NATURAL RESOURCE TECHNOLOGY
ENVIRONMENTAL CONSULTANTS

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Report:	**Weekly Progress Report**
Project:	**Former Two Rivers MGP Site** **Removal Action Construction** **Two Rivers, Wisconsin**
Date:	October 6, 2014
Prepared By:	Natural Resource Technology, Inc. Mark D. Walter, PE Kenneth R. Mika, PE
Submitted To:	Integrys Business Support, LLC Naren M. Prasad, PE Stacy A. Brault
Activity Period:	September 22 through September 28, 2014

Natural Resource Technology, Inc. Personnel on Site

- Mark Walter, **Field Engineer**
- Andrea Salus, **Field Engineer**
- Dan Vachon, **Field Technician**
- Kenneth Mika, **Project Manager**

Integrys/Wisconsin Public Service Corporation Personnel on Site

- Gerry Warden

Geo-Solutions, Inc. Personnel on Site

- Keith Adamson
- Aaron Handel
- Eric Shannon
- Jason Greggs
- Rob Kautchick
- Dylan Ice
- Bob Lager
- Randall Tilly
- John Scott
- Darin Payne
- Jesse Frederick

U.S. EPA Personnel on Site

- Brad Benning, **U.S. EPA**

- Andy Plier, **OTIE**

Subcontractors on Site

- Subsurface Exploration Services, LLC, **Well Abandonment Contractor**

Others

- None

Visitors

- Bill Fitzpatrick, **WDNR**
- Scott Inman, **WDNR**

This report summarizes field activities performed by NRT, GSI, and GSI's subcontractors, on behalf of IBS at the former Two Rivers MGP Site Time Critical Removal Action:

Site Activities

Removal Action Totals:

- Soil Direct Disposal through 9/28/14: 885.46 Tons
- Debris Direct Disposal (Concrete and Wood) through 9/28/14: 945.09 Tons
- Total Direct Disposal through 9/28/14: 1,830.55 Tons
- In-Situ Solidification/Stabilization (ISS) through 9/28/14: 1,002.19 Cubic Yards

Site Perimeter Air Monitoring:

- Real-time site perimeter air monitoring for TVOCs and PM_{10} was conducted 24 hours per day, all seven days of the week. The locations of the perimeter air monitoring stations are shown on Figure 1.
- A total of 27 SUMMA canister samples were collected, including five samples at each of the five air monitoring station locations, one duplicate sample, and one field blank sample. SUMMA canister samples were analyzed for BTEX compounds and naphthalene. A summary of the analytical results is presented in Table 1.
- A total of 27 PUF samples were collected, including five samples at each of the five air monitoring station locations, one duplicate sample, and one field blank sample. PUF samples were analyzed for PAH compounds. A summary of the analytical results is presented in Table 1.

NRT

- Participated in daily safety meetings to evaluate potential safety concerns for the day's planned construction activities.
- Oversaw Subsurface Exploration Services, LLC's abandonment of eight monitoring wells on site and two monitoring wells located on the Manitowoc County property to the south of the site.
- Collected and shipped a sample of MGP-impacted soil for fingerprint analysis.
- Oversaw GSI's mobilization efforts throughout the week.
- Oversaw GSI's ISS drilling.
- Collected and prepared 1 ISS Construction Quality Assurance (CQA) sample (ISS-CS3-M).
- Shipped 12 ISS CQA samples from ISS Pilot Test Columns for UCS (ASTM D1633) and hydraulic conductivity (ASTM D5084) laboratory testing by Timely Engineering Soil Tests (T.E.S.T.).

- Received and reviewed ISS CQA sample test results for UCS and hydraulic conductivity. Results are compared to ISS performance goals established in the Removal Action Work Plan (RAWP) Addendum 1 Construction Quality Assurance Project Plan (CQAPP).
- Oversaw GSI's weekly erosion control inspection on Monday (9/22).
- Oversaw GSI's removal of wooden pilings in the ISS Area.
- Oversaw GSI's excavation of peat material in the southeastern portion of the ISS Area.
- Issued truck manifests for disposal of concrete debris and peat material.
- Performed perimeter air monitoring and sampling.
- Monitored site conditions for traffic flow, fugitive dust, odors, and general overall safety.

Geo-Solutions Inc.

- Continued mobilization of equipment in preparation of ISS construction activities.
- Continued constructing housing for the ISS batch plant.
- Began removal of wooden pilings in the ISS Area.
- Began removal of peat material in the southeastern portion of the ISS Area.
- Began off-site trucking and disposal of concrete debris and peat material.
- Began full-scale ISS drilling.
- Performed weekly erosion control inspection on Monday (9/22).
- Implemented fugitive emission controls including spraying Rusmar odor control foam on material stockpiles and disturbed areas, covering of inactive stockpiles, installation and operation of an odor control perimeter misting system, and sequencing of work to minimize material handling.
- Conducted periodic worker health and safety air monitoring in the work (exclusion) zone.

