

Report of Progress, June 30, 2009

Pursuant to Administrative Settlement Agreement and Order on Consent for Removal Action

Docket No. V-W-08-C-897

Countywide Recycling and Disposal Facility
East Sparta, Stark County, Ohio
Respondent: Republic Services of Ohio II, LLC (Republic)

Paragraph 15.a and b Enhanced Gas Extraction and Temperature Monitoring [NOTE: THIS WORK ITEM IS SUPERSEDED BY AN ISOLATION BREAK EXCAVATION].

In June 2009, the access road through the bottom of the Isolation Break was completed, the 18-inch gas extraction header pipe was installed, and gas wells on the 88-acre side were connected and put into service. **This marks the total completion of the Isolation Break work.** A drawing indicating the limit of work and progress is contained in Attachment A-1.

In situ temperature monitoring of the FBMP thermocouple monitors were continued throughout the month; results are presented in Attachment A-2.

Paragraph 15.c and f Capping and Stabilization.

A Capping Plan for the remaining uncapped areas of the site (Cells 1-3) was approved by the U.S. EPA on June 2, 2009. The new Capping Plan includes additional temporary FML cap but no composite cap. The remainder of the re-capping of the "bowl" area and over-capping of the northern portion of the north/south access road with temporary FML cap was accomplished in June (see Attachment B). On June 30, the solidification facility was closed, thereby clearing the way for the remainder of the temporary FML cap which will complete this portion of the project. A map depicting the current status of capping and the remainder to be capped is included in Attachment B.

Paragraph 15.e Air Monitoring and Sampling.

In June, air monitoring activities continued on the Tier 3 (Stage C Fixed Continuous Monitoring) and Tier 4 (Community Monitoring) programs. A summary of the results is included in Attachments C-1 and C-2.

Paragraph 15.g Aerial Infrared Imaging.

May 2009 and June 2009 aerial infrared images are provided in Attachment D along with a diagram to outline the approximate coverage of the images. Both images were taken in the pre-dawn hours. The ambient air temperature during the May 2009 image was 50° F and during the June 2009 image was 57° F. Comparison of these images generally shows the same subcap warm areas attributed to subcap leachate outbreaks and transmittal of gas through subcap cracking with no large aerial changes or trends. However, the ditch line of the "deep trench" area did seem to experience cooling.

