Date Received _____
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RECEIVED
JAN 25 2012
Remediation & Redevelopment

Request for Initial Coverage Under
Wisconsin Pollutant Discharge Elimination System (WPDES)
Wastewater Discharge Permit (WI-0046566-05) for
Contaminated Groundwater from Remedial Action Operations

(Revised 12 / 2007)

Please type or print required information, except for the signature.

I. GENERAL INFORMATION

A: FACILITY LOCATION INFORMATION	
Name of Facility / Project Ripon HWY FF/NN Landfill License #467, Ripon, WI	Official Representative Onsite Title Nelson Olavarria (PRP Group Chairman)
(Address or Highway / Road with Distance and Direction from nearest City) 600 Travis Street, #5600	Telephone No.: Fax # (713) 209-8850 (713) 209-8990
City, State, Zip Code Houston, TX 77210	County Email Address Fond du Lac nelson.olavarria@CooperIndustries.com

B: Individual, parent company, or organization with direct control over the facility. Enter full official legal name of the owner or parent company, if there is one, the mailing address, and the name and title of the official representative (responsible party) signing this application if he/she is located at address of parent company.	
Parent Company/Owner Ripon HWY FF/NN Landfill License #467, Ripon, WI	Company Contact Title Nelson Olavarria (PRP Group Chairman)
Mailing Address - PO Box, Street, or Route 600 Travis Street, #5600	Telephone No.: Fax # (713) 209-8850 (713) 209-8990
City, State, Zip Code Houston, TX 77210	Email Address Fond du Lac nelson.olavarria@CooperIndustries.com

C: Consulting Firm for Groundwater	
Company Name Tetra Tech GEO	Company Contact Title Michael Noel Principal Hydrogeologist
Mailing Address - PO Box, Street, or Route 175 N Corporate Drive, Suite 100	Telephone No.: Fax # (262) 792-1282 (262) 792-1310
City, State, Zip Code Brookfield, WI 53045	Email Address mike.noel@tetratech.com

D. **Name of Person to Receive Discharge Monitoring Report Forms** from Department:

Nelson Olavarria

E. **Any Other Necessary Contact Person** (name, phone, email)

Mike Noel, Tetra Tech GEO, 262-792-1282, mike.noel@tetratech.com

F. **DNR Environmental Response & Repair Project Number, and DNR Project Manager name:**

WDNR BRRTS #02-20-000915 Gary Edelstein

II. SPECIFIC INFORMATION ON PROJECT

A. Pollutants

1. The suspected **sources of the pollutants** (from original application)
Landfill leachate, groundwater at location of groundwater extraction wells contains vinyl chloride and other Volatile Organic Compounds.

2. Check **all fuel and waste types** suspected in the contamination at this site:

☐ Unleaded Gasoline ☐ Jet Fuel ☐ Pesticides
☐ Leaded Gasoline ☐ Waste Oil ☐ Fertilizers
☐ Diesel Fuel X Solvents
☐ Heating Oil ☐ Other:

3. Check **all pollutants identified at this site:**

☐ BETX (Benzene, Ethylbenzene, Toluene, Xylene) ☐ Pesticides/Fertilizers
☐ PAHs (Polynuclear aromatic hydrocarbons) ☐ Total Recoverable Lead *
X VOCs (Volatile Organic Chemicals) ☐ Other_____

* Include upstream receiving water hardness analysis if lead is detected.

B. Treatment

1. **Describe the proposed treatment system:**

Two groundwater extraction wells at 20 GPM each with one sediment filter and one air stripper. Treated groundwater to discharge to Silver Creek located approximately 1,500 feet south of the Northwestern Trail.

Treatment Techniques Used
X Pump & Treat
X Air stripping
☐ GAC (Granular Activated Carbon)
☐ Augmented Insitu Bioremediation (with chemicals or nutrient addition)
☐ Other (describe)

2. **Cleaning, softening or descaling of Pump & Treat treatment system**

a. Identify any additives that are being used for cleaning, softening, or descaling of the treatment system. Provide Material Safety Data Sheets, and describe dosage.

None are proposed at this time.

b. Describe what is done to clean, soften or descale, and how often it is done.

No additives are proposed at this time. If scale collects on the air stripper trays it will be removed in a closed loop cleaning process or by physical means.

c. Where is the wastewater from cleaning and descaling discharged?

☐ same discharge point as treated effluent ☐ sanitary sewer X other (please describe)

Any cleaning and descaling wastewater will be characterized and contained within a truck mounted holding tank and transported to the City of Ripon POTW for proper disposal or another permitted disposal facility approved by WDNR.

3. **Anticipated operating schedule** during the permit term (2007 – 2012)

Post 2012.

4. **Anticipated flowrate** (in gpm), and total volume of treated water to be discharged per month:

40 GPM 30 days X 40 GPM = 1,728,000 gallons per month.

5. **Proposed Effluent discharge point location** (see Part III. Item 9 below for level of detail needed):

From the Northwestern Trail, due south along the west side of the South Koro Road right of way, through City of Ripon owned vacant land, to a newly constructed engineered discharge structure on the north bank of Silver Creek.

6. Is an **air permit** from the DNR air management program required? If not, why not

No air permit will be required as the documented VOC contaminant load in the groundwater to be treated cannot cause the contaminant level in the air stream to exceed the maximum published WDNR limits for a non-permit air discharge.

III. DISCHARGE MANAGEMENT PLAN UPDATE

Include the following information:

1. A **summary** of analytical results for contaminants **detected** at the site.

   Included in Table 2 attached.

2. Results from the most recent **volatile organic compounds (VOC) scan**, including methods used and detection levels.

   Included in the attached Pace Analytical report dated November 4, 2011.

3. Results from an analysis of the **poly-nuclear aromatic hydrocarbons (PAHs)** shown on the right, including methods used and detection levels.

   The lab needs to reach the lowest detection level achievable for each parameter because of the low limit for total PAHs. EPA test method SW-846 8310 is recommended (unless there are high levels of BETX which interfere).

benzo(a)anthracene	dibenzo(a,h)anthracene
benzo(a)pyrene	fluoranthene
benzo(b)fluoranthene	indeno(1,2,3-cd)pyrene
benzo(g,h,i)perylene	naphthalene
benzo(k)fluoranthene	phenanthrene
chrysene	pyrene

   No PAH data is available for this site. PAHs have not been contaminants of concern at this site per EPA and WDNR.

4. **Contaminants proposed for periodic monitoring** and demonstration of why any monitoring required in the permit should be exempted due to low level of contaminants in the wastewater discharge.

   Vinyl chloride is the only contaminant proposed for periodic monitoring as it is the only pre-treatment VOC that exceeds a NR 140 ES.

5. **Information to support request for any alternate effluent limit** for discharges to groundwater (Part 5 of permit) or request for temporary exemption for in-situ discharges (Part 6 of permit).

   No information to support a request for any alternate effluent limit is submitted or necessary for this site.

6. **Plans and specifications of your proposed treatment system** identifying sampling points. For supplier furnished package treatment units, only a flow diagram, design summary, and unit sizing calculations are required.

   Attached Figures 5-3 and 5-4 show the location and preliminary details of the 40 GPM groundwater treatment system. The groundwater pumps will be electric-drive Grundfos (or equivalent) submersible pumps delivering 20 GPM each from two new extraction wells. The treatment system building will house a sediment filter and a low profile stainless steel counter flow multi-tray air stripper (NEEP systems or equivalent) capable of 40 GPM flow to successfully remove the known vinyl chloride contaminant load. The discharge pump on the stripper sump will be sized to deliver the 40 GPM flow through 1,500 feet of nominal 4-inch diameter HDPE pipe to the outfall at Silver Creek.

7. **General description of operations**, identifying operational tasks, who is responsible to do that task, and how frequently the task is done (particularly needed at pump & treat systems).

   The groundwater treatment system will be fully automatic with a process control panel capable of complete system shutdown in the event an alarm condition occurs. Alarm conditions will include but not be limited to:

   - *Power failure*
   - *Air stripper blower motor failure*
   - *Air stripper sump high level*
   - *Air stripper sump discharge pump motor failure*
   - *Recovery well shut-off*

   The control panel will contain an auto-dialer to alert remote personnel of a system failure. Manual system restart will be required.

   City of Ripon personnel currently visit the landfill gas treatment system biweekly and would similarly visit this groundwater treatment system to record performance data and perform maintenance. Required WPDES sampling would be performed as part of this biweekly site visit.

8. A **site plan** that identifies general land uses, underground storage tanks and pipelines, groundwater monitoring and recovery wells, contaminant plume definition and zone of influence, other known spills in the area, septic tanks and drain fields, separation distances to potable water supply wells and residences, and other pertinent information (as in original application)

   Figures 5-3 and 5-4 (attached) are adequate for this submittal. Please refer to the attached July 15, 2004, WDNR "Special Well Casing Pipe Depth Area" notice and other WDNR file documents for site specific information requested above.

9. A **detailed map of the discharge location**, showing if discharge is direct or via a storm sewer or other conveyance. Indicate distance from site to discharge location and other impacted water bodies or wetlands.

   - If a city storm sewer is used, approval from the municipality is required.
   - If a new outfall structure is proposed, the plans should identify the outfall and incorporate appropriate erosion control methods. A permit for riprap projects (available at most DNR offices) should be obtained.
   - Wetland discharges are not allowed unless they meet wetland protection requirements of Ch. NR 103, Wis. Admin. Code.

A new outfall structure will be required at Silver Creek. The 4-inch diameter HDPE pipe will terminate inside a 3-foot diameter vertical concrete pipe with a concrete base and a sewer grate top. Flow energy will be absorbed by the vertical concrete pipe. Riprap will be placed surrounding the vertical pipe routed to the creek to prevent bank erosion. A typical outfall structure is shown on Figure A attached. A Chapter 30 Exemption Determination Request will be submitted if this remedial alternative is implemented. WDNR approval of the outfall structure will be obtained prior to construction.

III. SIGNATURES

A. Signature of person completing the form, attesting to the accuracy and completeness of the statements made.

Daniel L. Morgan	Senior Engineer	Jan 17, 2012
Name	Title	Date Signed
175 N Corporate Drive, Brookfield, WI 53045	dan.morgan@tetratech.com	262-792-1282
Address	Email	Telephone Number

B. This application must be signed by the official representative of the permitted facility (responsible party) who is: the owner, the sole proprietor for a sole proprietorship, a general partner for a partnership, or by a ranking elected official or other duly authorized representative for a unit of government, or an executive officer of at least the level of vice president for a corporation, having overall responsibility for the operation of the facility. If the application is not signed, or is found to be incomplete, it will be returned.

