

**Countywide Recycling & Disposal Facility
Ambient Air Monitoring
Monthly Report #10
March 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
Countywide Recycling & Disposal Facility
3619 Gracemont Street SW
East Sparta, Ohio 44262**

Prepared by
Lawhon & Associates, Inc.
975 Eastwind Drive, Suite 190
Westerville, OH 43081

**Countywide Recycling & Disposal Facility
Ambient Air Monitoring
Monthly Report #10
March 20, 2008
Monitoring Events #42 through 45**

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 #42: Monday January 28 to Tuesday January 29.
- Event #43: Sunday February 3 to Monday February 4.
- Event #44: Saturday February 9 to Sunday February 10.
- Event #45: Friday February 15 to Saturday February 16.

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. A sample was not collected at the wetland for Event #44 (2/9) due to heavy flooding and washed out roads. Starting on Event #45 (2/15) the wetland unit was moved to east of the landfill near floodgates located on Gracemont. 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 #42, Monday/Tuesday January 28/29, 2008:

Average temperature in degrees F: 28, Max. 45, Min. 10

Winds were calm at 3 mph out of the S/SE.

Average relative humidity 75% with 0.04 in of precipitation recorded.

Complaints: Three complaints from travelers occurred at 9:42 am, 5:36 pm, and 6:51 pm at Interstate 77 North, between mile markers #96 and #97. A complaint from a resident occurred at 2:54 pm at Haut Street between Sherman Church Avenue and Downing Street. Pump, pipeline, temporary cap, and Flare # 4 maintenance and pipe maintenance were potentially odor-causing activities noted on the Daily Odor Monitoring Summary.

Event #43, Sunday/Monday February 03/04, 2008:

Average temperature in degrees F: 28, Max. 33, Min. 23

Winds were calm 6 mph with max gusts at 16 mph out of the S.

Average relative humidity 85% with no precipitation recorded.
Complaints: There were no odor complaints during this time.

Event #44: Saturday/Sunday February 9/10, 2008:

Average temperature in degrees F: 42, Max. 48, Min. 36
Winds were 4 mph with max gusts at 32 mph out of the SSW.
Average relative humidity 87% with 0.04 in of precipitation recorded.
Complaints: A complaint from a resident occurred at 8:59 am at 6948 Beth Avenue in Navarre. A complaint from a resident occurred at 6:48 pm Sherman Church Avenue, north of the Hudson Street Intersection. Pump and #4 Flare maintenance were potentially odor-causing activities noted on the Daily Odor Monitoring Summary.

Event #45: Friday/Saturday February 15/16, 2008:

Average temperature in degrees F: 28, Max. 33, Min. 23
Winds were 10 mph with max gusts at 24 mph out of the W.
Average relative humidity was 78% with no precipitation recorded.
Complaints: There were no odor complaints during this 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 #42, January 28/29, 2008:

Analytical results for Method TO-15 for Event #42 are summarized in Table 1 and provided in Appendix A. Four compounds were measured at levels above their respective PRG.

Event #42: VOCs Detected Above PRGs
Concentrations in ug/m3

Compound	PRG	School (Crosswind)	Cell Tower (Downwind)	Campground (Crosswind)	Wetland (Crosswind)
Benzene	0.25	4.7	3.3	19	1.8
1,2,4- Trichlorobenzene	3.7	6.8	ND	ND	ND
1,2,4- Trimethylbenzene	6.2	6.4	6.8	ND	ND
Acetaldehyde (TIC)	0.87	22	18	14	22

Event #43, February 03/04, 2008:

Analytical results for Method TO-15 for Event #43 are summarized in Table 2 and provided in Appendix B. Five compounds were measured at levels above their respective PRG.

Event #43: VOCs Detected Above PRGs
Concentrations in ug/m3

Compound	PRG	School (Upwind)	Cell Tower (Crosswind)	Campground (Downwind)	Wetland (Crosswind)
Benzene	0.25	.83	2.0	ND	ND
Methylene chloride	4.1	ND	ND	ND	169 D
Acetaldehyde (TIC)	0.87	3.8	ND	3.6	ND
Ethylene Oxide (TIC)	0.019	ND	5.8	ND	ND
Tetrahydrofuran (TIC)	0.99	ND	ND	ND	2.9

The analytical result for methylene chloride indicates that the sample was diluted prior to analysis.