Changes to Scope of Work

- IBS approved an RFI submitted by GSI requesting to haul concrete debris in trucks without tarps.
- IBS approved an RFI submitted by GSI regarding the removal of wooden pilings in the ISS Area.

Open/Outstanding Items

- None

Work planned for the week of September 29 through October 5, 2014

- Install asphalt pad for decontamination and water treatment.
- Continue to excavate peat material in the Excavation Area and ISS Area.
- Continue off-site trucking and disposal of peat material.
- Perform soil confirmation sampling at the limits of the Excavation Area.
- Continue full-scale ISS.
- Perform ISS CQA sampling.
- Perform perimeter air monitoring and sampling.
- Continue implementation of fugitive emission controls.

A Weekly Progress Report will be issued throughout the duration of field activities for this Time Critical Removal Action. A written report summarizing the results of the Removal Action will be provided following completion of all field activities.

Please contact us if you have any questions.

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.

Kenneth R. Mika, PE
Environmental Engineer

Attachments:

Field Photos
Figure 1: Air Monitoring Station Locations
Table 1: Weekly Air Data Summary

[P:\1500\1569\Construction\Field Reports\Weekly Reports\1569 NRT Two Rivers MGP Weekly Report 09-22-14 To 09-28-14.Docx]

Field Photos:

Photo 1: Site monitoring well abandonment.

Direction: Facing southwest

Photo Date: 9/22/2014

Photo Taken By: MDW

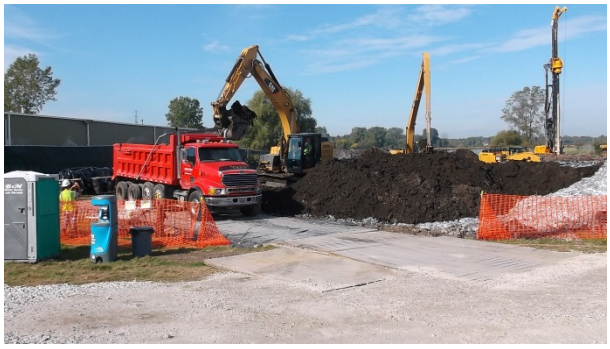


Photo 2: Loading peat material for off-site disposal.

Direction: Facing southwest

Photo Date: 9/25/2014

Photo Taken By: MDW

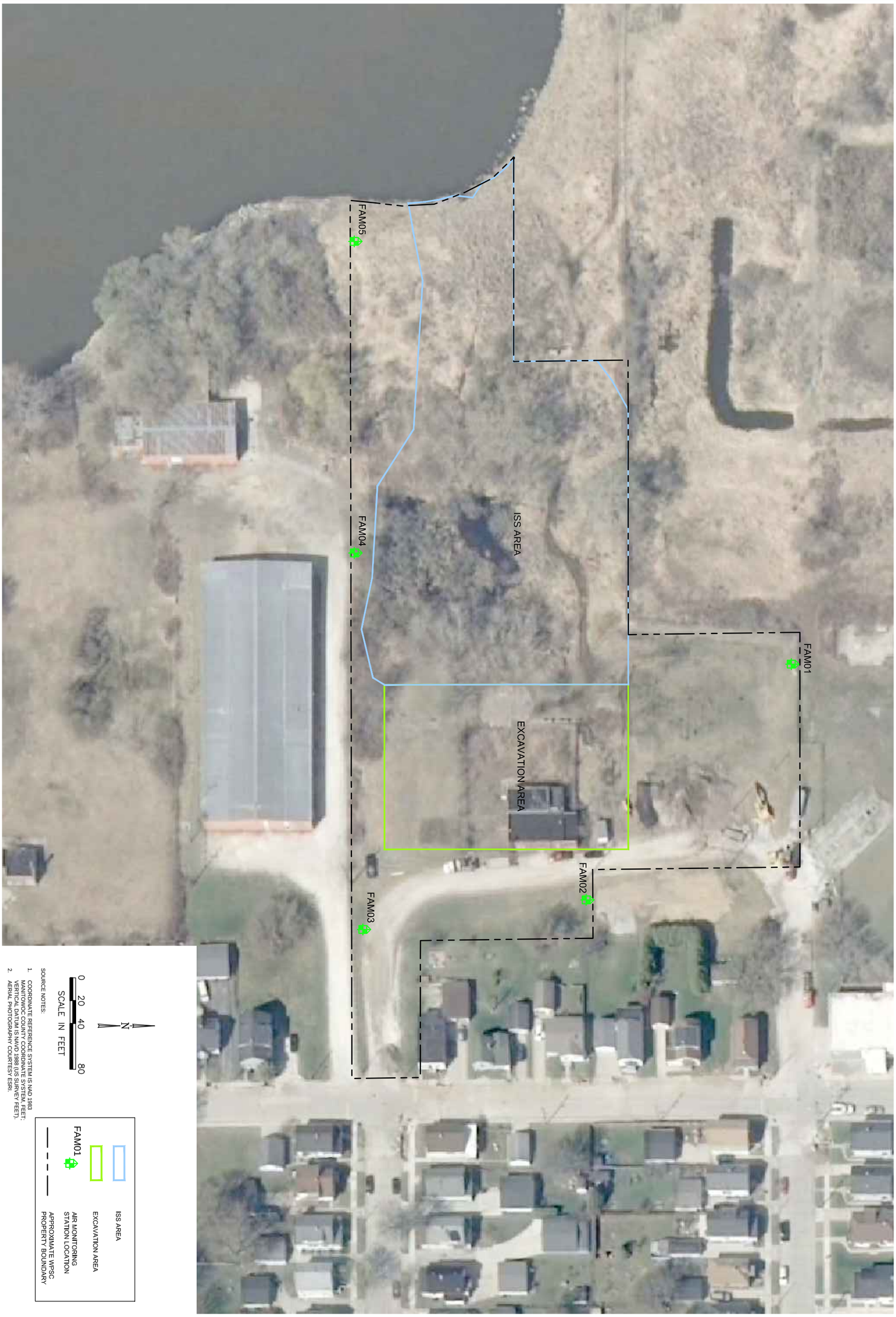
Photo 3: ISS drilling.