Nelson Olavarria	Representative for PRP Group PRP COMMITTEE CHAIRMAN
Typed or Printed Name of Official Representative	Title
Nelson M. Olavarria	1/17/2012
Signature of Official Representative	Date Signed

Please submit the application to the Regional DNR office nearest you, or to:

Department of Natural Resources
WPDES Permit Application – WT/3
P.O. Box 7921
Madison, WI 53707

A copy of the submittal should also be sent to the Department Remediation & Redevelopment Project Manager.

Watershed Central:\General Permits\Reissue Docs\Grw Remediation\Request For Initial Coverage.doc

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 04, 2011

Mr. Nelson Olavarria
Cooper Industries
600 Travis Street
Suite 5600
Houston, TX 77002

RE: Project: FF/NN Landfill
Pace Project No.: 3056312

Dear Mr. Olavarria:
Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

David A. Pichette

david.pichette@pacelabs.com
Project Manager

Enclosures

cc: Mr. Michael Noel, Geotrans, Inc.

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: FF/NN Landfill
Pace Project No.: 3056312

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 11888
North Carolina Certification #: 503
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: FF/NN Landfill
Pace Project No.: 3056312

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
3056312001	P-103D	EPA 8260	SMT	45	PASI-G
3056312002	P-103	EPA 8260	SMT	45	PASI-G
3056312003	P-111D	EPA 8260	SMT	45	PASI-G
3056312004	P-111D DUP	EPA 8260	SMT	45	PASI-G
3056312005	P-107D	EPA 8260	SMT	45	PASI-G
3056312006	P-107	EPA 8260	SMT	45	PASI-G
3056312007	MW-107	EPA 8260	SMT	45	PASI-G
3056312008	MW-103	EPA 8260	SMT	45	PASI-G
3056312009	MW-112	EPA 8260	SMT	45	PASI-G
3056312010	MW-104	EPA 8260	SMT	45	PASI-G
3056312011	P-113A	EPA 8260	SMT	45	PASI-G
3056312012	P-113B	EPA 8260	SMT	45	PASI-G
3056312013	MW-3A	EPA 8260	SMT	45	PASI-G
3056312014	MW-3B	EPA 8260	SMT	45	PASI-G
3056312015	P-116	EPA 8260	SMT	45	PASI-G
3056312016	P-114	EPA 8260	SMT	45	PASI-G
3056312017	P-114DUP	EPA 8260	SMT	45	PASI-G
3056312018	P-115	EPA 8260	SMT	45	PASI-G
3056312019	TRIP BLANK	EPA 8260	SMT	45	PASI-G

Pace Analytical Services, Inc.
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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: P-103D **Lab ID: 3056312001** Collected: 10/18/11 11:45 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/25/11 21:36	67-64-1	
Benzene	ND	ug/L	1.0	1		10/25/11 21:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/25/11 21:36	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/25/11 21:36	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/25/11 21:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/25/11 21:36	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/25/11 21:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/25/11 21:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/25/11 21:36	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/25/11 21:36	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/25/11 21:36	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/25/11 21:36	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/25/11 21:36	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/25/11 21:36	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/25/11 21:36	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/25/11 21:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 21:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 21:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 21:36	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/25/11 21:36	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/25/11 21:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/25/11 21:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/25/11 21:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 21:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 21:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/25/11 21:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 21:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 21:36	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/25/11 21:36	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/25/11 21:36	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/25/11 21:36	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/25/11 21:36	91-20-3	
Styrene	ND	ug/L	1.0	1		10/25/11 21:36	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/25/11 21:36	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/25/11 21:36	109-99-9	
Toluene	ND	ug/L	1.0	1		10/25/11 21:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/25/11 21:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/25/11 21:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/25/11 21:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/25/11 21:36	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/25/11 21:36	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/25/11 21:36	1330-20-7	
4-Bromofluorobenzene (S)	92	%.	70-130	1		10/25/11 21:36	460-00-4	
Dibromofluoromethane (S)	93	%.	70-130	1		10/25/11 21:36	1868-53-7	
Toluene-d8 (S)	94	%.	70-130	1		10/25/11 21:36	2037-26-5	

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: P-103 **Lab ID: 3056312002** Collected: 10/18/11 12:20 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/25/11 21:59	67-64-1	
Benzene	ND	ug/L	1.0	1		10/25/11 21:59	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/25/11 21:59	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/25/11 21:59	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/25/11 21:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/25/11 21:59	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/25/11 21:59	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/25/11 21:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/25/11 21:59	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/25/11 21:59	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/25/11 21:59	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/25/11 21:59	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/25/11 21:59	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/25/11 21:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/25/11 21:59	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/25/11 21:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 21:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 21:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 21:59	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/25/11 21:59	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/25/11 21:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/25/11 21:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/25/11 21:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 21:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 21:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/25/11 21:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 21:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 21:59	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/25/11 21:59	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/25/11 21:59	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/25/11 21:59	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/25/11 21:59	91-20-3	
Styrene	ND	ug/L	1.0	1		10/25/11 21:59	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/25/11 21:59	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/25/11 21:59	109-99-9	
Toluene	ND	ug/L	1.0	1		10/25/11 21:59	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/25/11 21:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/25/11 21:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/25/11 21:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/25/11 21:59	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/25/11 21:59	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/25/11 21:59	1330-20-7	
4-Bromofluorobenzene (S)	91	%.	70-130	1		10/25/11 21:59	460-00-4	
Dibromofluoromethane (S)	92	%.	70-130	1		10/25/11 21:59	1868-53-7	
Toluene-d8 (S)	93	%.	70-130	1		10/25/11 21:59	2037-26-5	