Event #44, February 09/10, 2008:

Analytical results for Method TO-15 for Event #44 are summarized in Table 3 and provided in Appendix C. Four compounds were measured at levels above their respective PRG.

**Event #44: VOCs Detected Above PRGs
Concentrations in ug/m3**

Compound	PRG	School (Crosswind)	Cell Tower (Upwind)	Campground (Crosswind)	Wetland (Crosswind)
Benzene	0.25	2.0	3.2	4.3	NS
Methylene Chloride	4.1	17	ND	7.3	NS
1,2,4- Trimethylbenzene	6.2	3.6	6.1	10	NS
Acetaldehyde (TIC)	0.87	2.2	10	16	NS

NS: Not Sampled. The wetland monitoring location was flooded and was not accessible.

Event #45, February 15/16, 2008:

Analytical results for Method TO-15 for Event #45 are summarized in Table 4 and provided in Appendix D. Three compounds were measured at levels above their respective PRG.

**Event #45: VOCs Detected Above PRGs
Concentrations in ug/m3**

Compound	PRG	School (Crosswind)	Cell Tower (Upwind)	Campground (Crosswind)	Wetland (Downwind)
Benzene	0.25	18	7.8	6.7	6.2
Methylene chloride	4.1	3.7	72	ND	ND
Acetaldehyde (TIC)	0.87	11	ND	23	6.5

3.2 Sulfur Compounds

Carbonyl sulfide was detected as a TIC with Method TO-15 for the wetland on Event #42 (1/28) and at the cell tower and campground on Event #44 (2/9). There is no PRG associated with carbonyl sulfide. No other sulfur-containing compounds were detected.

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 #42, January 28/29, 2008:

No carbonyl compounds were present above detection limits of EPA Method TO-11A in any of the samples collected during this event. Analytical results are in Appendix A.

Event #43, February 03/04 2008:

No carbonyl compounds were present above detection limits of EPA Method TO-11A in any of the samples collected during this event. As indicated previously, acetaldehyde was reported as a TIC by Method TO-15 at the school and campground locations. Analytical results are in Appendix B.

Event #44, February 09/10 2008:

No carbonyl compounds were present above detection limits of EPA Method TO-11A in any of the samples collected during this event. As indicated previously, acetaldehyde was reported as a TIC by Method TO-15 at the school, cell tower and campground locations. No samples were obtained from the wetland because this location was flooded and inaccessible. Analytical results are in Appendix C.

Event #45, February 15/16, 2008:

No carbonyl compounds were present above detection limits of EPA Method TO-11A in any of the samples collected during this event. Acetaldehyde was reported as a TIC by Method TO-15 at the school, campground and wetland locations. Analytical results are in Appendix D.

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 #42 through #45 are summarized below. All detected concentrations were very low, and were orders of magnitude below the PRG for HCl.

Event #42, January 28/29, 2008:

Neither hydrogen fluoride nor hydrogen chloride was detected in any of the samples from the school and the cell tower. HF was detected in one sample from the campground and HCl was detected in one of the three samples from the wetland. Analytical results are in Appendix A.

**Event #42: Hydrogen Fluoride and Hydrogen Chloride
Concentrations in ug/m3**

Compound	PRG	School (Crosswind)			Cell Tower (Downwind)			Campground (Crosswind)			Wetland (Crosswind)		
		1	2	3	1	2	3	1	2	3	1	2	3
HF	NA	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND
HCl	210	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4

Event #43, February 03/04, 2008:

Hydrogen fluoride was detected at a concentration of 2.0 ug/m3 in the second of the three tubes collected from the cell tower location. Neither hydrogen fluoride nor hydrogen chloride was detected at any of the other locations during this monitoring event. Analytical results are in Appendix B.