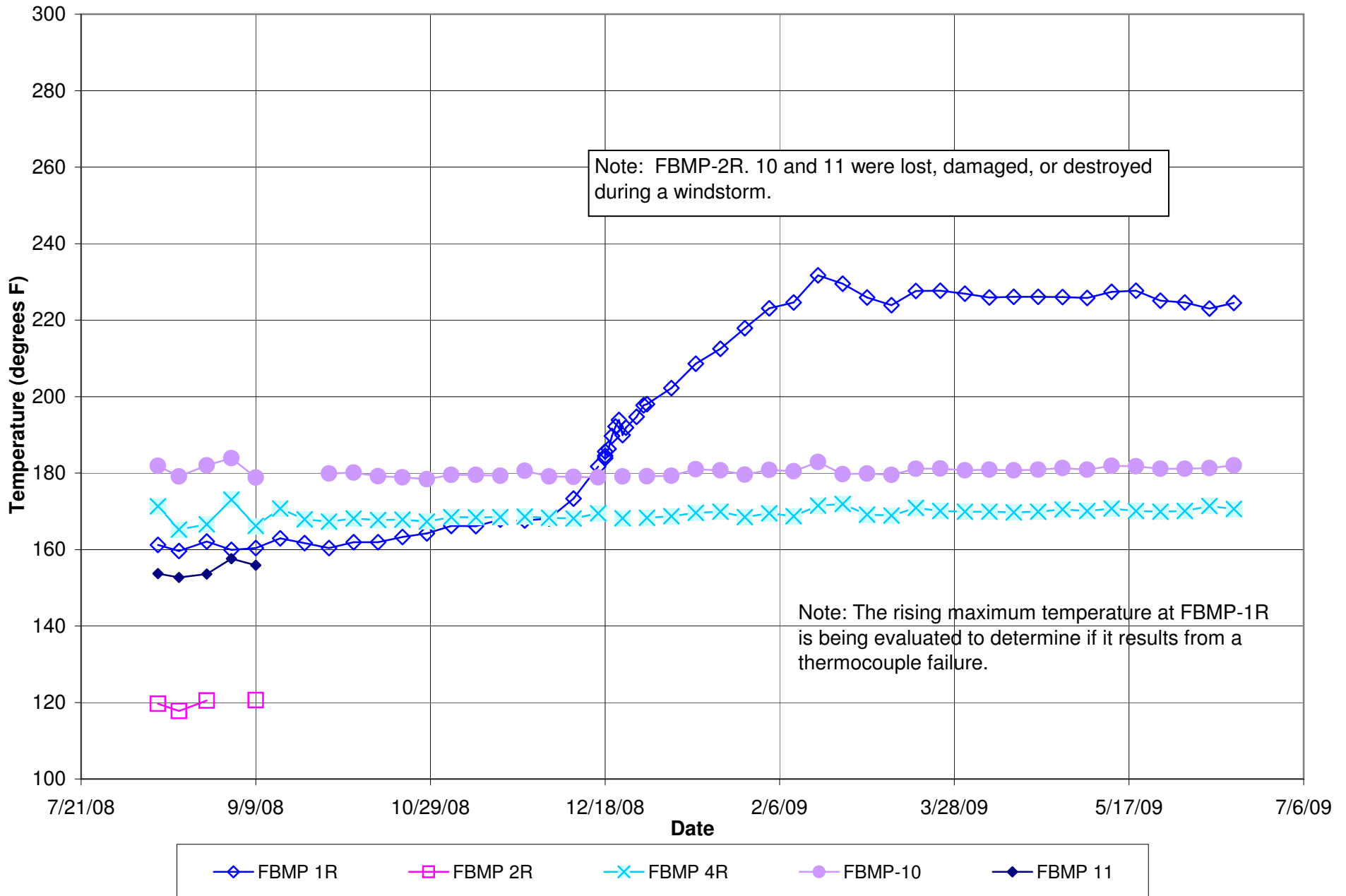
ATTACHMENT A-1

ISOLATION BREAK EXCAVATION PROGRESS

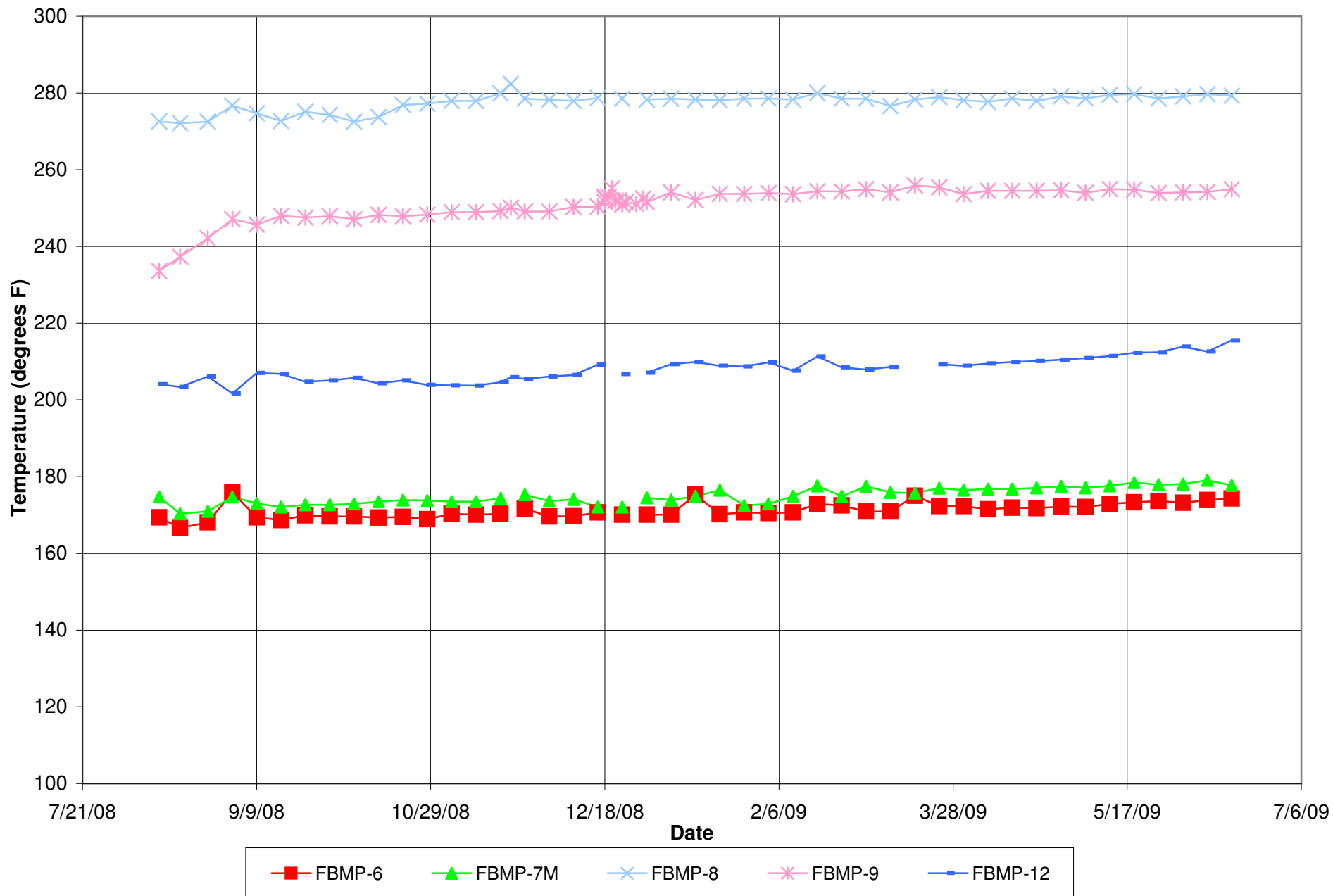
ATTACHMENT A-2

FBMP TEMPERATURE PROBE GRAPHS

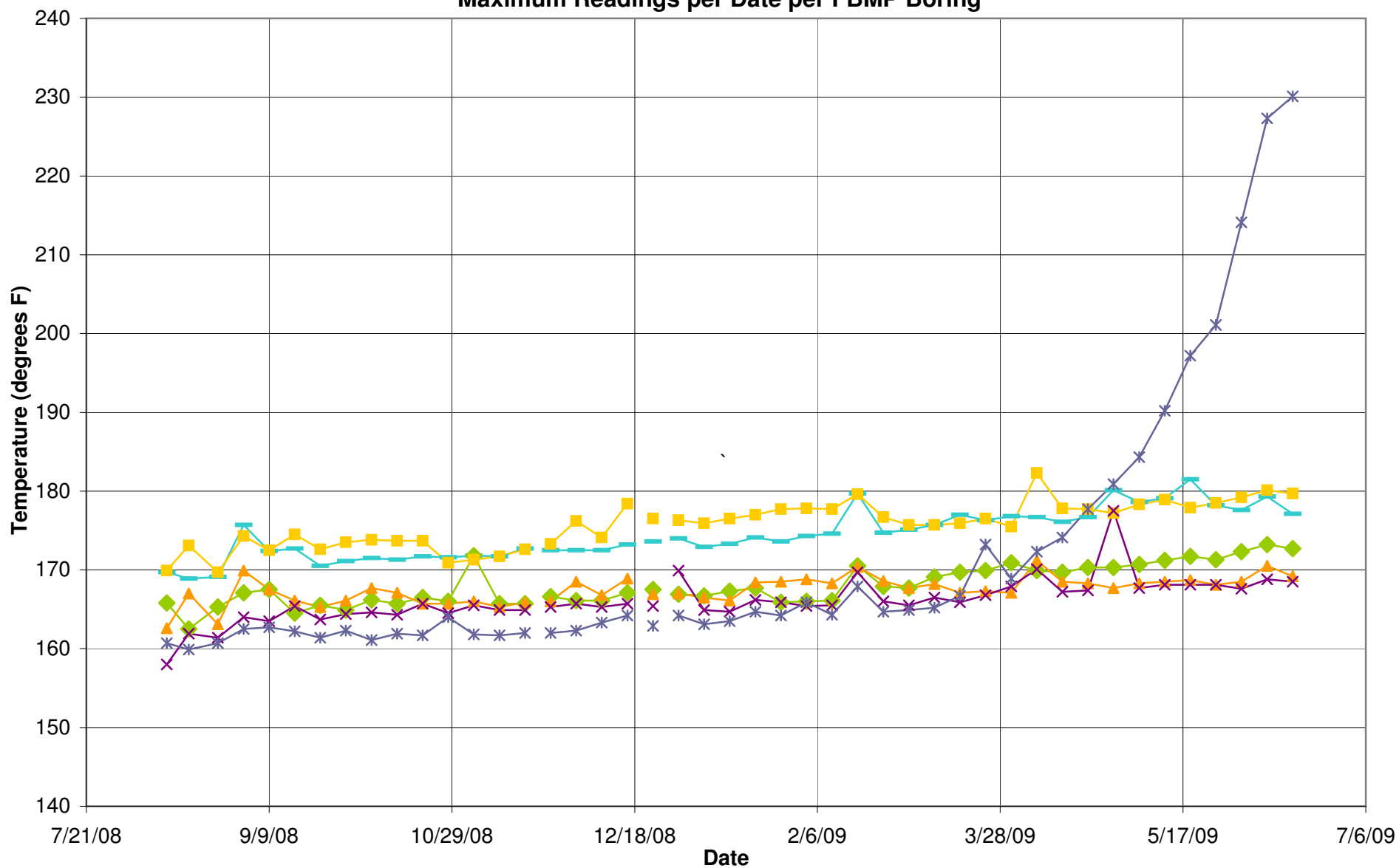
In-situ Temperatures - FBMPs within 150 ft of the Isolation Break Excavation
Maximum Readings per Date per FBMP Boring



