #36 are summarized in Table 5 and provided in Appendix E. Three compounds were measured at levels above their respective PRG.

Event #36: VOCs Detected Above PRGs
Concentrations in ug/m3

Compound	PRG	School (Crosswind)	Cell Tower (Downwind)	Campground (Crosswind)	Wetland (Upwind)
Benzene	0.25	6.1	11	12	4.3
1,2,4-Trimethylbenzene	6.2	3.1	6.5	4.3	ND
Acetaldehyde (TIC)	0.87	ND	10	ND	4.1

3.2 Sulfur Compounds

No sulfur compounds were detected at any location during these five monitoring events.

3.3 Aldehydes and Ketones

In order to obtain a continuous 24 hours of data, three separate gel collection tubes were sequentially exposed to ambient air for a period of approximately 8-hours each. Consequently there are three separate sample results for each location for each monitoring event.

Event #32, November 26/27, 2007:

Analytical results for aldehydes are summarized on the following page. Formaldehyde was detected above its PRG for three samples from the cell tower, three samples from the campground, and three samples from the wetland. Although acetaldehyde was detected at levels above its PRG at the cell tower by Method TO-15, it was quantified at this location by Method TO-11A at concentrations below the PRG. Although acetaldehyde was detected at levels above its PRG for three samples from the wetland by Method TO-11, it was not quantified at this location by Method TO-15. Analytical results are in Appendix A.

**Event #32: Aldehydes
Concentrations in ug/m3**

Aldehyde	PRG	School (Crosswind)			Cell Tower (Upwind)			Campground (Crosswind)			Wetland (Crosswind)		
		1	2	3	1	2	3	1	2	3	1	2	3
Formaldehyde	0.15	ND	ND	ND	1.3	2.5	0.79	0.96	0.92	0.63	4.6	4.2	4.6
Acetaldehyde TO-11A	0.87	ND	ND	ND	ND	0.71	0.29	ND	ND	ND	2.0	1.5	1.2
Acetaldehyde TO-15 (TIC)	0.87	ND			9.9			ND			ND		

Event #33, December 02/03, 2007:

Analytical results for aldehydes are summarized below. Formaldehyde was detected above its PRG for three samples from the cell tower, three samples from the campground, and three samples from the wetland. Although acetaldehyde was not detected at the cell tower by Method TO-11A, it was quantified at this location by Method TO-15 at a concentration exceeding the PRG. Although acetaldehyde was detected at the wetland by Method TO-11A at levels below its PRG, it was not quantified at this location by Method TO-15. Analytical results are in Appendix B.

**Event #33: Aldehydes
Concentrations in ug/m3**

Aldehyde	PRG	School (Crosswind)			Cell Tower (Downwind)			Campground (Crosswind)			Wetland (Upwind)		
		1	2	3	1	2	3	1	2	3	1	2	3
Formaldehyde	0.15	ND	ND	ND	0.46	0.63	0.41	0.29	0.22	0.26	1.0	2.0	4.0
Acetaldehyde TO-11A	0.87	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.50	0.67	0.75
Acetaldehyde TO-15 (TIC)	0.87	ND			13			ND			ND		

Event #34, December 08/09, 2007:

Analytical results for aldehydes are on the following page. Formaldehyde was detected above its PRG in one sample from the campground. Although acetaldehyde was detected at levels above its PRG at the campground by Method TO-15, it was quantified at this location by Method TO-11A at a concentration below the PRG. Although acetaldehyde was detected at levels above its PRG at the wetland by Method TO-15, it was not quantified at this location by Method TO-11A. Analytical results are in Appendix C.

**Event #34: Aldehydes
Concentrations in ug/m3**

Aldehyde	PRG	School (Crosswind)			Cell Tower (Upwind)			Campground (Crosswind)			Wetland (Downwind)		
		1	2	3	1	2	3	1	2	3	1	2	3
Formaldehyde	0.15	ND	ND	ND	ND	ND	ND	ND	ND	0.88	ND	ND	ND
Acetaldehyde TO-11A	0.87	ND	ND	ND	ND	ND	ND	ND	ND	0.63	ND	ND	ND
Acetaldehyde TO-15 (TIC)	0.87	ND			ND			4.5			5.4		

Event #35, December 14/15, 2007:

Analytical results for aldehydes are summarized below. Formaldehyde was detected above its PRG in one sample from the school, two samples from the cell tower, and one sample from the campground. Although acetaldehyde was detected at levels above its PRG at the campground by Method TO-15, it was not quantified at this location by Method TO-11A. Although acetaldehyde was detected at levels below its PRG at the cell tower by Method TO-11A, it was not quantified at this location by Method TO-15. Analytical results are in Appendix D.