Event #44, February 09/10, 2008:

Neither hydrogen fluoride nor hydrogen chloride was present above detection limits in any of the samples with the exception of HCl in the first tube from the school and the second tube from the campground. The laboratory indicated that the HCL was found only on the back half of the sorbent tube, which strongly suggested that this finding was not due to the presence of HCL in either the ambient air or the laboratory analytical procedures. Analytical results are in Appendix C.

**Event #44: 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	1.3	ND	ND	ND	ND	ND	ND	ND
HCl	210	129*	ND	ND	ND	ND	ND	ND	114*	ND	ND	ND	ND

* All of the hydrogen chloride was found in the back half of the sorbent tube.

Event #45, February 15/16 2008:

No hydrogen fluoride was present above detection limits in any of the samples. Hydrogen chloride was found in the third tube from the school and the first tube from the campground. As indicated below, the laboratory also found HCl in the trip blank for this event-suggesting that there may have been pre-existing contamination in the sample tubes. Analytical results are in Appendix D.

**Event #45: 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	ND
HCl	210	ND	ND	4.6*	ND	ND	ND	.84	ND	ND	ND	ND	ND

*Denotes breakthrough from front to back of tube.

** HCl was found in the trip blank at a concentration of 9.4 ug/m3. This may be due to pre-existing contamination of the sorbent media in the tubes.

4.0 SUMMARY

Due to heavy flooding, no samples could be collected from the wetland monitoring site during Event #44 (2/9). Because flooding occurs fairly frequently in low-lying areas around the landfill, an alternate location was chosen for the wetland site starting with Event #45 (2/15). The new monitoring location is on higher ground, but still on the eastern boundary of the landfill near floodgates located on Gracemont slightly off the Tri-County Horse-Trail. It is anticipated that this will be the sampling location for the duration of the monitoring program.

The results for monitoring events #42 through #45 are consistent with previous results in that low levels of various VOCs, aldehydes, hydrogen fluoride and hydrogen chloride were detected from all four sample locations. A single high result for methylene chloride was reported from the wetland location during Monitoring Event #43. Although methylene chloride was detected on other occasions and at other locations at concentrations above the Region 9 PRG, the detected concentrations were relatively low. Likely spurious high concentrations of methylene chloride have been sporadically reported throughout the monitoring program and do not appear related to any specific ambient source.

Benzene was detected at concentrations exceeding the conservative Region 9 PRG at all locations (except for the campground and wetland during Event #43). During all four sampling events, the highest concentrations of benzene were in the (presumed) prevailing crosswind direction relative to the landfill. There was no pattern as to the location of the highest concentration of benzene with regard to prevailing wind direction relative to the landfill.

As discussed in previous reports, the origin of the benzene concentrations is not known and no clear pattern has emerged. The February 7, 2008 DFFO mandates that a second set of summa canisters be co-located with the summa canisters collected during two of the regularly scheduled monitoring events and submitted to the Ohio EPA laboratory for Method TO-15 modified analysis to help determine if the benzene is an artifact of the sampling and analysis process. The two co-located sampling events specified by the

DFFO were completed prior to the end of February as mandated, but the analytical results have not yet been received and so cannot be included in this Monthly Report.

The sporadic detections of benzene that have been reported may be anomalies related to sampling and/or analysis. Thus far the ambient air monitoring conducted pursuant to the DFFO has not provided any useful information about potential sources of benzene or the dispersion of this compound in the community surrounding Countywide. The findings of nine months of sampling do not indicate consistent, ongoing exposures to high levels of benzene. Consequently, it is 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

Address: _____ Date: _____

City: _____

1. Ambient air quality is good on the facility: Yes No

2. There are no odors on the facility: Yes No

3. There are no visible emissions on the facility: Yes No

4. There are no noise complaints on the facility: Yes No

Countywide Recycling & Disposal Facility Ambient Air Monitoring Monthly Report #10

March 20, 2008

TABLE SUMMARY

[Handwritten signature]

EPA Method TO-15 SUMMARY TABLES

Location:

Countywide Recycling & Disposal Facility (CRDF) is located at 10000 S. 100th St., Kent, WA 98032. The facility is a large industrial site that processes and recycles various types of waste materials. The facility is surrounded by residential areas and is subject to ambient air monitoring under EPA Method TO-15.