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: P-111D **Lab ID: 3056312003** Collected: 10/18/11 14:00 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/25/11 22:22	67-64-1	
Benzene	ND	ug/L	1.0	1		10/25/11 22:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/25/11 22:22	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/25/11 22:22	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/25/11 22:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/25/11 22:22	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/25/11 22:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/25/11 22:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/25/11 22:22	108-90-7	
Chloroethane	**1.5**	ug/L	1.0	1		10/25/11 22:22	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/25/11 22:22	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/25/11 22:22	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/25/11 22:22	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/25/11 22:22	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/25/11 22:22	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/25/11 22:22	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 22:22	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 22:22	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 22:22	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/25/11 22:22	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/25/11 22:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/25/11 22:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/25/11 22:22	75-35-4	
cis-1,2-Dichloroethene	**1.4**	ug/L	1.0	1		10/25/11 22:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 22:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/25/11 22:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 22:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 22:22	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/25/11 22:22	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/25/11 22:22	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/25/11 22:22	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/25/11 22:22	91-20-3	
Styrene	ND	ug/L	1.0	1		10/25/11 22:22	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/25/11 22:22	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/25/11 22:22	109-99-9	
Toluene	ND	ug/L	1.0	1		10/25/11 22:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/25/11 22:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/25/11 22:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/25/11 22:22	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/25/11 22:22	75-69-4	
Vinyl chloride	**4.5**	ug/L	1.0	1		10/25/11 22:22	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/25/11 22:22	1330-20-7	
4-Bromofluorobenzene (S)	90	%.	70-130	1		10/25/11 22:22	460-00-4	
Dibromofluoromethane (S)	92	%.	70-130	1		10/25/11 22:22	1868-53-7	
Toluene-d8 (S)	96	%.	70-130	1		10/25/11 22:22	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: P-111D DUP **Lab ID: 3056312004** Collected: 10/18/11 14:05 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/25/11 20:51	67-64-1	
Benzene	ND	ug/L	1.0	1		10/25/11 20:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/25/11 20:51	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/25/11 20:51	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/25/11 20:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/25/11 20:51	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/25/11 20:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/25/11 20:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/25/11 20:51	108-90-7	
Chloroethane	**1.4**	ug/L	1.0	1		10/25/11 20:51	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/25/11 20:51	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/25/11 20:51	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/25/11 20:51	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/25/11 20:51	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/25/11 20:51	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/25/11 20:51	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 20:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 20:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 20:51	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/25/11 20:51	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/25/11 20:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/25/11 20:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/25/11 20:51	75-35-4	
cis-1,2-Dichloroethene	**1.5**	ug/L	1.0	1		10/25/11 20:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 20:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/25/11 20:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 20:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 20:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/25/11 20:51	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/25/11 20:51	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/25/11 20:51	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/25/11 20:51	91-20-3	
Styrene	ND	ug/L	1.0	1		10/25/11 20:51	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/25/11 20:51	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/25/11 20:51	109-99-9	
Toluene	ND	ug/L	1.0	1		10/25/11 20:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/25/11 20:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/25/11 20:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/25/11 20:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/25/11 20:51	75-69-4	
Vinyl chloride	**4.8**	ug/L	1.0	1		10/25/11 20:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/25/11 20:51	1330-20-7	
4-Bromofluorobenzene (S)	91	%.	70-130	1		10/25/11 20:51	460-00-4	
Dibromofluoromethane (S)	93	%.	70-130	1		10/25/11 20:51	1868-53-7	
Toluene-d8 (S)	96	%.	70-130	1		10/25/11 20:51	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: P-107D **Lab ID: 3056312005** Collected: 10/18/11 14:50 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/25/11 22:44	67-64-1	
Benzene	ND	ug/L	1.0	1		10/25/11 22:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/25/11 22:44	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/25/11 22:44	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/25/11 22:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/25/11 22:44	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/25/11 22:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/25/11 22:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/25/11 22:44	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/25/11 22:44	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/25/11 22:44	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/25/11 22:44	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/25/11 22:44	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/25/11 22:44	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/25/11 22:44	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/25/11 22:44	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 22:44	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 22:44	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 22:44	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/25/11 22:44	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/25/11 22:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/25/11 22:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/25/11 22:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 22:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 22:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/25/11 22:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 22:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 22:44	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/25/11 22:44	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/25/11 22:44	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/25/11 22:44	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/25/11 22:44	91-20-3	
Styrene	ND	ug/L	1.0	1		10/25/11 22:44	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/25/11 22:44	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/25/11 22:44	109-99-9	
Toluene	ND	ug/L	1.0	1		10/25/11 22:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/25/11 22:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/25/11 22:44	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/25/11 22:44	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/25/11 22:44	75-69-4	
Vinyl chloride	**1.8**	ug/L	1.0	1		10/25/11 22:44	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/25/11 22:44	1330-20-7	
4-Bromofluorobenzene (S)	91	%.	70-130	1		10/25/11 22:44	460-00-4	
Dibromofluoromethane (S)	95	%.	70-130	1		10/25/11 22:44	1868-53-7	
Toluene-d8 (S)	99	%.	70-130	1		10/25/11 22:44	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: P-107 **Lab ID: 3056312006** Collected: 10/18/11 15:30 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/25/11 23:07	67-64-1	
Benzene	ND	ug/L	1.0	1		10/25/11 23:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/25/11 23:07	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/25/11 23:07	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/25/11 23:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/25/11 23:07	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/25/11 23:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/25/11 23:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/25/11 23:07	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/25/11 23:07	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/25/11 23:07	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/25/11 23:07	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/25/11 23:07	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/25/11 23:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/25/11 23:07	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/25/11 23:07	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 23:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 23:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 23:07	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/25/11 23:07	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/25/11 23:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/25/11 23:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/25/11 23:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 23:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 23:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/25/11 23:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 23:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 23:07	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/25/11 23:07	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/25/11 23:07	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/25/11 23:07	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/25/11 23:07	91-20-3	
Styrene	ND	ug/L	1.0	1		10/25/11 23:07	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/25/11 23:07	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/25/11 23:07	109-99-9	
Toluene	ND	ug/L	1.0	1		10/25/11 23:07	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/25/11 23:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/25/11 23:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/25/11 23:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/25/11 23:07	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/25/11 23:07	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/25/11 23:07	1330-20-7	
4-Bromofluorobenzene (S)	90	%.	70-130	1		10/25/11 23:07	460-00-4	
Dibromofluoromethane (S)	95	%.	70-130	1		10/25/11 23:07	1868-53-7	
Toluene-d8 (S)	94	%.	70-130	1		10/25/11 23:07	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: MW-107 **Lab ID: 3056312007** Collected: 10/18/11 17:30 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/25/11 23:30	67-64-1	
Benzene	ND	ug/L	1.0	1		10/25/11 23:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/25/11 23:30	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/25/11 23:30	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/25/11 23:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/25/11 23:30	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/25/11 23:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/25/11 23:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/25/11 23:30	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/25/11 23:30	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/25/11 23:30	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/25/11 23:30	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/25/11 23:30	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/25/11 23:30	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/25/11 23:30	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/25/11 23:30	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 23:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 23:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 23:30	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/25/11 23:30	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/25/11 23:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/25/11 23:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/25/11 23:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 23:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 23:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/25/11 23:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 23:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 23:30	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/25/11 23:30	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/25/11 23:30	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/25/11 23:30	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/25/11 23:30	91-20-3	
Styrene	ND	ug/L	1.0	1		10/25/11 23:30	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/25/11 23:30	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/25/11 23:30	109-99-9	
Toluene	ND	ug/L	1.0	1		10/25/11 23:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/25/11 23:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/25/11 23:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/25/11 23:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/25/11 23:30	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/25/11 23:30	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/25/11 23:30	1330-20-7	
4-Bromofluorobenzene (S)	92	%.	70-130	1		10/25/11 23:30	460-00-4	
Dibromofluoromethane (S)	94	%.	70-130	1		10/25/11 23:30	1868-53-7	
Toluene-d8 (S)	92	%.	70-130	1		10/25/11 23:30	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: MW-103 **Lab ID: 3056312008** Collected: 10/19/11 08:45 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/25/11 23:53	67-64-1	
Benzene	ND	ug/L	1.0	1		10/25/11 23:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/25/11 23:53	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/25/11 23:53	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/25/11 23:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/25/11 23:53	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/25/11 23:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/25/11 23:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/25/11 23:53	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/25/11 23:53	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/25/11 23:53	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/25/11 23:53	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/25/11 23:53	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/25/11 23:53	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/25/11 23:53	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/25/11 23:53	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 23:53	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 23:53	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 23:53	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/25/11 23:53	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/25/11 23:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/25/11 23:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/25/11 23:53	75-35-4	
cis-1,2-Dichloroethene	**4.3**	ug/L	1.0	1		10/25/11 23:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 23:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/25/11 23:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 23:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 23:53	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/25/11 23:53	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/25/11 23:53	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/25/11 23:53	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/25/11 23:53	91-20-3	
Styrene	ND	ug/L	1.0	1		10/25/11 23:53	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/25/11 23:53	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/25/11 23:53	109-99-9	
Toluene	ND	ug/L	1.0	1		10/25/11 23:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/25/11 23:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/25/11 23:53	79-00-5	
Trichloroethene	**3.0**	ug/L	1.0	1		10/25/11 23:53	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/25/11 23:53	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/25/11 23:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/25/11 23:53	1330-20-7	
4-Bromofluorobenzene (S)	90	%.	70-130	1		10/25/11 23:53	460-00-4	
Dibromofluoromethane (S)	93	%.	70-130	1		10/25/11 23:53	1868-53-7	
Toluene-d8 (S)	98	%.	70-130	1		10/25/11 23:53	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: MW-112 **Lab ID: 3056312009** Collected: 10/19/11 09:05 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/26/11 00:16	67-64-1	
Benzene	ND	ug/L	1.0	1		10/26/11 00:16	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/26/11 00:16	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/26/11 00:16	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/26/11 00:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/26/11 00:16	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/26/11 00:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/26/11 00:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/26/11 00:16	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/26/11 00:16	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/26/11 00:16	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/26/11 00:16	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/26/11 00:16	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/26/11 00:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/26/11 00:16	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/26/11 00:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 00:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 00:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 00:16	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/26/11 00:16	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/26/11 00:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/26/11 00:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/26/11 00:16	75-35-4	
cis-1,2-Dichloroethene	1.4	ug/L	1.0	1		10/26/11 00:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 00:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/26/11 00:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 00:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 00:16	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/26/11 00:16	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/26/11 00:16	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/26/11 00:16	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/26/11 00:16	91-20-3	
Styrene	ND	ug/L	1.0	1		10/26/11 00:16	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/26/11 00:16	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/26/11 00:16	109-99-9	
Toluene	ND	ug/L	1.0	1		10/26/11 00:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/26/11 00:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/26/11 00:16	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/26/11 00:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/26/11 00:16	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/26/11 00:16	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/26/11 00:16	1330-20-7	
4-Bromofluorobenzene (S)	90	%.	70-130	1		10/26/11 00:16	460-00-4	
Dibromofluoromethane (S)	94	%.	70-130	1		10/26/11 00:16	1868-53-7	
Toluene-d8 (S)	97	%.	70-130	1		10/26/11 00:16	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: MW-104 **Lab ID: 3056312010** Collected: 10/19/11 09:30 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/26/11 00:38	67-64-1	
Benzene	ND	ug/L	1.0	1		10/26/11 00:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/26/11 00:38	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/26/11 00:38	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/26/11 00:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/26/11 00:38	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/26/11 00:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/26/11 00:38	56-23-5	
Chlorobenzene	3.6	ug/L	1.0	1		10/26/11 00:38	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/26/11 00:38	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/26/11 00:38	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/26/11 00:38	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/26/11 00:38	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/26/11 00:38	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/26/11 00:38	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/26/11 00:38	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 00:38	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 00:38	541-73-1	
1,4-Dichlorobenzene	2.0	ug/L	1.0	1		10/26/11 00:38	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/26/11 00:38	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/26/11 00:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/26/11 00:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/26/11 00:38	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 00:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 00:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/26/11 00:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 00:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 00:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/26/11 00:38	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/26/11 00:38	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/26/11 00:38	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/26/11 00:38	91-20-3	
Styrene	ND	ug/L	1.0	1		10/26/11 00:38	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/26/11 00:38	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/26/11 00:38	109-99-9	
Toluene	ND	ug/L	1.0	1		10/26/11 00:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/26/11 00:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/26/11 00:38	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/26/11 00:38	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/26/11 00:38	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/26/11 00:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/26/11 00:38	1330-20-7	
4-Bromofluorobenzene (S)	91	%.	70-130	1		10/26/11 00:38	460-00-4	
Dibromofluoromethane (S)	90	%.	70-130	1		10/26/11 00:38	1868-53-7	