**Event #35: Aldehydes
Concentrations in ug/m3**

Aldehyde	PRG	School (Crosswind)			Cell Tower (Downwind)			Campground (Crosswind)			Wetland (Upwind)		
		1	2	3	1	2	3	1	2	3	1	2	3
Formaldehyde	0.15	ND	ND	0.26	ND	1.0	2.3	ND	ND	0.26	ND	ND	ND
Acetaldehyde TO-11A	0.87	ND	ND	ND	ND	0.23	0.54	ND	ND	ND	ND	ND	ND
Acetaldehyde TO-15 (TIC)	0.87	ND			ND			7.6			ND		

Event #36, December 20/21, 2007:

Analytical results for aldehydes are summarized on the following page. Formaldehyde was detected above its PRG in one sample from the cell tower, one sample from the campground, and one sample from the wetland. Although acetaldehyde was detected at levels above its PRG at the cell tower by Method TO-15, it was quantified at this location at levels below its PRG by Method TO-11A. Although acetaldehyde was detected at levels above its PRG at the wetland by Method TO-15, it was not quantified at this location by Method TO-11A. Analytical results are in Appendix E.

**Event #36: Aldehydes
Concentrations in ug/m3**

Aldehyde	PRG	School (Crosswind)			Cell Tower (Downwind)			Campground (Crosswind)			Wetland (Upwind)		
		1	2	3	1	2	3	1	2	3	1	2	3
Formaldehyde	0.15	ND	ND	ND	ND	ND	2.5	ND	ND	5.0	ND	ND	0.32
Acetaldehyde TO-11A	0.87	ND	ND	ND	ND	ND	0.79	ND	ND	1.3	ND	ND	ND
Acetaldehyde TO-15 (TIC)	0.87	ND			10			ND			4.1		

3.4 Hydrogen Chloride and Hydrogen Fluoride

As with the aldehyde and ketone samples, three separate gel collection tubes were sequentially exposed to ambient air for a period of approximately 8-hours each. Consequently there are three separate sample results for each location for each monitoring event. The concentrations of HF and HCl in the air are quantified based on the mass of fluoride and chloride ion captured on the gel inside the tubes and the volume of air that was passed through the tube.

Analytical results for sampling events #32 through #36 are summarized below. All detected concentrations are very low, and were orders of magnitude below the PRG for HCl.

Event #32, November 26/27, 2007:
Analytical results are in Appendix A.

**Event #32: Hydrogen Fluoride and Hydrogen Chloride
Concentrations in ug/m3**

Compound	PRG	School (Crosswind)			Cell Tower (Upwind)			Campground (Crosswind)			Wetland (Crosswind)		
		1	2	3	1	2	3	1	2	3	1	2	3
HF	NA	ND	ND	ND	ND	ND	5.0	ND	ND	ND	12	12	9.0
HCl	210	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Event #33, December 02/03, 2007:
Analytical results are in Appendix B.

**Event #33: Hydrogen Fluoride and Hydrogen Chloride
Concentrations in ug/m3**

Compound	PRG	School (Crosswind)			Cell Tower (Downwind)			Campground (Crosswind)			Wetland (Upwind)		
		1	2	3	1	2	3	1	2	3	1	2	3
HF	NA	ND	ND	1.3	ND	1.3	1.4	1.4	1.8	1.3	3.0	2.5	5.0
HCl	210	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Event #34, December 08/09, 2007:
Analytical results are in Appendix C.

**Event #34: Hydrogen Fluoride and Hydrogen Chloride
Concentrations in ug/m3**

Compound	PRG	School (Crosswind)			Cell Tower (Upwind)			Campground (Crosswind)			Wetland (Downwind)		
		1	2	3	1	2	3	1	2	3	1	2	3
HF	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0
HCl	210	ND	ND	ND	ND	ND	6.0*	ND	ND	ND	ND	ND	ND

*Denotes breakthrough from the front to the back of the sorbent tube.

Event #35, December 14/15, 2007:
Analytical results are in Appendix D.