The purpose of this report is to provide a summary of the ambient air monitoring data collected at the CRDF facility during the month of March 2008. The data is presented in the following tables, which show the results of the monitoring for various pollutants. The data is presented in the following tables, which show the results of the monitoring for various pollutants.

TABLE 1: SUMMARY OF MONITORING DATA FOR OZONE

TABLE 2: SUMMARY OF MONITORING DATA FOR PARTICULATE MATTER (PM10)

TABLE 3: SUMMARY OF MONITORING DATA FOR SULFUR DIOXIDE (SO2)

TABLE 4: SUMMARY OF MONITORING DATA FOR NITROGEN DIOXIDE (NO2)

TABLE 5: SUMMARY OF MONITORING DATA FOR CARBON MONOXIDE (CO)

[Handwritten signature]

Countywide Recycling & Disposal Facility					
EPA Method TO-15 Modified: Volatile Organic Compounds					
Table 1: Event #42 January 28, 2008					
Analyte	Monitoring Location				
	PRG	School (Crosswind)	Cell Tower (Downwind)	Campground (Crosswind)	Wetland (Crosswind)
All results in ug/m3					
Method TO-15 Modified					
Acetone	3300	101	42	ND	32
Benzene	0.25	4.7	3.3	19	1.8
tert-Butyl alcohol	NA	24	50	5.7	18
Chloromethane	95	2.8	2.3	2.8	3.2
Cyclohexane	6200	ND	ND	ND	ND
Dichlorodifluoromethane	210	7.4	6.1	8	8
Ethylbenzene	1100	2.3	5.4	ND	ND
4-Ethyltoluene	NA	ND	ND	ND	ND
Heptane	NA	5.8	5.7	3.2	ND
Hexachlorobutadiene	NA	13	ND	ND	ND
Hexane	210	7	2	1.9	ND
Isopropyl alcohol	NA	3	ND	ND	ND
Methyl ethyl ketone	5100	13	9	6.7	2.8
Methyl isobutyl ketone	3100	6.6	ND	ND	ND
Methylene chloride	4.1	4.6	3.1	2.9	ND
Toluene	400	15	11	7.4	2.8
1,2,4-Trichlorobenzene	3.7	6.8	ND	ND	ND
Trichlorofluoromethane	730	2.9	ND	3.1	3
1,2,4-Trimethylbenzene	6.2	6.4	6.8	ND	ND
1,3,5-Trimethylbenzene	6.2	2.8	2.6	ND	ND
2,2,4-Trimethylpentane	NA	2.7	ND	ND	ND
m/p-Xylene	110	8.0	25	4.9	2.6
o-Xylene	110	2.7	13	ND	ND
Tentatively Identified Compounds					
Acetaldehyde	0.87	22	18	14	22
Acetonitrile	62	6.5	6	5.2	ND
Butanal	NA	ND	10	ND	2.5
3-methyl butanal	NA	ND	ND	5.6	ND
Butane	NA	7.4	ND	5.7	5.9
2-methyl-Butane	NA	ND	ND	16	ND
3-Butanoic acid	NA	ND	ND	13	ND
Carbonyl sulfide	NA	ND	ND	ND	16
Ethanol	NA	ND	ND	ND	1.4
Heptane, 3-methylene	NA	ND	19	ND	ND
1-Heptene	NA	ND	12	ND	ND
Hexanal	NA	9	ND	6.1	4.5
Pentane	NA	9.4	ND	5	5.3
Pentane,2-methyl	NA	8.8	ND	ND	ND
1 Pentene	NA	ND	8.9	ND	ND
2-Pentene	NA	ND	ND	ND	7.2
1R -alpha -Pinene	NA	22	14	8.9	ND