Toluene-d8 (S)	96	%.	70-130	1		10/26/11 00:38	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: P-113A **Lab ID: 3056312011** Collected: 10/19/11 11:00 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/26/11 01:01	67-64-1	
Benzene	ND	ug/L	1.0	1		10/26/11 01:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/26/11 01:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/26/11 01:01	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/26/11 01:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/26/11 01:01	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/26/11 01:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/26/11 01:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/26/11 01:01	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/26/11 01:01	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/26/11 01:01	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/26/11 01:01	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/26/11 01:01	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/26/11 01:01	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/26/11 01:01	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/26/11 01:01	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 01:01	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 01:01	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 01:01	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/26/11 01:01	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/26/11 01:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/26/11 01:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/26/11 01:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 01:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 01:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/26/11 01:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 01:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 01:01	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/26/11 01:01	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/26/11 01:01	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/26/11 01:01	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/26/11 01:01	91-20-3	
Styrene	ND	ug/L	1.0	1		10/26/11 01:01	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/26/11 01:01	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/26/11 01:01	109-99-9	
Toluene	ND	ug/L	1.0	1		10/26/11 01:01	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/26/11 01:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/26/11 01:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/26/11 01:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/26/11 01:01	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/26/11 01:01	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/26/11 01:01	1330-20-7	
4-Bromofluorobenzene (S)	91	%.	70-130	1		10/26/11 01:01	460-00-4	
Dibromofluoromethane (S)	95	%.	70-130	1		10/26/11 01:01	1868-53-7	
Toluene-d8 (S)	94	%.	70-130	1		10/26/11 01:01	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: P-113B **Lab ID: 3056312012** Collected: 10/19/11 11:30 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/26/11 01:24	67-64-1	
Benzene	ND	ug/L	1.0	1		10/26/11 01:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/26/11 01:24	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/26/11 01:24	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/26/11 01:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/26/11 01:24	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/26/11 01:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/26/11 01:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/26/11 01:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/26/11 01:24	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/26/11 01:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/26/11 01:24	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/26/11 01:24	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/26/11 01:24	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/26/11 01:24	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/26/11 01:24	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 01:24	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 01:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 01:24	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/26/11 01:24	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/26/11 01:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/26/11 01:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/26/11 01:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 01:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 01:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/26/11 01:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 01:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 01:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/26/11 01:24	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/26/11 01:24	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/26/11 01:24	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/26/11 01:24	91-20-3	
Styrene	ND	ug/L	1.0	1		10/26/11 01:24	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/26/11 01:24	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/26/11 01:24	109-99-9	
Toluene	ND	ug/L	1.0	1		10/26/11 01:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/26/11 01:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/26/11 01:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/26/11 01:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/26/11 01:24	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/26/11 01:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/26/11 01:24	1330-20-7	
4-Bromofluorobenzene (S)	92	%.	70-130	1		10/26/11 01:24	460-00-4	
Dibromofluoromethane (S)	94	%.	70-130	1		10/26/11 01:24	1868-53-7	
Toluene-d8 (S)	95	%.	70-130	1		10/26/11 01:24	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: MW-3A **Lab ID: 3056312013** Collected: 10/19/11 12:20 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/26/11 01:47	67-64-1	
Benzene	ND	ug/L	1.0	1		10/26/11 01:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/26/11 01:47	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/26/11 01:47	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/26/11 01:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/26/11 01:47	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/26/11 01:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/26/11 01:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/26/11 01:47	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/26/11 01:47	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/26/11 01:47	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/26/11 01:47	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/26/11 01:47	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/26/11 01:47	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/26/11 01:47	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/26/11 01:47	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 01:47	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 01:47	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 01:47	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/26/11 01:47	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/26/11 01:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/26/11 01:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/26/11 01:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 01:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 01:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/26/11 01:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 01:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 01:47	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/26/11 01:47	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/26/11 01:47	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/26/11 01:47	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/26/11 01:47	91-20-3	
Styrene	ND	ug/L	1.0	1		10/26/11 01:47	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/26/11 01:47	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/26/11 01:47	109-99-9	
Toluene	ND	ug/L	1.0	1		10/26/11 01:47	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/26/11 01:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/26/11 01:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/26/11 01:47	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/26/11 01:47	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/26/11 01:47	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/26/11 01:47	1330-20-7	
4-Bromofluorobenzene (S)	91	%.	70-130	1		10/26/11 01:47	460-00-4	
Dibromofluoromethane (S)	93	%.	70-130	1		10/26/11 01:47	1868-53-7	
Toluene-d8 (S)	100	%.	70-130	1		10/26/11 01:47	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: MW-3B **Lab ID: 3056312014** Collected: 10/19/11 12:40 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/26/11 02:09	67-64-1	
Benzene	ND	ug/L	1.0	1		10/26/11 02:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/26/11 02:09	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/26/11 02:09	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/26/11 02:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/26/11 02:09	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/26/11 02:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/26/11 02:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/26/11 02:09	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/26/11 02:09	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/26/11 02:09	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/26/11 02:09	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/26/11 02:09	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/26/11 02:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/26/11 02:09	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/26/11 02:09	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 02:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 02:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 02:09	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/26/11 02:09	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/26/11 02:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/26/11 02:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/26/11 02:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 02:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 02:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/26/11 02:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 02:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 02:09	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/26/11 02:09	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/26/11 02:09	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/26/11 02:09	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/26/11 02:09	91-20-3	
Styrene	ND	ug/L	1.0	1		10/26/11 02:09	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/26/11 02:09	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/26/11 02:09	109-99-9	
Toluene	ND	ug/L	1.0	1		10/26/11 02:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/26/11 02:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/26/11 02:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/26/11 02:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/26/11 02:09	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/26/11 02:09	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/26/11 02:09	1330-20-7	
4-Bromofluorobenzene (S)	92	%.	70-130	1		10/26/11 02:09	460-00-4	
Dibromofluoromethane (S)	94	%.	70-130	1		10/26/11 02:09	1868-53-7	
Toluene-d8 (S)	99	%.	70-130	1		10/26/11 02:09	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: P-116 **Lab ID: 3056312015** Collected: 10/19/11 13:40 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/26/11 02:32	67-64-1	
Benzene	ND	ug/L	1.0	1		10/26/11 02:32	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/26/11 02:32	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/26/11 02:32	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/26/11 02:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/26/11 02:32	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/26/11 02:32	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/26/11 02:32	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/26/11 02:32	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/26/11 02:32	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/26/11 02:32	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/26/11 02:32	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/26/11 02:32	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/26/11 02:32	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/26/11 02:32	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/26/11 02:32	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 02:32	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 02:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 02:32	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/26/11 02:32	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/26/11 02:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/26/11 02:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/26/11 02:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 02:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 02:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/26/11 02:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 02:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 02:32	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/26/11 02:32	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/26/11 02:32	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/26/11 02:32	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/26/11 02:32	91-20-3	
Styrene	ND	ug/L	1.0	1		10/26/11 02:32	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/26/11 02:32	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/26/11 02:32	109-99-9	
Toluene	ND	ug/L	1.0	1		10/26/11 02:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/26/11 02:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/26/11 02:32	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/26/11 02:32	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/26/11 02:32	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/26/11 02:32	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/26/11 02:32	1330-20-7	
4-Bromofluorobenzene (S)	90	%.	70-130	1		10/26/11 02:32	460-00-4	
Dibromofluoromethane (S)	94	%.	70-130	1		10/26/11 02:32	1868-53-7	
Toluene-d8 (S)	98	%.	70-130	1		10/26/11 02:32	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: P-114 **Lab ID: 3056312016** Collected: 10/19/11 14:15 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/26/11 02:55	67-64-1	
Benzene	ND	ug/L	1.0	1		10/26/11 02:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/26/11 02:55	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/26/11 02:55	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/26/11 02:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/26/11 02:55	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/26/11 02:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/26/11 02:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/26/11 02:55	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/26/11 02:55	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/26/11 02:55	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/26/11 02:55	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/26/11 02:55	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/26/11 02:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/26/11 02:55	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/26/11 02:55	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 02:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 02:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 02:55	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/26/11 02:55	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/26/11 02:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/26/11 02:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/26/11 02:55	75-35-4	
cis-1,2-Dichloroethene	**1.2**	ug/L	1.0	1		10/26/11 02:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 02:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/26/11 02:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 02:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 02:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/26/11 02:55	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/26/11 02:55	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/26/11 02:55	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/26/11 02:55	91-20-3	
Styrene	ND	ug/L	1.0	1		10/26/11 02:55	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/26/11 02:55	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/26/11 02:55	109-99-9	
Toluene	ND	ug/L	1.0	1		10/26/11 02:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/26/11 02:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/26/11 02:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/26/11 02:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/26/11 02:55	75-69-4	
Vinyl chloride	**5.6**	ug/L	1.0	1		10/26/11 02:55	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/26/11 02:55	1330-20-7	
4-Bromofluorobenzene (S)	91	%.	70-130	1		10/26/11 02:55	460-00-4	
Dibromofluoromethane (S)	91	%.	70-130	1		10/26/11 02:55	1868-53-7	
Toluene-d8 (S)	97	%.	70-130	1		10/26/11 02:55	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: P-114DUP **Lab ID: 3056312017** Collected: 10/19/11 14:20 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/26/11 03:18	67-64-1	
Benzene	ND	ug/L	1.0	1		10/26/11 03:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/26/11 03:18	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/26/11 03:18	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/26/11 03:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/26/11 03:18	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/26/11 03:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/26/11 03:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/26/11 03:18	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/26/11 03:18	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/26/11 03:18	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/26/11 03:18	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/26/11 03:18	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/26/11 03:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/26/11 03:18	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/26/11 03:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 03:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 03:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 03:18	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/26/11 03:18	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/26/11 03:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/26/11 03:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/26/11 03:18	75-35-4	
cis-1,2-Dichloroethene	**1.3**	ug/L	1.0	1		10/26/11 03:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 03:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/26/11 03:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 03:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 03:18	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/26/11 03:18	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/26/11 03:18	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/26/11 03:18	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/26/11 03:18	91-20-3	
Styrene	ND	ug/L	1.0	1		10/26/11 03:18	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/26/11 03:18	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/26/11 03:18	109-99-9	
Toluene	ND	ug/L	1.0	1		10/26/11 03:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/26/11 03:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/26/11 03:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/26/11 03:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/26/11 03:18	75-69-4	
Vinyl chloride	**5.5**	ug/L	1.0	1		10/26/11 03:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/26/11 03:18	1330-20-7	
4-Bromofluorobenzene (S)	91	%.	70-130	1		10/26/11 03:18	460-00-4	
Dibromofluoromethane (S)	95	%.	70-130	1		10/26/11 03:18	1868-53-7	
Toluene-d8 (S)	99	%.	70-130	1		10/26/11 03:18	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: P-115 **Lab ID: 3056312018** Collected: 10/19/11 14:45 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/26/11 03:41	67-64-1	
Benzene	ND	ug/L	1.0	1		10/26/11 03:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/26/11 03:41	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/26/11 03:41	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/26/11 03:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/26/11 03:41	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/26/11 03:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/26/11 03:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/26/11 03:41	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/26/11 03:41	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/26/11 03:41	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/26/11 03:41	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/26/11 03:41	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/26/11 03:41	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/26/11 03:41	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/26/11 03:41	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 03:41	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 03:41	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/26/11 03:41	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/26/11 03:41	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/26/11 03:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/26/11 03:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/26/11 03:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 03:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/26/11 03:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/26/11 03:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 03:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/26/11 03:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/26/11 03:41	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/26/11 03:41	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/26/11 03:41	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/26/11 03:41	91-20-3	
Styrene	ND	ug/L	1.0	1		10/26/11 03:41	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/26/11 03:41	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/26/11 03:41	109-99-9	
Toluene	ND	ug/L	1.0	1		10/26/11 03:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/26/11 03:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/26/11 03:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/26/11 03:41	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/26/11 03:41	75-69-4	
Vinyl chloride	1.0	ug/L	1.0	1		10/26/11 03:41	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/26/11 03:41	1330-20-7	
4-Bromofluorobenzene (S)	91	%.	70-130	1		10/26/11 03:41	460-00-4	
Dibromofluoromethane (S)	97	%.	70-130	1		10/26/11 03:41	1868-53-7	
Toluene-d8 (S)	96	%.	70-130	1		10/26/11 03:41	2037-26-5	