In-situ Temperatures - FBMPs beyond 150 ft from Isolation Break Excavation
Maximum Readings per Date per FBMP Boring

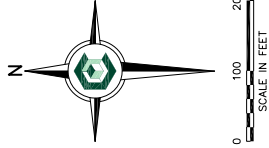


In-situ Temperatures - West Slope FBMPs
Maximum Readings per Date per FBMP Boring



ATTACHMENT B

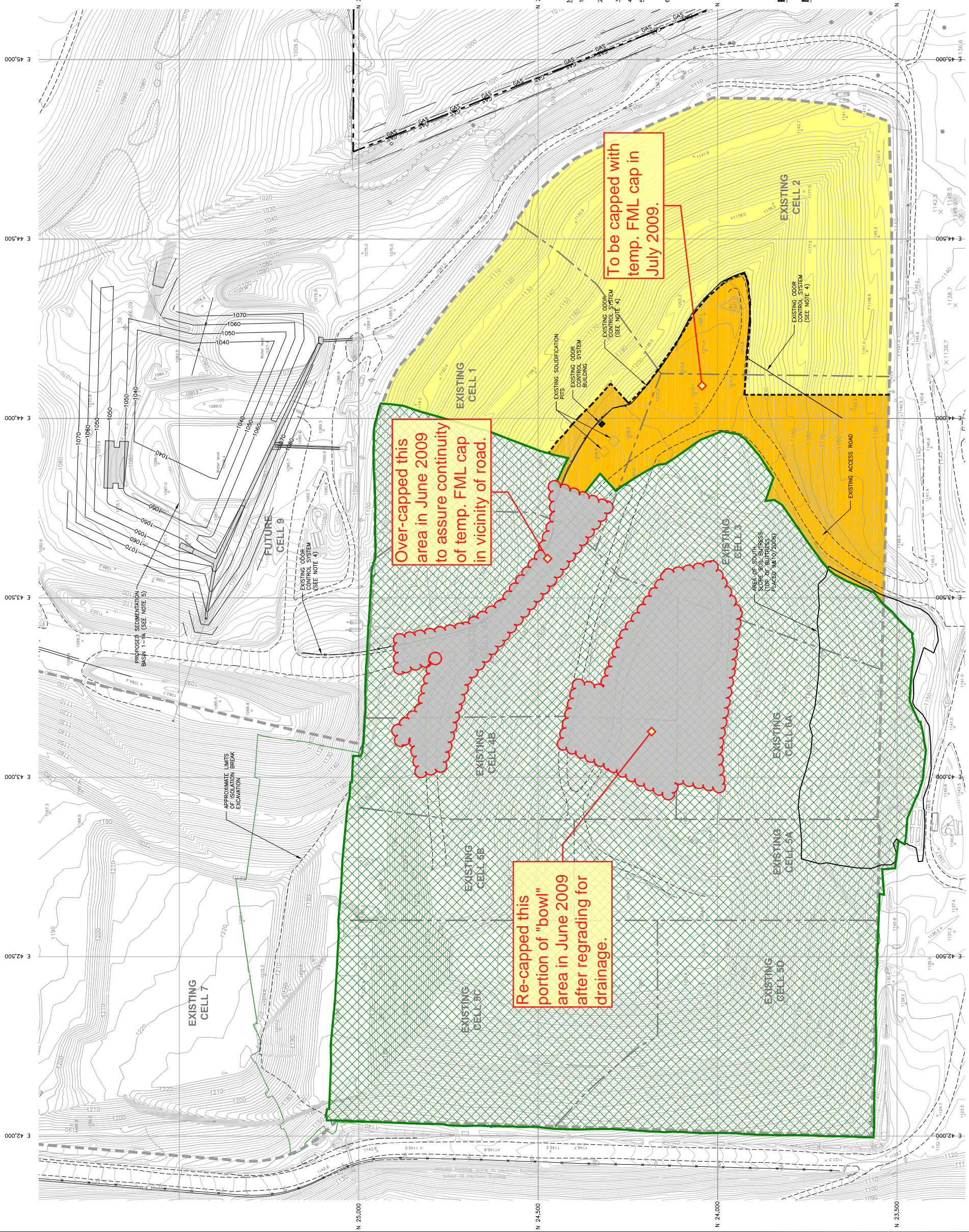
CAPPING AND STABILIZATION PROGRESS



- LEGEND**
- PROPERTY LINE
 - EXISTING LIMIT OF SOLID WASTE CELL BOUNDARY
 - EXISTING 2' CONTOURS
 - EXISTING 10' CONTOURS
 - PROPOSED TEMPORARY CAP BOUNDARY
 - AS-BUILT TEMPORARY FML CAP DATED 12/19/08
 - EXISTING GRAVEL ROAD
 - EXISTING TEMPORARY FML CAP
 - PROPOSED TEMPORARY FML CAP
 - AREA WITH EXISTING INTERIOR COVER (TO REMAIN UNDISTURBED)

- NOTES:**
- EXISTING CONTOURS WERE COMPILED FROM DIVERSIFIED ENGINEERING, INC. TOPOGRAHICAL SURVEY DATED 02/11/09 AND 03/05/09.
 - PROPOSED TEMPORARY CAP BOUNDARIES ARE APPROXIMATE AND WILL BE FIELD ADJUSTED AS NECESSARY.
 - THE EXISTING TEMPORARY CAP WILL BE MAINTAINED.
 - EXISTING ODOR CONTROL SYSTEM IS ATTACHED TO FENCE.
 - PROPOSED SEDIMENTATION BASIN 1-1A WAS APPROVED BY ODEP ON 06/29/09. THE SEDIMENTATION BASIN MAY BE CONSTRUCTED IN STAGES.
 - EXISTING CAP LIMITS PROVIDED BY DEI 06/29/09.