Direction: Facing northwest

Photo Date: 9/26/2014

Photo Taken By: MDW

Sep 24, 2014 8:34am PLOTTED BY: rhopkins SAVED BY: rhopkins
Y:\ACAData\Projects\15\1569 2riv\1569_1\14-7\15691-147-B01.dwg Layout1
IMAGES: Y:\GIS\Projects\15\1569\CAD\To_CAD\Manitowoc_Co_Imagery_2010_v2.tif;
XREFS:



AIR MONITORING STATION LOCATIONS

FORMER TWO RIVERS MANUFACTURED GAS PLANT
WISCONSIN PUBLIC SERVICE CORPORATION
TWO RIVERS, WISCONSIN

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DRAWN BY:	RLH	DATE:	09/24/14
CHECKED BY:	MDW	DATE:	09/24/14
APPROVED BY:	KRM	DATE:	09/24/14

DRAWING NO: 15691-147-B01

REFERENCE: .

PROJECT NO. 1569.1/14.7

FIGURE NO. 1

Table 1 - Analytical Air Summary

Weekly Progress Report
Former Two Rivers MGP Site
Two Rivers, WI

Sample Location	Sample Date	Sample Type	Benzo(a)anthracene (ug/m3)	Benzo(a)pyrene (ug/m3)	Benzo(b)fluoranthene (ug/m3)	Benzo(k)fluoranthene (ug/m3)	Chrysene (ug/m3)	Dibenz(a,h)anthracene (ug/m3)	Indeno(1,2,3-cd)pyrene (ug/m3)
Site-Specific Air SL (1E-04)			**160**	**16**	**160**	**160**	**1600**	**15**	**160**
Site-Specific Air SL (1E-05)			*16*	*1.6*	*16*	*16*	*160*	*1.5*	*16*
Site-Specific Air SL (1E-06)			1.6	0.16	1.6	1.6	16	0.15	1.6
FAM01	9/22/2014	PUF	< 0.0017	< 0.0022	< 0.0011	< 0.0026	< 0.0024	< 0.0018	< 0.0014
FAM02	9/22/2014	PUF	< 0.0017	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM03	9/22/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM04	9/22/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM05	9/22/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM01	9/23/2014	PUF	< 0.0017	< 0.0022	< 0.0012	< 0.0026	< 0.0024	< 0.0018	< 0.0015
FAM02	9/23/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM03	9/23/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM04	9/23/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM05	9/23/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM01	9/24/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM02	9/24/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM03	9/24/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM04	9/24/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM05	9/24/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM01	9/25/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM02	9/25/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM03	9/25/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM04	9/25/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0025	< 0.0018	< 0.0015
FAM05	9/25/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0025	< 0.0018	< 0.0015
FAM01	9/26/2014	PUF	< 0.0017	< 0.0022	< 0.0012	< 0.0026	< 0.0024	< 0.0018	< 0.0014
FAM02	9/26/2014	PUF	< 0.0017	< 0.0022	< 0.0012	< 0.0026	< 0.0024	< 0.0018	< 0.0015
FAM03	9/26/2014	PUF	< 0.0017	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
FAM04	9/26/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015