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ANALYTICAL RESULTS

Project: FF/NN Landfill
Pace Project No.: 3056312

Sample: TRIP BLANK **Lab ID: 3056312019** Collected: 10/18/11 00:01 Received: 10/21/11 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	ug/L	20.0	1		10/25/11 21:13	67-64-1	
Benzene	ND	ug/L	1.0	1		10/25/11 21:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	1		10/25/11 21:13	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/25/11 21:13	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/25/11 21:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	20.0	1		10/25/11 21:13	78-93-3	
Carbon disulfide	ND	ug/L	1.0	1		10/25/11 21:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	1		10/25/11 21:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/25/11 21:13	108-90-7	
Chloroethane	ND	ug/L	1.0	1		10/25/11 21:13	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/25/11 21:13	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/25/11 21:13	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/25/11 21:13	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/25/11 21:13	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/25/11 21:13	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/25/11 21:13	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 21:13	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 21:13	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/25/11 21:13	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/25/11 21:13	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/25/11 21:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/25/11 21:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/25/11 21:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 21:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/25/11 21:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/25/11 21:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 21:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/25/11 21:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		10/25/11 21:13	100-41-4	
Methylene Chloride	ND	ug/L	1.0	1		10/25/11 21:13	75-09-2	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/25/11 21:13	1634-04-4	
Naphthalene	ND	ug/L	5.0	1		10/25/11 21:13	91-20-3	
Styrene	ND	ug/L	1.0	1		10/25/11 21:13	100-42-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/25/11 21:13	127-18-4	
Tetrahydrofuran	ND	ug/L	5.0	1		10/25/11 21:13	109-99-9	
Toluene	ND	ug/L	1.0	1		10/25/11 21:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/25/11 21:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/25/11 21:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/25/11 21:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/25/11 21:13	75-69-4	
Vinyl chloride	ND	ug/L	1.0	1		10/25/11 21:13	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/25/11 21:13	1330-20-7	
4-Bromofluorobenzene (S)	92	%.	70-130	1		10/25/11 21:13	460-00-4	
Dibromofluoromethane (S)	91	%.	70-130	1		10/25/11 21:13	1868-53-7	
Toluene-d8 (S)	99	%.	70-130	1		10/25/11 21:13	2037-26-5	

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QUALITY CONTROL DATA

Project: FF/NN Landfill
Pace Project No.: 3056312

QC Batch: MSV/13072 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 3056312001, 3056312002, 3056312003, 3056312004, 3056312005, 3056312006, 3056312007, 3056312008, 3056312009, 3056312010, 3056312011, 3056312012, 3056312013, 3056312014, 3056312015, 3056312016, 3056312017, 3056312018, 3056312019

METHOD BLANK: 523568 Matrix: Water
Associated Lab Samples: 3056312001, 3056312002, 3056312003, 3056312004, 3056312005, 3056312006, 3056312007, 3056312008, 3056312009, 3056312010, 3056312011, 3056312012, 3056312013, 3056312014, 3056312015, 3056312016, 3056312017, 3056312018, 3056312019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	10/25/11 17:25	
1,1,2-Trichloroethane	ug/L	ND	1.0	10/25/11 17:25	
1,1-Dichloroethane	ug/L	ND	1.0	10/25/11 17:25	
1,1-Dichloroethene	ug/L	ND	1.0	10/25/11 17:25	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	10/25/11 17:25	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	10/25/11 17:25	
1,2-Dichlorobenzene	ug/L	ND	1.0	10/25/11 17:25	
1,2-Dichloroethane	ug/L	ND	1.0	10/25/11 17:25	
1,2-Dichloropropane	ug/L	ND	1.0	10/25/11 17:25	
1,3-Dichlorobenzene	ug/L	ND	1.0	10/25/11 17:25	
1,4-Dichlorobenzene	ug/L	ND	1.0	10/25/11 17:25	
2-Butanone (MEK)	ug/L	ND	20.0	10/25/11 17:25	
Acetone	ug/L	ND	20.0	10/25/11 17:25	
Benzene	ug/L	ND	1.0	10/25/11 17:25	
Bromodichloromethane	ug/L	ND	1.0	10/25/11 17:25	
Bromoform	ug/L	ND	1.0	10/25/11 17:25	
Bromomethane	ug/L	ND	1.0	10/25/11 17:25	
Carbon disulfide	ug/L	ND	1.0	10/25/11 17:25	
Carbon tetrachloride	ug/L	ND	1.0	10/25/11 17:25	
Chlorobenzene	ug/L	ND	1.0	10/25/11 17:25	
Chloroethane	ug/L	ND	1.0	10/25/11 17:25	
Chloroform	ug/L	ND	5.0	10/25/11 17:25	
Chloromethane	ug/L	ND	1.0	10/25/11 17:25	
cis-1,2-Dichloroethene	ug/L	ND	1.0	10/25/11 17:25	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/25/11 17:25	
Dibromochloromethane	ug/L	ND	1.0	10/25/11 17:25	
Dibromomethane	ug/L	ND	1.0	10/25/11 17:25	
Dichlorodifluoromethane	ug/L	ND	1.0	10/25/11 17:25	
Ethylbenzene	ug/L	ND	1.0	10/25/11 17:25	
Methyl-tert-butyl ether	ug/L	ND	1.0	10/25/11 17:25	
Methylene Chloride	ug/L	ND	1.0	10/25/11 17:25	
Naphthalene	ug/L	ND	5.0	10/25/11 17:25	
Styrene	ug/L	ND	1.0	10/25/11 17:25	
Tetrachloroethene	ug/L	ND	1.0	10/25/11 17:25	
Tetrahydrofuran	ug/L	ND	5.0	10/25/11 17:25	
Toluene	ug/L	ND	1.0	10/25/11 17:25	
trans-1,2-Dichloroethene	ug/L	ND	1.0	10/25/11 17:25	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/25/11 17:25	
Trichloroethene	ug/L	ND	1.0	10/25/11 17:25	

Pace Analytical Services, Inc.
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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: FF/NN Landfill
Pace Project No.: 3056312

METHOD BLANK: 523568 Matrix: Water

Associated Lab Samples: 3056312001, 3056312002, 3056312003, 3056312004, 3056312005, 3056312006, 3056312007, 3056312008, 3056312009, 3056312010, 3056312011, 3056312012, 3056312013, 3056312014, 3056312015, 3056312016, 3056312017, 3056312018, 3056312019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichlorofluoromethane	ug/L	ND	1.0	10/25/11 17:25	
Vinyl chloride	ug/L	ND	1.0	10/25/11 17:25	
Xylene (Total)	ug/L	ND	3.0	10/25/11 17:25	
4-Bromofluorobenzene (S)	%.	90	70-130	10/25/11 17:25	
Dibromofluoromethane (S)	%.	91	70-130	10/25/11 17:25	
Toluene-d8 (S)	%.	99	70-130	10/25/11 17:25	

LABORATORY CONTROL SAMPLE & LCSD: 523569 523570

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	51.9	53.5	104	107	70-133	3	20	
1,1,2-Trichloroethane	ug/L	50	57.3	57.8	115	116	70-130	.8	20	
1,1-Dichloroethane	ug/L	50	54.2	54.4	108	109	70-130	.4	20	
1,1-Dichloroethene	ug/L	50	51.0	53.3	102	107	70-130	5	20	
1,2-Dibromo-3-chloropropane	ug/L		43.1	45.3				5	20	
1,2-Dibromoethane (EDB)	ug/L		54.7	55.6				2	20	
1,2-Dichlorobenzene	ug/L		52.7	54.8				4	20	
1,2-Dichloroethane	ug/L	50	54.6	55.8	109	112	70-145	2	20	
1,2-Dichloropropane	ug/L	50	54.4	55.2	109	110	70-130	2	20	
1,3-Dichlorobenzene	ug/L		52.4	53.6				2	20	
1,4-Dichlorobenzene	ug/L		53.4	54.3				2	20	
2-Butanone (MEK)	ug/L	50	45.7	43.9	91	88	50-150	4	20	
Acetone	ug/L	50	42.7	46.6	85	93	50-150	9	20	
Benzene	ug/L	50	54.2	55.7	108	111	70-130	3	20	
Bromodichloromethane	ug/L	50	54.2	56.0	108	112	70-130	3	20	
Bromoform	ug/L	50	44.8	47.0	90	94	70-130	5	20	
Bromomethane	ug/L	50	50.7	55.2	101	110	52-155	9	20	
Carbon disulfide	ug/L	50	51.7	53.6	103	107	70-130	4	20	
Carbon tetrachloride	ug/L	50	52.9	56.2	106	112	70-153	6	20	
Chlorobenzene	ug/L	50	56.9	58.6	114	117	70-130	3	20	
Chloroethane	ug/L	50	50.4	51.5	101	103	70-130	2	20	
Chloroform	ug/L	50	54.0	55.6	108	111	70-130	3	20	
Chloromethane	ug/L	50	57.8	58.6	116	117	50-130	1	20	
cis-1,2-Dichloroethene	ug/L	50	52.1	53.7	104	107	70-130	3	20	
cis-1,3-Dichloropropene	ug/L	50	50.2	52.3	100	105	70-130	4	20	
Dibromochloromethane	ug/L	50	50.3	51.1	101	102	70-130	1	20	
Dichlorodifluoromethane	ug/L		47.2	47.0				.5	20	
Ethylbenzene	ug/L	50	57.6	59.1	115	118	70-130	3	20	
Methyl-tert-butyl ether	ug/L		45.1	46.5				3	20	
Methylene Chloride	ug/L	50	51.4	53.1	103	106	70-130	3	20	
Styrene	ug/L	50	59.2	60.3	118	121	70-130	2	20	
Tetrachloroethene	ug/L	50	55.5	56.8	111	114	70-130	2	20	
Toluene	ug/L	50	58.5	58.8	117	118	70-130	.5	20	
trans-1,2-Dichloroethene	ug/L	50	56.0	56.4	112	113	70-130	.7	20	