PROPOSED CAPPING AREA: 319,161 sq ft
NOTE: AREA MEASURED IN 3D.



REPUBLIC SERVICES OF OHIO II, LLC
COUNTY-WIDE RECYCLING AND DISPOSAL FACILITY
EAST SPARTA, STARK CO., OHIO
REVISED CAPPING PLAN - CELLS 1, 2, & 3

CORNERSTONE

Environmental Group, LLC

PROPOSED / EXISTING CAPPING AREAS

2

06/29/09

REVISED REMAINING TEMP CAP

JAW

JCW

JCW

1

04/28/09

REVISED PER US EPA 05/04/09 COMMENTS

JAW

JCW

MFB

JCW

REV

DATE

DESCRIPTION

DESIGNED BY

CHECKED BY

APPROVED BY

DATE OF ISSUE

04/09/09

JAW

JCW

JCW

SHEET NO.

1

PROJECT NO.

070187

FILE X:\PROJECT\CORNERSTONE - F&O - 070187\CAP WORK PLAN\PROJECT DRAWMINGS\CELLS 1-2-3-CAPPING\REVISED CAPPING PLAN RHC-01-REVISED-CAP-AREAS.dwg Layout Layout1 User: jason@hcn.com Date: 28-Nov-2009 9:42:29am

ATTACHMENT C-1

TIER 3 (STAGE C) FIXED CONTINUOUS MONITORING RESULTS

June 2009 Stage C Monthly Ambient Air Monitoring Report

Prepared for
Republic Services of Ohio II, LLC
3619 Gracemont Street, SW
East Sparta, OH. 44626
(330) 874-3855

Prepared by
Center for Toxicology and Environmental Health, L.L.C.
5120 North Shore Drive
North Little Rock, AR 72118

June 20, 2009



The Stage C ambient air monitoring program has continuously collected real-time Volatile Organic Compounds (VOC) and weather data 24 hours per day since October 2, 2008. Over 1,666,920 VOC readings have been collected at the perimeter of the landfill during this monitoring period. On Wednesday June 24th the Stage C host computer was moved from the remediation trailer to the Countywide Landfill main office building. This move resulted in a change to the host computers IP address which will temporarily suspend data updates to the Countywide Dashboard. It is important to note that while the Countywide dashboard data updates are temporarily down, data is still continuing to be collected. Additionally, the Stage C stations dataloggers are scheduled to be taken down on July 1, 2009, calibrated by J@S instruments on July 2, 2009, and placed back into service on July 3, 2009. During this 3 day downtime Lawhon and Associates representatives will manually log real-time VOC data at the perimeter of the landfill.

Trigger Levels

On January 27, 2009, Center for Toxicology and Environmental Health (CTEH®), United States Environmental Protection Agency (USEPA) and Agency for Toxic Substances and Disease Registry (ATSDR) adjusted the trigger levels for the collection of SUMMA canister laboratory samples. A sustained VOC concentration at or above 0.50 ppm VOC was chosen as the trigger level for each station. Table 1.0 illustrates the trigger levels for each station.

Table 1.0
May 28, through June 29 Trigger Levels

Station	Trigger Level (ppm)
1	0.50
2	0.50
3	0.50
4	0.50
5	0.50

If a trigger level is exceeded for a five minute consecutive monitoring period, a 15 minute integrated SUMMA canister is automatically collected. Trigger levels will continue to be evaluated based on the results of the SUMMA canister data or VOC statistics.

Real-Time Results

During the May 28, 2009 through June 29, 2009 monitoring period, approximately 121,363 real-time VOC readings have been collected at the perimeter of the landfill. Of these readings, the sustained VOC concentration exceeded the established trigger levels one time. The mean VOC concentrations collected at the perimeter of the landfill ranged from 0.05 ppm to 0.14 ppm. Table 2.0 summarizes the real-time data collected for this monitoring period.

Table 2.0 May 28, through June 29, Real Time Data Summary

Station	Analyte	Total VOC Readings Recorded	Trigger Level	Triggering events	Average Concentration
1	VOC	30,568	0.50	0	0.14 ppm
2	VOC	33,076	0.50	0	0.06 ppm

3	VOC	17,761	0.50	1	0.13 ppm
4	VOC	17,656	0.50	0	0.05 ppm
5	VOC	22,302	0.50	0	0.07 ppm

A graphical representation of 24 hour average Real-time concentrations can be viewed in Attachment A.

SUMMA Results

As of May 15, 2009 Tentatively Identified Compounds (TIC) analysis was discontinued. Therefore, only compounds on the TO15 target compound list will be analyzed by the laboratory. Additionally Sample preparation was modified from individually certified clean SUMMA canisters to batch certified clean canisters. Two SUMMA samples were collected during this monitoring period (Attachment B). With these laboratory results and previously available sample results, no VOCs, including benzene, were detected at levels that exceeded the ATSDR's acute or chronic Minimal Risk Levels (MRLs). These data to date indicate that landfill emissions from the site under current conditions do not pose a risk to human health in the short or long term.