**Event #35: Hydrogen Fluoride and Hydrogen Chloride
Concentrations in ug/m3**

Compound	PRG	School (Crosswind)			Cell Tower (Downwind)			Campground (Crosswind)			Wetland (Upwind)		
		1	2	3	1	2	3	1	2	3	1	2	3
HF	NA	ND	ND	ND	ND	1.9	5.8	ND	ND	ND	ND	ND	ND
HCl	210	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5*	ND	1.2*

*Denotes breakthrough from the front to the back of the sorbent tube.

Event #36, December 20/21, 2007:
Analytical results are in Appendix E.

**Event #36: Hydrogen Fluoride and Hydrogen Chloride
Concentrations in ug/m3**

Compound	PRG	School (Crosswind)			Cell Tower (Downwind)			Campground (Crosswind)			Wetland (Upwind)		
		1	2	3	1	2	3	1	2	3	1	2	3
HF	NA	3.2	ND	ND	ND	ND	4.2	ND	ND	8.3	ND	ND	ND
HCl	210	ND	ND	5.9*	ND	ND	ND	ND	69	ND	ND	ND	ND

*Denotes breakthrough from the front to the back of the sorbent tube.

4.0 SUMMARY

The results of monitoring events #32 through 36 were consistent with previous findings. As occurred on several past occasions, high levels of benzene were reported from all monitoring stations during event #32 and from the cell tower location during event #33. The cell tower would have been in the prevailing downwind direction from the landfill during event #33 on December 02/03. However, the clearly aberrant nature of the analytical result for benzene on these days and the fact that randomly high results were reported for benzene and a few other parameters during other sampling events when the cell tower was not directly downwind suggests that these findings are not likely to be attributable to the landfill. Although not as high, the concentrations of benzene reported from all locations during events #35 and 36 were also higher than what would be expected based on Ohio background, but there was no apparent relationship to prevailing wind direction. High concentrations of acetonitrile (TIC) were reported from the cell tower location during events #32 and 35. During event #32 the cell tower was in the prevailing upwind direction and during event #35 it was in the prevailing downwind direction relative to the landfill. Relative wind direction did not appear to be related to the findings.

There does not appear to be a clear pattern associating the ambient air monitoring results with the landfill or any other currently identified source. We suspect that the summa canisters received from the laboratory had not been thoroughly cleaned and/or that these common solvents were introduced into the samples during handling and/or laboratory analysis.

Given that the sporadic high concentrations of benzene that have been reported are almost certainly anomalies related to sampling and/or analysis, we hold to our opinion that the ambient air quality (as represented by our ongoing monitoring) does not present an unacceptable risk to members of the communities surrounding the landfill.

**Countywide Recycling & Disposal Facility
Ambient Air Monitoring
Monthly Report #8**

January 20, 2008

EPA Method TO-15 SUMMARY TABLES

Countywide Recycling & Disposal Facility

EPA Method TO-15 Modified: Volatile Organic Compounds

Table 1: Event #32 November 26/27, 2007

Analyte	PRG	Monitoring Location			
		School (Crosswind)	Cell Tower (Upwind)	Campground (Crosswind)	Wetland (Crosswind)
All results in ug/m3					
Method TO-15 Modified					
Acetone	3300	ND	ND	38	ND
Benzene	0.25	58	53	71	36
tert-Butyl alcohol	NA	8.6	40	60	24
Carbon disulfide	730	ND	ND	1.6	ND
Chloromethane	95	ND	2.2	2.2	2.2
Dichlorodifluoromethane	210	ND	6.9	6.8	6.5
Ethylbenzene	1100	2.6	8.6	7.6	8.6
4-Ethyltoulene	NA	ND	3.3	3.1	3.4
Heptane	NA	ND	3.6	4.1	3.7
Hexane	210	2.9	4.3	5.0	4.2
Isopropyl alcohol	NA	1.8	4.3	3.2	5.1
Methyl ethyl ketone	5100	4.4	14	12	13
Methyl isobutyl ketone	3100	ND	3.8	3.7	3.4
Methylene chloride	4.1	ND	3.1	ND	3.0
Toluene	400	12	31	34	29
Trichlorofluoromethane	730	ND	3.0	2.9	ND
1,2,4-Trimethylbenzene	6.2	ND	10	9.2	13
1,3,5-Trimethylbenzene	6.2	ND	3.0	2.7	3.8
2,2,4-Trimethylpentane	NA	ND	ND	2.6	ND
m/p-Xylene	110	9.0	34	30	36
o-Xylene	110	3.2	13	11	15
Tentatively Identified Compounds					
1,2-Propadiene	NA	ND	ND	ND	1139
Pentanal	NA	ND	ND	ND	14
Hexanal	NA	ND	ND	ND	14
.alpha. -Piene	NA	ND	ND	ND	38
Acetaldehyde	0.87	ND	9.9	ND	ND
1-Butene	NA	ND	7.3	ND	ND
Acetonitrile	62	8.7	126	39	ND
Butanal	NA	7.4	8.2	9.7	ND
tetrahydro-Furan	NA	ND	8.5	10	ND
Hexanal	NA	ND	11	10	ND
hexamethyl-Cyclotrisiloxane	NA	ND	39	53	ND
1R .alpha. -Piene	NA	ND	117	48	ND
.beta. -Pinene	NA	ND	17	ND	ND
Butane	NA	5.2	ND	ND	ND
Ethanol	NA	2.6	ND	5.5	ND
2-methyl-Butane	NA	20	ND	ND	ND
Pentane	NA	4.7	ND	ND	ND
2-ethoxy-2-methyl-Propane	NA	7.1	ND	ND	ND
3-Pentanone	NA	4.9	ND	ND	ND