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(724)850-5600

QUALITY CONTROL DATA

Project: FF/NN Landfill
Pace Project No.: 3056312

LABORATORY CONTROL SAMPLE & LCSD: 523569 523570

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
trans-1,3-Dichloropropene	ug/L	50	47.3	49.4	95	99	70-130	4	20	
Trichloroethene	ug/L	50	56.6	57.1	113	114	70-130	.9	20	
Trichlorofluoromethane	ug/L		54.1	56.5				4	20	
Vinyl chloride	ug/L	50	51.5	51.7	103	103	66-130	.4	20	
Xylene (Total)	ug/L	150	173	177	115	118	70-130	2	20	
4-Bromofluorobenzene (S)	%.				97	97	70-130			
Dibromofluoromethane (S)	%.				93	95	70-130			
Toluene-d8 (S)	%.				102	102	70-130			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 524062 524063

Parameter	Units	3056312004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	54.1	54.4	108	109	70-133	.6	
1,1,2-Trichloroethane	ug/L	ND	50	50	57.1	57.7	114	115	70-130	1	
1,1-Dichloroethane	ug/L	ND	50	50	54.4	55.1	109	110	70-133	1	
1,1-Dichloroethene	ug/L	ND	50	50	50.0	50.8	100	102	70-130	1	
1,2-Dibromo-3-chloropropane	ug/L	ND			47.3	46.4				2	
1,2-Dibromoethane (EDB)	ug/L	ND			55.5	56.7				2	
1,2-Dichlorobenzene	ug/L	ND			54.0	55.1				2	
1,2-Dichloroethane	ug/L	ND	50	50	54.1	55.6	108	111	70-145	3	
1,2-Dichloropropane	ug/L	ND	50	50	55.6	56.4	111	113	70-130	1	
1,3-Dichlorobenzene	ug/L	ND			53.1	54.1				2	
1,4-Dichlorobenzene	ug/L	ND			53.9	55.0				2	
2-Butanone (MEK)	ug/L	ND	50	50	45.9	47.7	92	95	50-150	4	
Acetone	ug/L	ND	50	50	47.3	48.5	95	97	50-150	2	
Benzene	ug/L	ND	50	50	54.7	55.9	109	112	70-130	2	
Bromodichloromethane	ug/L	ND	50	50	55.5	55.7	111	111	70-130	.2	
Bromoform	ug/L	ND	50	50	45.7	46.4	91	93	70-130	2	
Bromomethane	ug/L	ND	50	50	53.5	55.4	107	111	52-155	4	
Carbon disulfide	ug/L	ND	50	50	48.2	43.7	96	87	61-131	10	
Carbon tetrachloride	ug/L	ND	50	50	54.6	56.8	109	114	70-158	4	
Chlorobenzene	ug/L	ND	50	50	58.3	59.0	117	118	70-130	1	
Chloroethane	ug/L	1.4	50	50	50.9	52.3	99	102	70-130	3	
Chloroform	ug/L	ND	50	50	55.0	55.5	110	111	70-130	1	
Chloromethane	ug/L	ND	50	50	56.6	54.4	113	109	46-130	4	
cis-1,2-Dichloroethene	ug/L	1.5	50	50	55.5	56.1	108	109	70-130	1	
cis-1,3-Dichloropropene	ug/L	ND	50	50	54.7	54.8	109	110	70-130	.2	
Dibromochloromethane	ug/L	ND	50	50	51.2	52.1	102	104	70-130	2	
Dichlorodifluoromethane	ug/L	ND			41.5	42.0				1	
Ethylbenzene	ug/L	ND	50	50	55.5	55.6	111	111	70-130	.1	
Methyl-tert-butyl ether	ug/L	ND			45.2	47.1				4	
Methylene Chloride	ug/L	ND	50	50	52.3	52.2	105	104	70-130	.2	
Styrene	ug/L	ND	50	50	19.0	20.2	38	40	19-157	6	
Tetrachloroethene	ug/L	ND	50	50	57.6	56.7	115	113	70-130	1	
Toluene	ug/L	ND	50	50	56.4	57.8	113	116	70-130	2	
trans-1,2-Dichloroethene	ug/L	ND	50	50	54.2	54.3	108	109	70-130	.04	

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QUALITY CONTROL DATA

Project: FF/NN Landfill
Pace Project No.: 3056312

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 524062 524063

Parameter	Units	3056312004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
trans-1,3-Dichloropropene	ug/L	ND	50	50	49.0	49.1	98	98	70-130	.2	
Trichloroethene	ug/L	ND	50	50	57.4	57.9	115	116	70-130	.8	
Trichlorofluoromethane	ug/L	ND			55.2	55.6				.7	
Vinyl chloride	ug/L	4.8	50	50	52.6	54.8	96	100	62-130	4	
Xylene (Total)	ug/L	ND	150	150	144	148	96	99	70-130	2	
4-Bromofluorobenzene (S)	%.						96	95	70-130		
Dibromofluoromethane (S)	%.						91	93	70-130		
Toluene-d8 (S)	%.						99	99	70-130		

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QUALIFIERS

Project: FF/NN Landfill
Pace Project No.: 3056312

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FF/NN Landfill
Pace Project No.: 3056312

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3056312001	P-103D	EPA 8260	MSV/13072		
3056312002	P-103	EPA 8260	MSV/13072		
3056312003	P-111D	EPA 8260	MSV/13072		
3056312004	P-111D DUP	EPA 8260	MSV/13072		
3056312005	P-107D	EPA8260	MSV/13072		
3056312006	P-107	EPA 8260	MSV/13072		
3056312007	MW-107	EPA 8260	MSV/13072		
3056312008	MW-103	EPA 8260	MSV/13072		
3056312009	MW-112	EPA 8260	MSV/13072		
3056312010	MW-104	EPA 8260	MSV/13072		
3056312011	P-113A	EPA 8260	MSV/13072		
3056312012	P-113B	EPA 8260	MSV/13072		
3056312013	MW-3A	EPA 8260	MSV/13072		
3056312014	MW-3B	EPA 8260	MSV/13072		
3056312015	P-116	EPA 8260	MSV/13072		
3056312016	P-114	EPA 8260	MSV/13072		
3056312017	P-114DUP	EPA 8260	MSV/13072		
3056312018	P-115	EPA 8260	MSV/13072		
3056312019	TRIP BLANK	EPA 8260	MSV/13072		

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

Page 1 of

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CHAIN OF CUSTODY

40526637

(Please Print Clearly)	
Company Name:	TetraTech GEO
Branch/Location:	Brookfield, WI
Project Contact:	Mike Noel
Phone:	(262) 792-1282
Project Number:	117-2202040.13
Project Name:	FF/NN Landfill
Project State:	WI
Sampled By (Print):	Ashley A. Weimer
Sampled By (Sign):	Ashley A. Weimer
PO #:	Regulatory Program:

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	Mike Noel
Mail To Company:	TetraTech GEO
Mail To Address:	175 N. Corporate Dr. Suite 100 Brookfield, WI 53045
Invoice To Contact:	Same as above
Invoice To Company:	
Invoice To Address:	30563132
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air; B = Biota; C = Charcoal; O = Oil; S = Soil; SI = Sludge; W = Water; DW = Drinking Water; GW = Ground Water; SW = Surface Water; WW = Waste Water; WP = Wipe

PACE LAB #	CLIENT FIELD ID 2011	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	VOCs 8260B	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	P-103 D	10-18	11:45	GW	N	B	✓		3-40mL B	001
002	P-103		12:20				✓			002
003	P-111 D		14:00				✓			003
004	P-111 D DUP		14:05				✓			004
005	P-107 D		14:50				✓			005
006	P-107		15:30				✓			006
007	MW-107	↓	17:30				✓			007
008	MW-103	10-19	08:45				✓			008
009	MW-112		09:05				✓			009
010	MW-104		09:30				✓			010
011	P-113A		11:00				✓			011
012	P-113B		11:30				✓			012
013	MW-3A	↓	12:20				✓		↓	013

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Ashley A. Weimer	10-21-11 0800	D. Fanigl	10/21/11 0930
D. Fanigl	10/21/11 1700	Alyssa Fuller	10-21-11 1700
~~Walter~~	10-22-11 AM		

PACE Project No. 40526637

Receipt Temp = 1°C °C

Sample Receipt pH ~~OK / Adjusted~~

Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

UPPER MIDWEST REGION
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CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	TetraTech GEO
Branch/Location:	Brookfield, WI
Project Contact:	Mike Noel
Phone:	(262)792-1282
Project Number:	117-2202040.13
Project Name:	FF/NN Landfill
Project State:	WI
Sampled By (Print):	Ashley A. Weimer
Sampled By (Sign):	Ashley A. Weimer
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	Mike Noel
Mail To Company:	TetraTech GEO
Mail To Address:	175 N. Corporate Dr. Suite 100 Brookfield, WI 53045
Invoice To Contact:	Same as above
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, SL = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID 2011	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: FILTERED? (YES/NO)	Analyses Requested: PRESERVATION (CODE)*	Analyses Requested: VOCs 8260	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					N	B				
014	MW-3B	10-19	12:40	GW			✓		3-40mlB	014
015	P-116		13:40				✓			015
016	P-114		14:15				✓			016
017	P-114 DUP		14:20				✓			017
018	P-115	↓	14:45	↓			✓			018
019	TRIP BLANK	—	—	DI			✓		2-40mlB	019

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Ashley A. Weimer	10-21-11 0800	D. Fennimore	10/21/11 0930
D. Fennimore	10/21/11 1700	Angela Peters	10-21-11 1700

PACE Project No.: 40526037
Receipt Temp = 1°C °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 08/14/06

C019a(27Jun2006)

ORIGINAL

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Pace Analytical

Sample Condition Upon Receipt

Client Name: Tetra Tech Geo Project # 4052637

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None Other

Optional
Proj. Due Date:
Proj. Name:

Thermometer Used NB

Type of Ice: (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun.

Cooler Temperature 1°C

Biological Tissue is Frozen: ☐ yes ☐ no

Temp Blank Present: ☑ yes ☐ no

Person examining contents:
Date: 10.26.11
Initials: ABF

Temp should be above freezing to 6°C for all sample except Biota.
Biota Samples should be received ≤ 0°C.