Attachment A

Custom Date Report

Start Date

End Date

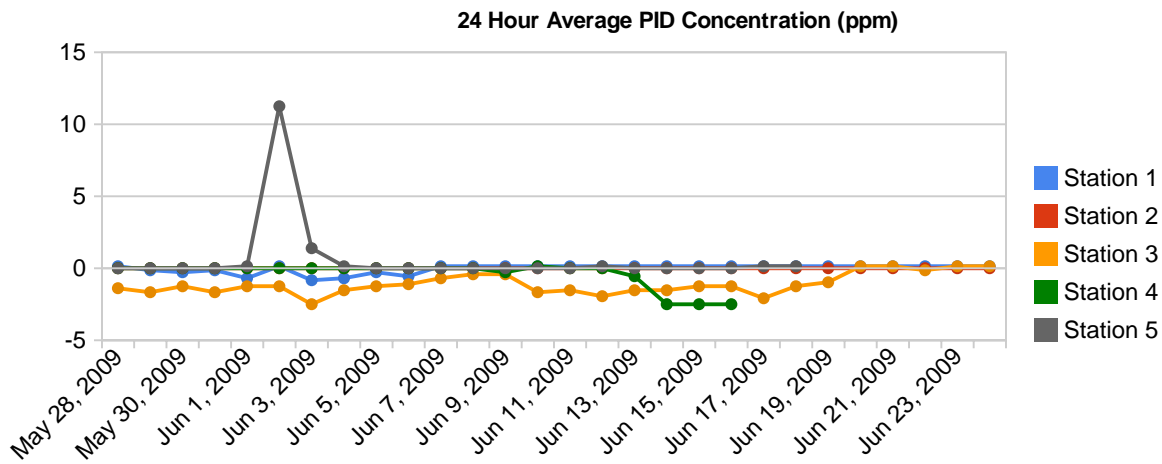
2009/05/28

Calendar

2009/06/29

Calendar

Save



Day	Station 1 (PID)	Station 2 (PID)	Station 3 (PID)	Station 4 (PID)	Station 5 (PID)
2009-05-28	0.16	0.05	-1.45	0.07	0.05
2009-05-29	-0.19	0.06	-1.65	0.06	0.05
2009-05-30	-0.22	0.06	-1.29	0.05	0.05
2009-05-31	-0.20	0.06	-1.64	0.05	0.05
2009-06-01	-0.73	0.06	-1.29	0.05	0.13
2009-06-02	0.11	0.05	-1.21	0.05	11.29
2009-06-03	-0.86	0.07	-2.49	0.04	1.35
2009-06-04	-0.69	0.07	-1.55	0.05	0.15
2009-06-05	-0.27	0.06	-1.28	0.05	0.05
2009-06-06	-0.52	0.06	-1.13	0.05	0.05
2009-06-07	0.10	0.05	-0.70	0.05	0.05
2009-06-08	0.12	0.05	-0.36	0.04	0.05
2009-06-09	0.15	0.05	-0.37	-0.26	0.06
2009-06-10	0.15	0.05	-1.60	0.08	0.05
2009-06-11	0.14	0.05	-1.48	0.07	0.06
2009-06-12	0.14	0.05	-1.88	0.04	0.08
2009-06-13	0.15	0.06	-1.58	-0.57	0.04
2009-06-14	0.15	0.06	-1.50	-2.48	0.04
2009-06-15	0.16	0.05	-1.24	-2.48	0.04
2009-06-16	0.15	0.05	-1.23	-2.48	0.04
2009-06-17	0.14	0.05	-2.10		0.16
2009-06-18	0.14	0.05	-1.22		0.18
2009-06-19	0.15	0.05	-1.00		
2009-06-20	0.16	-0.05	0.15		

2009-06-21	0.15	0.05	0.14
2009-06-22	0.16	0.05	-0.13
2009-06-23	0.17	0.05	0.13
2009-06-24	0.15	0.05	0.15



Center for Toxicology and
Environmental Health, L.L.C.

Joe Cameron
Center For Toxicology and Environmntal Health L.L.C.
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Attachment B

Stage C Integrated Air Sampling Summary

Sample ID	Set out Date	Location	Trigger Level	Trigger Date/Time	Wind Direction	Downwind of Reaction Area	Results (Link)	Average 15 min PID Reading During Sample	TICS Identified/ Sampling Methods	Ambient Sampling Temp (Celsius)
ESOH1108-1-SC001	11/8/2008	Station 1	0.50 ppm	11/12/2008 22:52	134	NO	ESOH1108-1-SC001	0.58	None	
ESOH1108-2-SC002	11/8/2008	Station 2	0.18 ppm	11/10/2008 4:38	266	YES	ESOH1101-2-SC002	-0.50	Hexafluoropropylene	7.8
ESOH1108-3-SC003	11/8/2008	Station 3	Sample Fault-Calibration gas triggered the Summa collection system							
ESOH1108-5-SC004	11/8/2008	Station 5	0.17 ppm	12/20/2008 3:53	12	NO	ESOH1108-5-SC004	22.52*	Ethane, 1,1 difluoro; Ethylene Oxide; Isopropyl Alcohol; Propane; 1,1,1,3,3,3,-hexafluoro-2-triflu; Propene, hexafluoro	7.8
ESOH1110-2-SC005	11/10/2008	Station 2	0.18 ppm	11/10/2008 20:15	338	YES	ESOH1110-2-SC005	0.17	unknown	-0.2
ESOH1111-2-SC006	11/11/2008	Station 2	Sample Fault Calibration gas triggered the Summa collection system							
ESOH1111-4-SC007	11/11/2008	Station 4	0.10 ppm	11/23/2008 14:06	227	NO	ESOH1111-4-SC007	0.09	Isopropyl alcohol; Propene, Hexafluoro-; Unknown	2.3
ESOH1113-1-SC008	11/13/2008	Station 1	0.50 ppm	11/13/2008 21:02	181	NO	ESOH1113-1-SC008	0.60	Ethyl alcohol; Propene, hexafluoro; Unknown	10.8
ESOH1114-1-SC009	11/11/2008	Station 1	0.50 ppm	11/24/2008 15:13	179	NO	ESOH1114-1-SC009	0.53	Methyl alcohol; Propene, hexafluoro	4.6
ESOH1119-3-SC010	11/19/2008	Station 3	Sample Fault- Leaking SUMMA Cannister							
ESOH1123-3-SC011	11/23/2008	Station 3	0.13 ppm	11/29/2008 3:06	290	Downwind of Working phase	ESOH1123-3-SC011	0.04	Butane; Butane, 2 methyl-; Disulfide, dimethyl; Ethane, 1-chloro-1,1-difluoro-; Ethyl alcohol; Isobutane; Pentane; Pentane, 2-methyl-; Propane; Propene, hexafluoro-	-1.6