Analyte	Monitoring Location				
	PRG	School (Crosswind)	Cell Tower (Upwind)	Campground (Crosswind)	Wetland (Crosswind)
All results in ug/m3					
Ethyl fluoroformate	NA	14	ND	ND	ND
Carbonyl sulfide	NA	ND	ND	15	ND
(E)-2-Butene	NA	ND	ND	7.8	ND
2,2 dimethyl-Propanal	NA	ND	ND	11	ND
ND = Not Detected					
NA = Not Availabe					
Shading indicates result exceeds PRG					

Countywide Recycling & Disposal Facility

EPA Method TO-15 Modified: Volatile Organic Compounds

Table 2: Event #33 December 02/03, 2007

Analyte	PRG	Monitoring Location			
		School (Crosswind)	Cell Tower (Downwind)	Campground (Crosswind)	Wetland (Upwind)
All results in ug/m3					
Method TO-15 Modified					
Acetone	3300	ND	39	ND	4.3
Benzene	0.25	2.1	170	ND	ND
tert-Butyl alcohol	NA	ND	65	ND	ND
Chloromethane	95	1.7	2.4	2.1	ND
Dichlorodifluoromethane	210	6.1	6.5	6.0	ND
Ethylbenzene	1100	4.3	6.9	ND	ND
4-Ethyltouene	NA	ND	3.1	ND	ND
Heptane	NA	ND	3.4	ND	ND
Hexane	210	ND	3.2	ND	ND
Methyl ethyl ketone	5100	ND	14	ND	ND
Methyl isobutyl ketone	3100	ND	3.3	ND	ND
Methylene chloride	4.1	3.2	ND	ND	ND
Toluene	400	3.4	27	ND	ND
Trichlorofluoromethane	730	2.9	3.0	ND	ND
1,2,4-Trimethylbenzene	6.2	4.2	9.7	ND	ND
1,3,5-Trimethylbenzene	6.2	ND	3.1	ND	ND
m/p-Xylene	110	20	28	ND	6.0
o-Xylene	110	10	11	ND	3.0
Tentatively Identified Compounds					
3-Butenamide	NA	3.2	ND	2.7	ND
Isobutane	NA	2.4	ND	ND	ND
Butane	NA	3.6	ND	2.4	ND
2-methyl-Butane	NA	9.1	ND	5.6	ND
Pentane	NA	3.5	ND	ND	ND
C2,4,6-Cycloheptarien-1-one,3,5	NA	20	ND	ND	ND
Carbonyl sulfide	NA	ND	14	ND	ND
Acetaldehyde	0.87	ND	13	ND	ND
1-Butene	NA	ND	25	ND	ND
Ethanol	NA	ND	6.0	ND	ND
Acetonitrile	62	ND	34	ND	ND
Butanal	NA	ND	20	ND	ND
Hexanal	NA	ND	13	ND	ND
hexamethyl-Cyclotrisiloxane	NA	ND	50	ND	ND
2-Heptanone	NA	ND	26	ND	ND
.alpha. -Piene	NA	ND	47	ND	ND
ND = Not Detected					
NA = Not Available					
Shading indicates result exceeds PRG					