Analyte	Monitoring Location				
	PRG	School (Crosswind)	Cell Tower (Downwind)	Campground (Crosswind)	Wetland (Crosswind)
All results in ug/m3					
Propanal, 2,2-dimethyl	NA	ND	7	ND	ND
Propane,2-methyl-2-nitro	NA	ND	ND	ND	3.2
Propene	NA	15	10	ND	ND
1-Propene-2 methyl	NA	52	43	20	71
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 #43 February 03/04, 2008					
Analyte	Monitoring Location				
	PRG	School (Upwind)	Cell Tower (Crosswind)	Campground (Downwind)	Wetland (Crosswind)
All results in ug/m3					
Method TO-15 Modified					
Acetone	3300	ND	31	21	31
Benzene	0.25	0.83	2	ND	ND
tert-Butyl alcohol	NA	ND	29	19	ND
Chloromethane	95	ND	2.4	1.5	ND
Dichlorodifluoromethane	210	ND	6.3	4.1	ND
Heptane	NA	0.94	2.3	ND	ND
Hexane	210	1.9	ND	ND	ND
Methyl ethyl ketone	5100	1.5	4.9	3	ND
Methylene chloride	4.1	2	1.9	ND	169
Toluene	400	3.6	2.4	ND	ND
Trichlorofluoromethane	730	ND	ND	ND	4.1
m/p-Xylene	110	2.1	5.5	3.2	ND
o-Xylene	110	ND	3.2	ND	ND
Tentatively Identified Compounds					
Acetaldehyde	0.87	3.8	ND	3.6	ND
Acetonitrile	62	ND	ND	ND	11
Butanal	NA	ND	5.0	2.8	ND
2-Butanal, (E)-	NA	ND	ND	2.9	ND
Butane	NA	1.5	2.8	2.1	ND
2-methyl-Butane	NA	13	ND	ND	ND
Cyclopropanecarboxamide	NA	ND	6.3	ND	ND
Dodecane,2,5-dimethyl	NA	ND	ND	ND	7.7
Ethanol	NA	ND	ND	1	ND
Ethylene oxide	0.019	ND	5.8	ND	ND
Heptane,5-ethyl-2,2,3-trimethyl	NA	ND	ND	ND	4.7
Isobutane	NA	1.4	3.3	1.8	ND
Pentane	NA	3.8	3.5	2	ND
Pentane, 2-methyl	NA	3.3	ND	ND	ND
2-Pentene	NA	2.5	4.3	2.5	ND
1-Pentene, 2-methyl	NA	ND	2.8	ND	ND
2,2-dimethyl-Propanal	NA	ND	3.9	ND	ND
Propane,2-methyl-2-nitro	NA	ND	ND	2.7	ND
Propene	NA	3.5	ND	ND	ND
1-Propene-2-methyl	NA	17	17	10	ND
Tetrahydrofuran	0.99	ND	ND	ND	2.9
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 #44 February 09/10, 2008					
Analyte	Monitoring Location				
	PRG	School (Crosswind)	Cell Tower (Upwind)	Campground (Crosswind)	Wetland (Crosswind)
All results in ug/m3					
Method TO-15 Modified					
Acetone	3300	ND	55	91	NS
Benzene	0.25	2	3.2	4.3	NS
tert-Butyl alcohol	NA	ND	80	39	NS
Chloromethane	95	2.3	1.9	2.3	NS
Dichlorodifluoromethane	210	4.5	3.7	4.3	NS
Ethylbenzene	1100	ND	ND	2.4	NS
4-Ethyltoluene	NA	ND	ND	2.8	NS
Heptane	NA	ND	6.6	8.5	NS
Hexane	210	3.1	3.1	4.3	NS
Methyl ethyl ketone	5100	3.2	13	11	NS
Methylene chloride	4.1	17	ND	7.3	NS
Toluene	400	8.1	9.4	12	NS
Trichlorofluoromethane	730	3.3	ND	2.9	NS
1,2,4-Trimethylbenzene	6.2	3.6	6.1	10	NS
m/p-Xylene	110	5.5	7.3	9.6	NS
o-Xylene	110	ND	2.6	3.9	NS
Tentatively Identified Compounds					
Acetaldehyde	0.87	2.2	10	16	NS
Acetonitrile	62	ND	2.5	3.2	NS
Butanal	NA	ND	5.3	ND	NS
Butane	NA	4	ND	ND	NS
3-Butanoic acid	NA	6.3	ND	ND	NS
Butane, 2-methyl	NA	11	ND	ND	NS
Carbonyl sulfide	NA	ND	6.1	13	NS
Ethanol	NA	1.5	ND	ND	NS
Heptane, 3-methylene	NA	ND	7.8	ND	NS
1-Heptene	NA	ND	6	ND	NS
Hexanal	NA	ND	ND	8.6	NS
Isobutane	NA	2.4	ND	ND	NS
Pentane	NA	2.9	5.0	6.5	NS
1-Pentene	NA	ND	6.6	7.7	NS
2,2 dimethyl-Propanal	NA	ND	7	8.1	NS
2-Propanol,2-methyl	NA	ND	ND	11	NS
2-methyl-1-Propene	NA	11	26	43	NS
Pyrazine, (1-methylenethenyl)-	NA	12	ND	ND	NS
ND = Not Detected					
NA = Not Available					
NS = Not Sampled (monitoring location was flooded and not accessible)					
Shading indicates result exceeds PRG					