Stage C Integrated Air Sampling Summary

Sample ID	Set out Date	Location	Trigger Level	Trigger Date/Time	Wind Direction	Downwind of Reaction Area	Results (Link)	Average 15 min PID Reading During Sample	TICS Identified/ Sampling Methods	Ambient Sampling Temp (Celsius)
ESOH1124-4-SC012	11/24/2008	Station 4	0.10 ppm	11/24/2008 14:23	226	NO	ESOH1124-4-SC012	0.10	None	4.1
ESOH1124-4-SC013	11/24/2008	Station 4	Sample Fault-Calibration gas triggered the Summa collection system							
ESOH1124-1-SC014	11/24/2008	Station 1	Sample Fault							
ESOH1126-4-SC015	11/26/2008	Station 4	0.10 ppm	11/29/2008 11:51	192	NO	ESOH1126-4-SC015	0.10	Ethyl alcohol:Methyl Alcohol: Propene, hexafluoro-	2.7
ESOH1129-3-SC016	11/29/2008	Station 3	Sample Fault							
ESOH1129-4-SC017	11/24/2008	Station 4	Sample Fault							
ESOH1202-4-SC018	12/2/2008	Station 4	0.10 ppm	12/3/2008 8:28	195	NO	ESOH1202-4-SC018	0.10	None	-2.0
ESOH1203-4-SC019	12/3/2008		Sample Fault due to PID malfunction							
ESOH1205-4-SC020	12/5/2008	Station 4	Sample Fault							
ESOH1208-4-SC021	12/8/2008	Station 4	0.10 ppm	12/21/2008 5:52	292	NO	ESOH1208-4-SC021	0.26	Acetaldehyde: Butane, 2-methyl-: Pentane: Propene, hexafluoro-	-1.3
ESOH1218-3-SC022	12/18/2008	Station 3	Sample Fault- Leaking SUMMA Cannister							
ESOH1220-5-SC023	12/20/2008	Station 5	Sample Fault- Leaking SUMMA Cannister							

Stage C Integrated Air Sampling Summary

Sample ID	Set out Date	Location	Trigger Level	Trigger Date/Time	Wind Direction	Downwind of Reaction Area	Results (Link)	Average 15 min PID Reading During Sample	TICS Identified/ Sampling Methods	Ambient Sampling Temp (Celsius)
ESOH1222-4-SC024	12/22/2008	Station 4	0.10 ppm	1/6/2009 0:02	110	Yes	ESOH1222-4-SC024	0.06	Butane; Butane, 2-methyl-; Dimethyl ether; Ethyl alcohol; Hexane, 3-methyl-; Hydroxylamine, O-methyl; Pentane; Pentane, 2-methyl-; Propene, hexafluoro-, 1-propene, 2-methyl-	-3.6
ESOH1230-5-SC025	12/30/2008	Station 5	0.17 ppm	1/8/2009 10:59	243	Yes	ESOH1230-5-SC025	0.16	Butanoic acid, ethyl ester; Ethane, 1,1-difluoro-; Ethyl alcohol; Isopropyl Alcohol; Methyl Alcohol; Propene, hexafluoro-, 1-Propanol; 2-Butanol, (R-)	-7.0
ESOH0106-4-SC026	1/6/2009	Station 4	0.10 ppm	1/7/2008 20:11	258	No	ESOH0106-4-SC026	0.10	Butane; Butane, 2-methyl-; Ethane, 1,1-difluoro-; Pentafluoropropionamide; Pentane	-2.2
ESOH0107-2-SC027	1/7/2009	Station 2	0.18 ppm	2/9/2009 2:23	223	No	ESOH0107-2-SC027	0.92*	Propene, hexafluoro-	1.6
ESOH0108-4-SC028	1/8/2009	Station 4	0.10 ppm	Current Sample						
ESOH0108-5-SC029	1/8/2009	Station 5	0.17 ppm	1/19/2009 0:32	215	Yes	ESOH0108-5-SC029	0.26	Ethyl alcohol; Furan; Propene	-11.70
ESOH0108-3-SC030	1/8/2009	Station 3	0.13 ppm	4/25/2009 12:00			ESOH0108-3-SC030	0.20	Acetaldehyde; Butane, 2-methyl-; Ethanol; Propane; Propene, hexafluoro-2-Cyano-2-O-fluorosulfatofluoropropane	25.4
ESOH0119-5-SC031	1/19/2009	Station 5	0.13 ppm	1/19/2009 13:22	267	Yes	ESOH0119-5-SC031	0.17	Ethyl alcohol; Isopropyl Alcohol; Methyl Alcohol; 1-Butanol; 1-Propanol; 2-Butanol;	-9.30
ESOH0119-5-SC032	1/19/2009	Station 5	0.13 ppm	1/26/2009 9:21	220	Yes	ESOH0119-5-SC032	0.18	Ethyl alcohol; Propene, hexafluoro;	-12.6
ESOH0119-1-SC033	1/19/2009	Station 1	0.50 ppm	Current Sample						
ESOH0119-5-SC034	1/19/2009	Station 5	0.50 ppm	2/16/2009 7:02	10	No	ESOH0127-5-SC034	0.78	Butane, 2-methyl-; Pentane; Propane; Propene, hexafluoro-	-4.6

Stage C Integrated Air Sampling Summary

Sample ID	Set out Date	Location	Trigger Level	Trigger Date/Time	Wind Direction	Downwind of Reaction Area	Results (Link)	Average 15 min PID Reading During Sample	TICS Identified/ Sampling Methods	Ambient Sampling Temp (Celsius)
ESOH0209-2-SC035	2/9/2009	Station 2	0.50 ppm	2/10/2009 6:25	211	No	ESOH0209-2-SC035	1.41*	Propene, hexafluoro-	8.4
ESOH0210-2-SC036	2/10/2009	Station 2	0.50 ppm	Current Sample						
ESOH0216-5-SC037	2/16/2009	Station 5	0.50 ppm	2/18/2009 6:12	168	Yes	ESOH0216-5-SC037	0.56	Acetaldehyde; Propene	2.1
ESOH0218-5-SC038	2/18/2009	Station 5	0.50 ppm	4/14/2009 16:39	97	No	ESOH0218-5-SC038	14.16	Butane, 2-methyl-; Ethane, 1,1-difluoro-; Ethanol; Methyl Alcohol; N,N'-Methylenebismethacrylamide; Oxirane, ethyl-; Propane; Propene, hexafluoro-	10.1
ESOH0416-5-SC039	4/16/2009	Station 5	0.50 ppm	4/20/2009 18:17	240	Yes	ESOH0416-5-SC039	0.04	Acetaldehyde; Butane, 2-methyl-; Propene, hexafluoro-	9.0
ESOH0422-5-SC040	4/22/2009	Station 5	0.50 ppm	5/5/2009 6:49	199	Yes	ESOH0422-5-SC040	0.59	Ethanol; Propene, hexafluoro-; Unknown; Unknown	14.7
ESOH0429-3-SC041	4/29/2009	Station 3	0.50 ppm	5/15/2009 12:30	229	Yes	ESOH0429-3-SC041	0.46		21.2
ESOH0504-5-SC042	5/4/2009	Station 5	0.50 ppm	Current Sample						
ESOH0518-3-SC043	5/18/2009	Station 3	0.50 ppm	Current Sample						
ESOH0518-3-SC045	5/18/2009	Station 3	0.50 ppm	Current Sample			ESOH0522-3-SC045			