Countywide Recycling & Disposal Facility
EPA Method TO-15 Modified: Volatile Organic Compounds
Table 3: Event #34 December 08/09, 2007

Analyte	PRG	Monitoring Location			
		School (Crosswind)	Cell Tower (Upwind)	Campground (Crosswind)	Wetland (Downwind)
All results in ug/m3					
Method TO-15 Modified					
Benzene	0.25	4.4	1.6	2.5	2.8
tert-Butyl alcohol	NA	2.1	ND	6.9	7.7
Chloromethane	95	1.8	1.9	1.9	ND
Dichlorodifluoromethane	210	6.7	6.6	6.7	7.8
Ethylbenzene	1100	3.7	ND	ND	ND
Hexane	210	4.6	ND	ND	1.8
Isopropyl alcohol	NA	1.7	ND	ND	ND
Methyl ethyl ketone	5100	1.5	ND	ND	ND
Toluene	400	18	ND	4.7	4.8
Trichlorofluoromethane	730	ND	ND	ND	3.7
1,2,4-Trimethylbenzene	6.2	5.6	ND	ND	ND
2,2,4-Trimethylpentane	NA	2.8	ND	ND	ND
m/p-Xylene	110	14	ND	4.7	4.9
o-Xylene	110	5.7	ND	ND	ND
Tentatively Identified Compounds					
Isobutane	NA	2.8	2.8	3.1	3.3
1-Butene	NA	ND	3.9	ND	ND
(Z)-2-Butene	NA	10	ND	ND	ND
Butane	NA	11	7.4	12	15
2-methyl-Butane	NA	19	5.6	5.6	18
1-Pentene	NA	3.4	ND	6.0	7.2
Pentane	NA	7.1	ND	5.6	6.8
2-methyl-Pentane	NA	8.1	ND	ND	ND
3-methyl-Pentane	NA	4.2	ND	ND	ND
Acetaldehyde	0.87	ND	ND	4.5	5.4
2-methyl-1-Propene	NA	ND	ND	23	27
Ethanol	NA	ND	ND	2.1	2.1
Benzoic acid	15000	ND	ND	12	ND
Butanal	NA	ND	20	ND	ND
hexamethyl-Cyclotrisiloxane	NA	ND	12	ND	ND
ND = Not Detected					
NA = Not Available					
Shading indicates result exceeds PRG					

Countywide Recycling & Disposal Facility

EPA Method TO-15 Modified: Volatile Organic Compounds

Table 4: Event #35 December 14/15, 2007

Analyte	PRG	Monitoring Location			
		School (Crosswind)	Cell Tower (Downwind)	Campground (Crosswind)	Wetland (Upwind)
All results in ug/m3					
Method TO-15 Modified					
Acetone	3300	47	ND	57	ND
Benzene	0.25	7.5	12	11	30
tert-Butyl alcohol	NA	14	ND	100	ND
Carbon disulfide	730	ND	ND	ND	2.2
Chloromethane	95	1.8	1.1	2.2	ND
Cyclohexane	6200	ND	ND	ND	14
Dichlorodifluoromethane	210	5.4	ND	6.3	ND
Ethylbenzene	210	ND	4.3	ND	22
4-Ethyltoluene	NA	ND	ND	ND	4.6
Heptane	NA	2.3	ND	2.3	12
Hexane	210	1.9	ND	ND	87
Methyl ethyl ketone	5100	9.6	5.0	9.1	47
Methyl isobutyl ketone	3100	ND	ND	ND	3.9
Methylene chloride	4.1	ND	ND	ND	133
Styrene	1100	ND	ND	ND	9.2
Toluene	400	11	14	9.0	126
1,2,4-Trimethylbenzene	6.2	4.3	8.7	3.0	20
1,3,5-Trimethylbenzene	6.2	ND	ND	ND	5.3
2,2,4-Trimethylpentane	NA	ND	ND	ND	58
m/p-Xylene	110	7.3	18	5.7	68
o-Xylene	110	2.2	7.2	ND	25
Tentatively Identified Compounds					
2-methyl-1-Propene	NA	26	ND	27	ND
Ethanol	NA	8.8	ND	8.1	55
Acetonitrile	62	14	545	11	ND
1-Pentene	NA	10	ND	12	ND
Pentane	NA	5.6	ND	5.3	ND
3-Pentanol	NA	10	ND	ND	ND
2-Pentanone	NA	14	11	ND	ND
3-methyl-Butanol	NA	4.2	ND	ND	ND
hexamethyl-Cyclotrisiloxane	NA	18	ND	ND	ND
1R .alpha. -Piene	NA	8.9	27	ND	ND
Acetaldehyde	0.87	ND	ND	7.6	ND
Butanal	NA	ND	ND	15	ND
2,2-dimethyl-Propanal	NA	ND	ND	9.5	ND
1-Hexene	NA	ND	ND	6.2	ND
1-Heptene	NA	ND	ND	6.4	ND
3-methylene-Heptane	NA	ND	ND	12	ND
Isobutane	NA	ND	ND	ND	12
2-methyl-Butane	NA	ND	ND	ND	147
3,2-dimethyl-Oxirane	NA	ND	ND	ND	374