Countywide Recycling & Disposal Facility

EPA Method TO-15 Modified: Volatile Organic Compounds

Table 4: Event #45 February 15/16, 2008

Analyte	Monitoring Location				
	PRG	School (Crosswind)	Cell Tower (Upwind)	Campground (Crosswind)	Wetland (Downwind)
All results in ug/m3					
Method TO-15 Modified					
Acetone	3300	73	ND	127	56
Benzene	0.25	18	7.8	6.7	6.2
tert-Butyl alcohol	NA	44	5	91	22
Chloromethane	95	3.3	2.1	3.5	1.9
Dichlorodifluoromethane	210	5.9	4.5	4.9	3.6
Ethylbenzene	1100	ND	3.3	3.1	ND
Heptane	NA	2.5	2.6	17	ND
Hexane	210	3.1	4.6	5.3	2.2
Isopropyl alcohol	NA	11	14	ND	ND
Methyl ethyl ketone	5100	35	8.5	31.0	26
Methyl isobutyl ketone	3100	ND	ND	4.4	ND
Methylene chloride	4.1	3.7	72	ND	ND
Toluene	400	3.6	20	21	2.8
1,2,4-Trimethylbenzene	6.2	ND	4.6	5	ND
2,2,4-Trimethylpentane	NA	ND	ND	4	ND
m/p-Xylene	110	ND	13	11	ND
o-Xylene	110	ND	6.3	3.3	ND
Tentatively Identified Compounds					
Acetaldehyde	0.87	11	ND	23	6.5
Acetonitrile	62	ND	5.7	5.5	ND
Butanal	NA	6.5	ND	12	3.8
Butane	NA	3.6	4	ND	3.8
Butane,2-methyl	NA	ND	44	ND	ND
3-Butanoic acid	NA	ND	ND	ND	9.5
Cyclopentane	NA	ND	9.4	ND	ND
Cyclopentane,1,2-dimethyl-trans-	NA	ND	ND	17	ND
Cyclopropanecarboxamide	NA	ND	9.4	ND	ND
Ethanol	NA	3.8	1.8	ND	2.8
3-methylene-Heptane	NA	ND	ND	38	ND
Hexanal	NA	ND	ND	11	ND
1-Hexene	NA	3.8	ND	ND	ND
Isobutane	NA	ND	7.8	ND	ND
Pentanal	NA	ND	ND	10	ND
Pentane	NA	3.5	94	ND	7.1
Pentane, 2-methyl	NA	ND	2.7	ND	ND
1-Pentene	NA	ND	ND	10	6.3
2-Pentyne	NA	3.9	ND	ND	ND
1R .alpha. -Piene	NA	ND	ND	ND	ND
2,2-dimethyl-Propanal	NA	5.6	ND	ND	3.9
Propene	NA	11	ND	12	ND
2-methyl-1-Propene	NA	33	16	47	20
ND = Not Detected					
NA = Not Available					
Shading indicates result exceeds PRG					