Pending- Sample has been collected awaiting results from the laboratory

Average PID Reading During Sample- Average PID concentration during the SUMMA can sample collection

* Potential RAEGuard PID error (Drift) noted

Station 4 Trigger Change to 0.15 ppm on January 13, 2009

Stations 1 through 5 trigger levels have been changed to 0.50 ppm on January 27, 2009

TIC analysis was dropped from the laboratory Summa Results May 15, 2009

Summa Cannisters are Batch cleaned and not individually certified clean May 15, 2009

ATTACHMENT C-2

TIER 4 COMMUNITY MONITORING RESULTS

Table 1. Summary of TO-15 Results from SUMMA Samples Collected Downwind from Isolation Break

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Analyte	Downwind 12/9/08	Downwind 12/12/08	Downwind 12/15/08	Downwind 12/18/08	Downwind 1/05/09	Downwind 1/08/09	Downwind 1/14/09	Downwind 1/20/09	Downwind 1/23/09	Downwind 1/26/09	Downwind 1/29/09	Downwind 2/04/09	Downwind 2/16/09	Downwind 2/25/09	Downwind 3/03/09	Downwind 3/30/09	Downwind 4/02/09	Downwind 4/08/09	Downwind 4/14/09	Downwind 4/17/09	Avg
trans-1,3-Dichloropropene																					
1,2-Dichloro-1,1,2,2-tetrafluoroethane																					
Acetone	5.1	6.9	7.5	5.1	2.8	13	5.8	14	18	3.6	8.9	5.6	5.6	6.9	2.0	5.3	3.1	2.8	15	5.9	7.15
Ethylbenzene	0.46	1.0	0.1		0.13	1.2	0.46	0.68	0.15	0.090	0.670	0.210	0.31	0.24		0.24	0.28	0.13	0.38	1.7	0.47
Trichlorofluoromethane	0.25	0.22	0.23	0.24	0.18	0.21	0.20	0.29	0.22	0.21	0.21	0.23	0.21	0.22	0.27	0.19	0.31	0.17	0.25	0.27	0.23
n-Heptane	0.64	0.30	0.15		0.16	0.45	0.31	0.56	0.54	0.16	0.31	0.15	0.25	0.21	0.12	0.093	0.27	0.12	0.46	0.75	0.32
Hexachlorobutadiene																					
n-Hexane	0.22	0.17	0.12	0.14	0.17		0.20	0.40	0.54	0.31	0.17	0.17	0.15	0.19	0.16	0.084	0.28	0.13	0.35	1.1	0.27
2,2,4-Trimethylpentane	0.08	0.064			0.077	0.099	0.10	0.14	0.16	0.044	0.062	0.054	0.057	0.059			0.087		0.085	0.21	0.08
tert-Butyl alcohol	0.13	0.16	0.11	0.12	0.073	0.35	0.15	0.48	0.40	0.059	0.260	0.061	0.13	0.097	0.048	0.12	0.13	0.10	0.29	1.0	0.21
Methylene chloride	2.8	0.49	0.2	0.34	0.27	0.25	0.25	2.4	0.78	0.19	0.21	0.52	0.21	0.42	0.13	0.22	0.21	0.15	0.34	0.26	0.53
Benzene	0.39	0.50	0.21	0.32	0.30	0.89	0.52	0.84	0.94	2.0	0.44	0.26	0.32	0.66	0.23	0.15	2.2	0.63	1.4	12	1.26
Styrene	0.12	1.0				0.1					0.070									0.064	0.33
1,1,2,2-Tetrachloroethane			0.23	0.22																	0.23
Tetrachloroethene	0.14	0.066				0.069		0.065	0.13						1.3				0.22	0.055	0.30
Tetrahydrofuran	0.47	0.57		0.22		0.90	0.34	0.83	0.93	0.97	0.47	0.16	0.23	0.31		0.13	0.87	0.65	0.58	3.9	0.74
Toluene	2.9	2.4	0.63	0.19	0.86	3.9	1.3	3.3	1.8	0.65	2.1	0.85	1.3	0.78	0.20	0.54	1.0	0.44	1.5	4.5	1.45
1,2,4-Trichlorobenzene					0.085																0.09
1,1,1-Trichloroethane		0.073																	0.084		0.07
Trichloroethene	0.054	0.040	0.230	1.5					0.084						0.19				0.082	0.16	0.35
1,1,2-Trichloro-1,2,2-trifluoroethane	0.072	0.071	0.082	0.075	0.066	0.064	0.074	0.072	0.069	0.068	0.071	0.070	0.069	0.066	0.075	0.053	0.082	0.062	0.11	0.087	0.07
1,2,4-Trimethylbenzene	0.17	0.38			0.085	0.54	0.18	0.19			0.35	0.076	0.19	0.16		0.080	0.20		0.15	0.60	0.22
1,3,5-Trimethylbenzene		0.14				0.21	0.099	0.076			0.15		0.079				0.11		0.081	0.25	0.12
Vinyl chloride									0.11										0.12		0.11
o-Xylene	0.3	0.5	0.078		0.11	0.73	0.29	0.30			0.45	0.14	0.21	0.18		0.11	0.35		0.35	1.0	0.29
m-Xylene & p-Xylene	1.1	1.8	0.24		0.36	3.0	1.1	1.3	0.22	0.13	1.7	0.49	0.78	0.58		0.50	1.0	0.20	1.0	3.7	0.91
2-Butanone (MEK)	2.7	2.8	0.88	1.4	1.2	6.3	3.2	9.2	6.2	1.0	3.5	1.6	2.0	1.5	0.43	0.81	0.92	0.56	2.7	2.3	2.56
4-Methyl-2-pentanone (MIBK)	0.16	0.16	0.14		0.058	0.31	0.11	0.27	0.13		0.21	0.049	0.13	0.093			0.078	0.046	0.18	0.20	0.15
Bromomethane																					
4-Ethyltoluene	0.077	0.15	0.076			0.23	0.094	0.079			0.14						0.076		0.075	0.23	0.12
Carbon disulfide	0.044	0.045	0.097	0.077		0.033	0.063	0.10	0.08		0.055						0.033	0.055	0.033	0.047	0.06
Carbon tetrachloride	0.093	0.069	0.099	0.11	0.082	0.065	0.10	0.094	0.076	0.066	0.069	0.069	0.067	0.078	0.066	0.056	0.10	0.065	0.10	0.11	0.08
Chlorobenzene																					
Chloroethane			0.044						0.036								0.043		0.084	0.15	0.04
Chloroform	0.045			0.039																	0.04
Chloromethane	0.53	0.57	0.73	0.53	0.40	0.47	0.60	0.60	0.63	0.72	0.51	0.61	0.62	0.58	0.64	0.56	0.94	0.42	0.79	1.0	0.62
2-Chlorotoluene						0.25															0.25
Cyclohexane	0.14								0.44		0.067	0.53		0.065	0.072		0.11		0.23	0.35	0.20
1,2-Dichlorobenzene																			0.25		
1,3-Dichlorobenzene																			0.085		
1,4-Dichlorobenzene						0.088	0.066				0.084								0.12	0.11	0.08
Dichlorodifluoromethane	0.65	0.50	0.52	0.54	0.40	0.46	0.45	0.61	0.63	0.53	0.54		0.52	0.53	0.54	0.48	0.65	0.36	0.57	0.61	0.53
1,1-Dichloroethane									0.05										0.073		0.05
1,2-Dichloroethane									0.069												0.07
1,1-Dichloroethene																			0.057		
cis-1,2-Dichloroethene				0.11															0.34		0.11
Sum of TO-15 Compounds	19.84	21.14	12.72	11.27	7.87	34.21	16.06	36.88	33.42	10.80	21.77	11.90	13.43	13.92	6.47	9.72	13.43	7.09	28.52	42.61	17.34