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WU		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☑Yes ☐No ☐N/A	16.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 10/24/11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

EXPLANATION

EW

GROUNDWATER EXTRACTION WELL LOCATION ALONG EAST-WEST CENTERLINE OF NORTH HALF OF NORTHWESTERN TRAIL RIGHT OF WAY

4" SDR 17 HDPE DISCHARGE PIPING AT 4.5 FEET BELOW SURFACE GRADE - INSTALL BY TRENCHING OR DIRECTIONAL DRILLING IN SOUTH KORO ROAD RIGHT OF WAY

GROUNDWATER TREATMENT SYSTEM DISCHARGE POINT ON SILVER CREEK - 40 GPM DISCHARGE STRUCTURE REQUIRED TO DISSIPATE FLOW

N

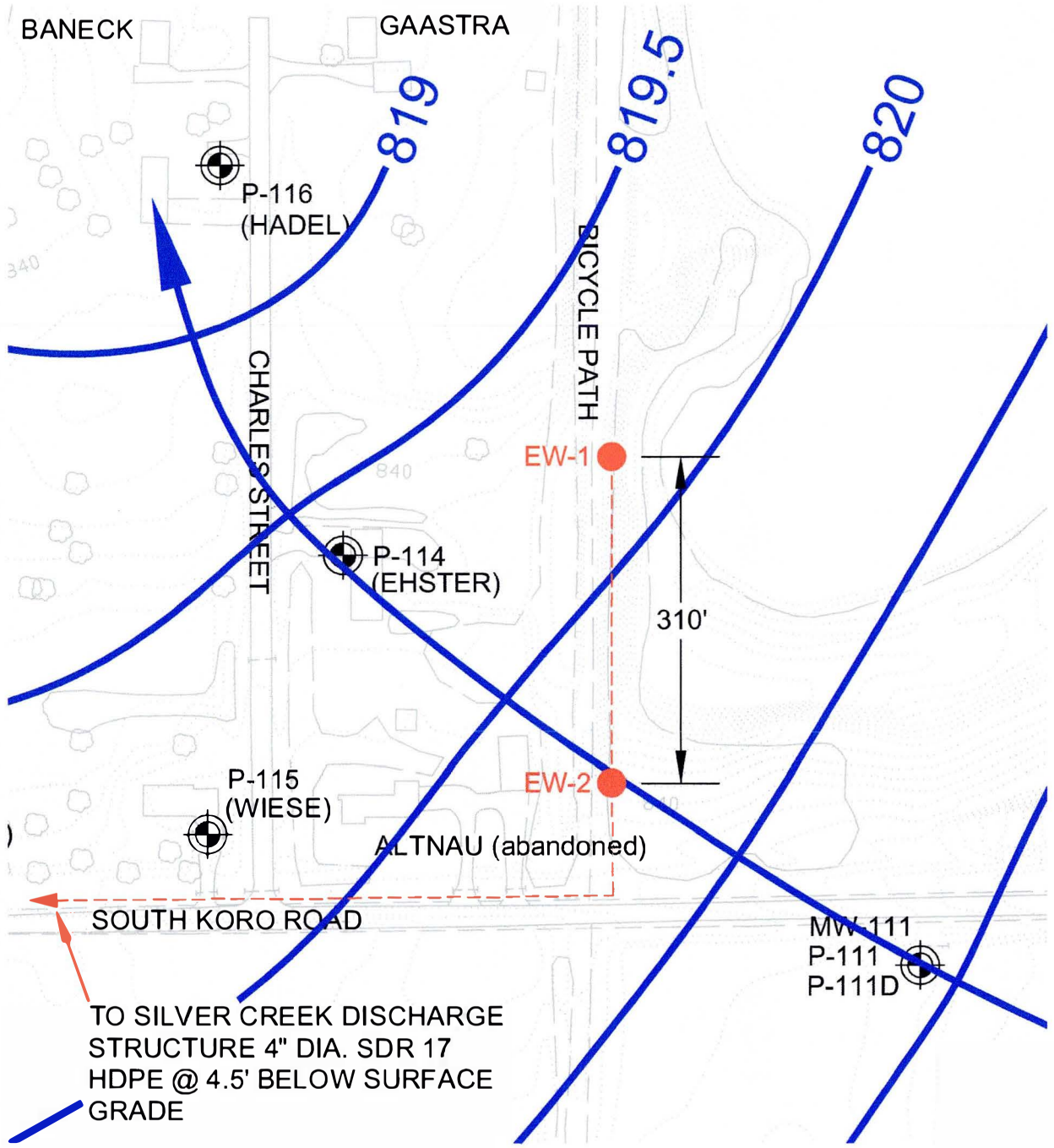
SCALE

0 400

Feet

FF/NN LANDFILL RIPON, WISCONSIN	DATE: 1/12/12
	DESIGNED: HJW
GROUNDWATER PUMP AND TREAT PIPING LOCATION PLAN	CHECKED: MRN
	APPROVED: MRN
	DRAWN: HJW
	PROJ.: 117-2202040
TETRA TECH	Figure 5-3

S:\CAD\RIPON\FS REPORT\2202040F\FIG5-3.DWG



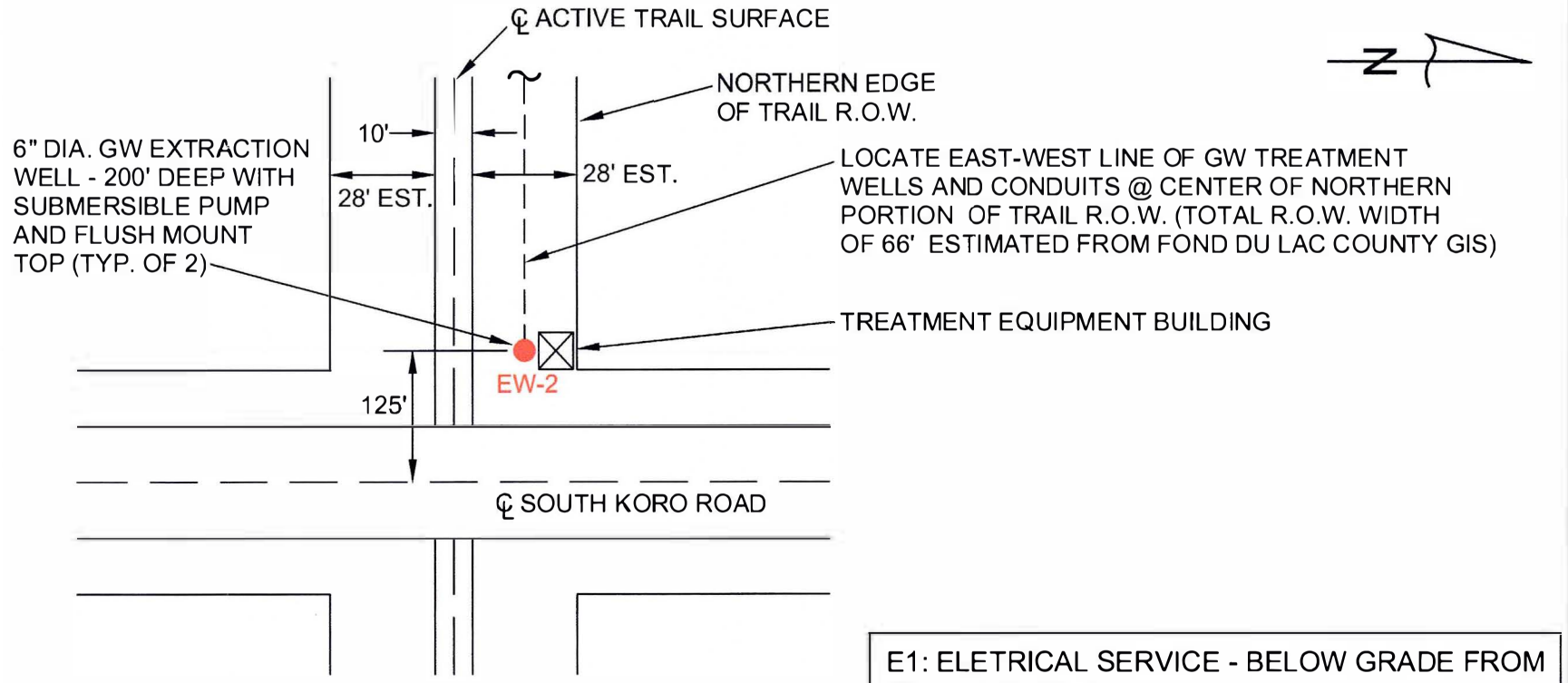
EXPLANATION

P-104
MW-104 MONITOR WELL, PIEZOMETER LOCATION, DESIGNATION

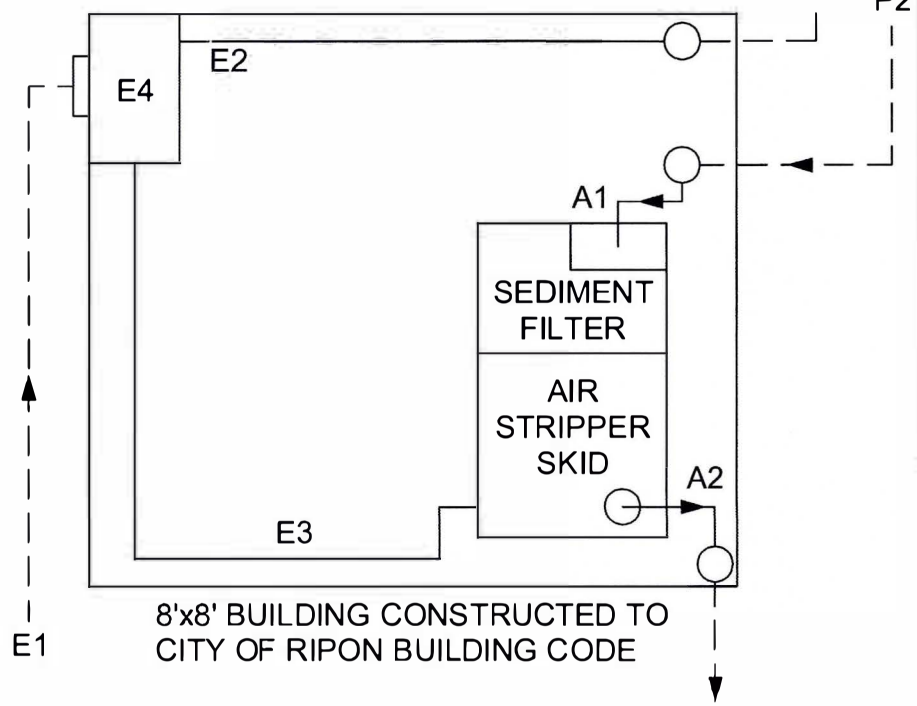
SCALE

0 300

Feet



RIGHT OF WAY DETAIL



TREATMENT EQUIPMENT BUILDING PLAN

E1: ELETRICAL SERVICE - BELOW GRADE FROM SOUTH KORO ROAD.