Sample Location	Sample Date	Sample Type	Benzene (ug/m3)	Ethylbenzene (ug/m3)	Naphthalene (ug/m3)	Toluene (ug/m3)	Xylene (total) (ug/m3)
Site-Specific Air SL (1E-04)			**110**	**7100**	**42**	**7000**	**560**
Site-Specific Air SL (1E-05)			*110*	*710*	*42*	*7000*	*560*
Site-Specific Air SL (1E-06)			23	71	5.2	*7000*	*560*
FAM01	9/22/2014	SUMMA	0.59	0.76	< 0.16	1.16	1.29
FAM02	9/22/2014	SUMMA	1.93	1.92	< 0.16	2.24	1.78
FAM03	9/22/2014	SUMMA	3.28	3.34	< 0.16	5.41	4.1
FAM04	9/22/2014	SUMMA	1.54	3.3	3.5	2.47	3.97
FAM05	9/22/2014	SUMMA	0.85	3.25	4.89	2.28	3.34
FAM01	9/23/2014	SUMMA	1.73	1.68	1.1	2.54	2.52
FAM02	9/23/2014	SUMMA	0.75	0.58	1.8	2.31	1.28
FAM03	9/23/2014	SUMMA	3.58	3.19	1.44	3.5	4.03
FAM04	9/23/2014	SUMMA	26.4	25.25	5.3	16.91	27.46
FAM05	9/23/2014	SUMMA	10.75	10.19	3.6	6.9	10.63
FAM01	9/24/2014	SUMMA	0.98	0.8	0.91	1.69	1.42
FAM02	9/24/2014	SUMMA	2.09	1.24	< 0.16	2.43	1.29
FAM03	9/24/2014	SUMMA	4.24	0.53	< 0.16	3.35	0.89
FAM04	9/24/2014	SUMMA	7.18	7.1	0.59	5.39	8.43
FAM05	9/24/2014	SUMMA	2.38	2.4	1.12	2.5	2.97
FAM01	9/25/2014	SUMMA	12.33	13.23	< 0.16	14.16	16.75
FAM02	9/25/2014	SUMMA	1.52	< 0.09	< 0.16	0.15	< 0.18
FAM03	9/25/2014	SUMMA	48.65	57.31	11.71	57.39	74.95
FAM04	9/25/2014	SUMMA	9.08	10.14	3.89	7.27	23.34
FAM05	9/25/2014	SUMMA	3.11	0.93	< 0.16	2.41	0.66
FAM01	9/26/2014	SUMMA	4.88	5.75	4.97	6.91	8.85
FAM02	9/26/2014	SUMMA	5.53	5.75	8.54	7.29	8.4
FAM03	9/26/2014	SUMMA	26.03	30.52	22.43	32.63	44.23
FAM04	9/26/2014	SUMMA	8.79	7.96	4	8.83	12.83

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Table 1 - Analytical Air Summary

Weekly Progress Report
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Two Rivers, WI

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Site-Specific Air SL (1E-05)			*16*	*1.6*	*16*	*16*	*160*	*1.5*	*16*
Site-Specific Air SL (1E-06)			1.6	0.16	1.6	1.6	16	0.15	1.6
FAM05	9/26/2014	PUF	< 0.0018	< 0.0022	< 0.0012	< 0.0027	< 0.0024	< 0.0018	< 0.0015
Average 9/9/14 - 9/26/14			**0.0018**	**0.0022**	**0.0012**	**0.0027**	**0.0024**	**0.0018**	**0.0015**

Sample Location	Sample Date	Sample Type	Benzene (ug/m3)	Ethylbenzene (ug/m3)	Naphthalene (ug/m3)	Toluene (ug/m3)	Xylene (total) (ug/m3)
Site-Specific Air SL (1E-04)			**110**	**7100**	**42**	**7000**	**560**
Site-Specific Air SL (1E-05)			*110*	*710*	*42*	*7000*	*560*
Site-Specific Air SL (1E-06)			23	71	5.2	*7000*	*560*
FAM05	9/26/2014	SUMMA	1.82	2.03	1.6	2.88	3.1
Average 9/9/14 - 9/26/14			**3.70**	**3.81**	**2.10**	**4.13**	**5.31**

Notes:

1) Site-Specific Air Sample Levels (SL) were developed by Exponent and were provided in the *Site-Specific Perimeter Air Monitoring Acceptable Air Concentrations Technical Memorandum* June 4, 2014. SLs are based on acceptable air concentrations for target cancer risks.
2) Sample date listed is the start date of the 24-hour sampling period.
3) Parameter level was below the method detection limit.
4) Averages do not include field blanks and duplicates.
5) Results below the method detection limit are average with the method detection limit level.
6) ug/m3 - micrograms per cubic meter adjusted to standard temperature and pressure.