Sum of Averages

20.75

Table 2. Summary of TO-15 TIC Results from SUMMA Samples Collected Downwind from Isolation Break

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
TICs	Downwind 12/9/08	Downwind 12/12/08	Downwind 12/15/08	Downwind 12/18/08	Downwind 1/05/09	Downwind 1/08/09	Downwind 1/14/09	Downwind 1/20/09	Downwind 1/23/09	Downwind 1/26/09	Downwind 1/29/09	Downwind 2/04/09	Downwind 2/16/09	Downwind 2/25/09	Downwind 3/03/09	Downwind 3/30/09	Downwind 4/02/09	Downwind 4/08/09	Downwind 4/14/09	Downwind 4/17/09	Avg
1-Propanol						6.9	2.7	8.7	12		4.5										6.96
1-Propene, 2-methyl-																					
2-butanol	3.2					5.1	3.4	8.2	14		5.6										6.58
4,7-dimethylundecane																					
Acetaldehyde									7.6		3.7										5.65
Butane								2.7	3.0	3.0											2.90
Butane, 2-methyl																					
butanol	2							4													3.15
Decane, 2,5,6-trimethyl-																					
Eicosane																					
ethanol	14	6.0		3.3	5.4	25.0	8.7	26	40		18	7.1	7.9	2.7					2.7		12.83
Heptane, 2,2-dimethyl-																					
Isobutane																					
isopropanol	3.4					6.1	3.5	8.4	14		6.1		2.8								6.33
Limonene																					
Methyl Alcohol			2.7	2.6		3.3		6.2				3.2									3.60
Pentane										2.6											2.60
Propane		2.8						4.3		4.7					3.6						3.85
propanol	6.9												2.1								4.50
Propene									6.2		2.5										4.35
Trisulfide, dipropyl																					
Undecane, 2,8-dimethyl-																					
Unknown																					
Unknown																					
Sum of TICs	29.50	8.80	2.70	5.90	5.40	46.40	18.30	68.80	96.80	10.30	40.40	10.30	12.80	6.30	0.00	0.00	0.00	0.00	2.70	0.00	18.27
Sum of TICs and TO-15 Compo	49.34	29.94	15.42	17.17	13.27	80.61	34.36	105.68	130.22	21.10	62.17	22.20	26.23	20.22	6.47	9.72	13.43	7.09	31.22	42.61	36.92

Table 3. Summary of VOC Information from TO-15 Analyses (Community and 300' Downwind)

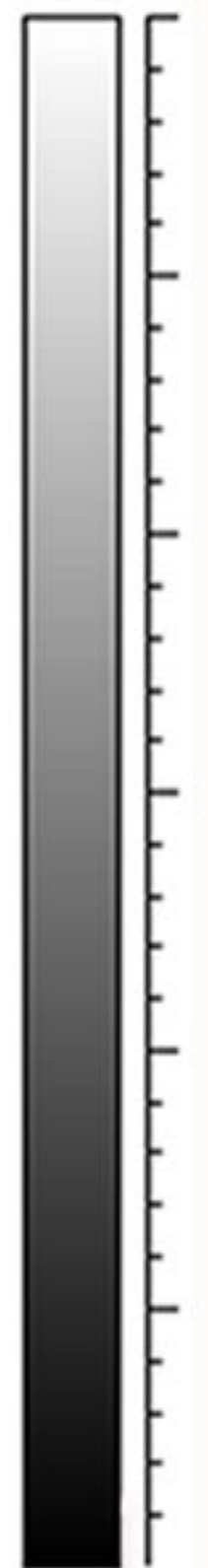
ATTACHMENT D

AERIAL INFRARED IMAGES

Composite Image by
Predictive Service LLC. 216.378.3500
Data Collected 5/19/2009



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TEMPERATURE AT
TIME OF IMAGE
WAS 50 DEG. F



Composite Image by
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Data Collected 6/15/2009

THIS AREA
SEEMS TO HAVE
COOLED SINCE
MAY 2009.

AMBIENT
TEMPERATURE AT
TIME OF IMAGE
WAS 57 DEG. F