2-methyl-Pentane	NA	ND	ND	ND	14
3-methyl-Pentane	NA	ND	ND	ND	15
3-methyl-Hexane	NA	ND	ND	ND	18
2,4-dimethyl-Hexane	NA	ND	ND	ND	21
2,3,4-trimethyl-Pentane	NA	ND	ND	ND	21
Decane	NA	ND	ND	ND	37
Undecane	NA	ND	ND	ND	42
2-ethoxyl-2-methyl-Propane	NA	ND	25	ND	ND
Hexanal	NA	ND	8.6	ND	ND
1-ethyl-3-methyl-Benzene	NA	ND	7.9	ND	ND
heptane,6,6-dimethyl-Bicyclo[3.1.1]	NA	ND	7.8	ND	ND
ND = Not Detected					
NA = Not Available					
Shading indicates result exceeds PRG					

Countywide Recycling & Disposal Facility					
EPA Method TO-15 Modified: Volatile Organic Compounds					
Table 5: Event #36 December 20/21, 2007					
Analyte	Monitoring Location				
	PRG	School (Crosswind)	Cell Tower (Downwind)	Campground (Crosswind)	Wetland (Upwind)
All results in ug/m3					
Method TO-15 Modified					
Acetone	3300	ND	58	ND	ND
Benzene	0.25	6.1	11	12	4.3
tert-Butyl alcohol	NA	12	84	8.2	59
Chloromethane	95	2.4	1.9	ND	ND
Dichlorodifluoromethane	210	6.1	5.3	4.8	4.4
Ethylbenzene	210	ND	2.9	2.2	ND
Heptane	NA	3.0	3.4	ND	2.9
Hexane	210	3.4	2.4	2.1	2.7
Methyl ethyl ketone	5100	9.7	10	5.6	4.8
Methylene chloride	4.1	ND	2.3	ND	ND
Toluene	400	11	9.5	9.5	8.0
1,2,4-Trimethylbenzene	6.2	3.1	6.5	4.3	ND
m/p-Xylene	110	6.3	13	8.3	4.0
o-Xylene	110	ND	6.2	3.2	ND
Tentatively Identified Compounds					
Isobutane	NA	11	ND	ND	3.1
2-methyl-1-Propene	NA	19	47	ND	15
Butane	NA	17	ND	ND	10
Ethanol	NA	4.1	5.6	ND	ND
Acetonitrile	62	12	18	ND	16
2-methyl-Butane	NA	44	ND	ND	27
1-Pentene	NA	9.2	14	ND	8.3
Pentane	NA	9.1	8	ND	6.8
2-Pentanone	NA	17	ND	ND	ND
3-methyl-Butanol	NA	5.3	ND	ND	ND
1R .alpha. -Piene	NA	8.3	ND	ND	ND
1-Propyne	NA	ND	ND	699	ND
1S- .alpha. -Piene	NA	ND	ND	13	ND
Benzoic acid	15000	ND	38	38	ND
Eicosane	NA	ND	ND	27	ND
Acetaldehyde	0.87	ND	10	ND	4.1
2-methyl-Butane	NA	ND	ND	ND	ND
Butanal	NA	ND	16	ND	11
2,2-dimethyl-Propanal	NA	ND	10	ND	7.0
3-methylene-Heptane	NA	ND	ND	ND	6.9
1,2,4-trimethyl-Cyclopentane	NA	ND	11	ND	ND
Limonene	NA	ND	61	ND	ND
ND = Not Detected					
NA = Not Available					
Shading indicates result exceeds PRG					