E2: ELETRICAL POWER TO EXTRACTION WELL PUMPS.

E3: ELETRICAL POWER TO AIR STRIPPER SKID.

E4: POWER / CONTROL PANEL WITH EXTERIOR METER / SOCKET.

A1: GROUNDWATER RETURN HEADER FROM GROUNDWATER WELL PUMPS.

A2: GROUNDWATER DISCHARGE LINE TO SILVER CREEK.

P1: ELECTRICAL POWER SUPPLY TO WELLS: INSIDE 2" DIA. SCH. 40 PVC IN COMMON TRENCH WITH P2.

P2: GROUNDWATER RETURN FROM WELLS: 3" DIA. SDR11 HDPE IN COMMON TRENCH WITH P1.

FF/NN LANDFILL RIPON, WISCONSIN	DATE: 1/16/12
	DESIGNED: HJW
GROUNDWATER PUMP AND TREAT SYSTEM LOCATION PLAN AND DETAILS	CHECKED: MRN
	APPROVED: MRN
	DRAWN: HJW
	PROJ.: 117-2202040
TETRA TECH	Figure 5-4

S:\CAD\RIPON\FS REPORT\2202040FIG5-4.DWG

WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary

101 S. Webster St.
Box 7921
Madison, Wisconsin 53707-7921
Telephone 608-266-2621
FAX 608-267-3579
TTY 608-267-6897

July 15, 2004

To: Wisconsin Licensed Well Drillers

Subject: Establishment of "Special Well Casing Pipe Depth Area"
***Ripon FF/NN Landfill Site* & Surrounding Area**
Part of the Town of Ripon, Fond du Lac County, Wisconsin

Dear Wisconsin Licensed Well Driller:

A "Special Well Casing Pipe Depth Area" has been established for a 1-½ square mile area including the *Ripon FF/NN Landfill Site* and a surrounding area, located just northwest of the City of Ripon. This area includes portions of Sections 7, 8, 17 & 18, T16N, R14E, Town of Ripon, Fond du Lac County. Attached please find the memo describing in detail this new "Special Well Casing Pipe Depth Area" and its requirements. This area has been established as a result of contamination of several wells and the groundwater of this area with Volatile Organic Compounds (VOCs).

Effective August 15, 2004, the construction of new private wells and the reconstruction of existing private wells within this "Special Well Casing Pipe Depth Area" shall only be undertaken according to the standards specified in the attached memo. In addition, upon completion of any newly constructed or reconstructed well, the well water shall be sampled and analyzed for (VOCs) at a certified laboratory, also as indicated in the attached memo.

Consuming water containing VOCs has been shown to pose a hazard to human health. This "Special Well Casing Pipe Depth Area" has been established under the provisions of Section NR 812.12(3) and is designed to reduce the risk that new wells, constructed or reconstructed according to the requirements of this 'Area', produce water contaminated with VOCs.

Consultation with the Department's Northeast Region's Drinking Water Program Staff is recommended, prior to construction, to help determine if a proposed well will meet the more stringent standards of this area.

Sincerely.

Mark F. Putra, R.S. Chief
Private Water Systems Section
Bureau of Drinking Water & Groundwater
Attachments

cc: Statewide Drinking Water & Groundwater Program Staff
Fond du Lac County Health Department
City of Ripon

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

July 15, 2004

TO: **Wisconsin Licensed Well Drillers**

FROM: **Mark Putra – Chief, Private Water Systems Section**
Bureau of Drinking Water & Groundwater

SUBJECT: **"SPECIAL WELL CASING PIPE DEPTH AREA"**
***Ripon FF/NN* (County Highways) *Landfill Site* & surrounding area;**
Including parts of Sections 7, 8, 17 & 18, T16N, R14E, Town of Ripon,
Fond du Lac County.

A "Special Well Casing Pipe Depth Area" is herewith established for the area including and surrounding the *Ripon FF/NN Landfill Site*, described in detail below. Within this area new wells shall be constructed or reconstructed to more stringent standards. In addition, a water sample shall be collected from each newly constructed or reconstructed well and the sample shall be analyzed at a certified laboratory for Volatile Organic Compounds, as indicated below. (Note: Compliance with the requirements of this "Special Well Casing Pipe Depth Area" does not alleviate the requirement to obtain a variance to construct a new well or reconstruct an existing well within 1,200 feet of this landfill.)

Effective Date: This "Special Well Casing Pipe Depth Area" becomes effective August 15, 2004.

This "Special Well Casing Pipe Depth Area" includes an area approximately 1-½ square miles in extent and includes parts of four Sections within T16N, R14E, Town of Ripon. This area is located just northwest of the City of Ripon. The establishment of this "Special Well Casing Pipe Depth Area" is based on contamination of the groundwater in this area, primarily by vinyl chloride and cis-1,2-Dichloroethylene (DCE). Both of these chemicals are Volatile Organic Compounds (VOCs). These compounds have been found in the groundwater of both the unconsolidated surficial aquifer and the bedrock aquifers in this area. This "Special Well Casing Pipe Depth Area" is located adjacent to and surrounding the Ripon landfill located near County Highways FF & NN. Included in this "Special Well Casing Pipe Depth Area" is the landfill itself and the area within the 1,200-foot distance radius established as a set-back requirement for landfills by the Fourth Edition of The State Private Well Code (then NR 112) in October of 1975. (The landfill proper is located just north of the centerline of the south boundary of the SE ¼ of Section 7, T16N, R14E, Town of Ripon.) The detailed description of the entire area included in this "Special Well Casing Pipe Depth Area" is listed below. (Also see enclosed map.)

This "Special Well Casing Pipe Depth Area" is established to reduce the risk wells constructed or reconstructed within this area produce water contaminated with these chemical compounds. This area is established under the Department's authority provided by Section NR 812.12(3), Wis. Admin. Code (State Private Well Construction & Pump Installation Code).

LOCATION

This "Special Well Casing Pipe Depth Area" is subdivided into two primary segments as listed below. Each segment has specific well construction and water sampling requirements. (See Enclosed Map)
The **"Inner Area"** is a rectangular area located within Sections 7 and 18, T16N, R14E, Town of Ripon, Fond du Lac County and includes the following:

- The S ½ of the SE ¼ of Section 7;
- The N ½ of the NE ¼ of Section 18: and
- That portion of the S ½ of the NE ¼ of Section 18 lying north of both Silver Creek and S. Koro Road.
- That portion of the N ½ of the SE ¼ of Section 18 lying north of both Silver Creek.

The **"Outer Area"** is located within Sections 7, 8, 17, and 18, T16N, R14E, Town of Ripon, Fond du Lac County and includes:

- The S ½ of Section 7 except for the S ½ of the SE ¼ thereof;
- The W ½ of the SW ¼ of Section 8;
- That portion of the W ½ of the NW ¼ of Section 17 lying north of Silver Creek and west of Silver Creek's northern tributary;
- That portion of the NW 1/4 of Section 18 lying north of both Silver Creek & S. Koro Road and north of Highway 23/49; and
- None of the area described above within the "Inner Area".

CONTAMINANTS

Vinyl chloride; cis-1,2-Dichloroethylene (DCE) and/or other Volatile Organic Compounds (VOCs).

WELL CONSTRUCTION SPECIFICATIONS AND SAMPLING REQUIREMENTS

Within this "Special Well Casing Pipe Depth Area" the construction of new wells and reconstruction of existing wells shall only be undertaken according to the following specifications:

Inner Area: The department does **not** advise the construction of new wells or the reconstruction of existing wells within this inner area. (Existing well water sample results indicate the Cambrian Sandstone layers are contaminated with VOCs throughout their vertical extent within much of this inner area.) Although not advised, construction of new wells and reconstruction of existing wells **is** allowed within this inner area, but only as indicated below.
The following types of well construction **are** allowed within this inner area:

- ***Unconsolidated aquifer wells.*** Wells completed in the unconsolidated surficial aquifer (primarily glacial drift) – lying above the first bedrock -- are allowed, but only if they are located outside the 1,200-foot radius of the landfill boundary. Such unconsolidated formation wells may be constructed according to the minimum requirements of NR 812.
- ***Precambrian bedrock wells.*** Precambrian bedrock wells are allowed if they are constructed to be cased and cement-grouted down to at least the top the Precambrian crystalline bedrock. In this area the Precambrian bedrock lies below the Cambrian Sandstone and will be encountered at depths exceeding 300 feet. This dense 'basement' bedrock does not usually yield sufficient quantities of water for a household so property owners should be made aware of this problem before attempting this type of well. Hydrofracturing of crystalline bedrock wells is **not** allowed in this area because this process can cause migration of contaminated water down into the Precambrian.

For any new well construction or existing well reconstruction within this "Inner Area", a water sample shall be collected and analyzed for VOCs at the time of construction and, thereafter, during each subsequent alternate year. The water sample shall be analyzed according to the requirements of an approved Safe Drinking Water Act analytical method in accordance with Section NR 809.725, Table B, Wis. Admin. Code. If the water sample is contaminated with VOCs, a water treatment device approved by the Wisconsin Department of Commerce shall be installed for the water supply. The installation of the device shall be approved by the Department; Or, as an alternative, the residence shall be connected to a bacteriologically safe & uncontaminated water supply. (Such a connection can be to either an existing Code-complying private water supply or to a community water supply, if available.)

Outer Area: Within this outer area the construction of new wells and the reconstruction of existing wells shall be accomplished as follows:
An attempt shall first be made to construct or reconstruct a well that withdraws water only from the unconsolidated, surficial (glacial) aquifer. Such an unconsolidated formation well may be constructed according to the minimum requirements of NR 812.

When an unconsolidated aquifer formation well does not produce a sufficient quantity of water or produces contaminated water, a well cased and cement-grouted at least to the top of the Cambrian Sandstone **may** be constructed or reconstructed, but only with prior written Department approval. Such Cambrian Sandstone wells will be allowed **only** as a secondary choice and shall have site-specific construction specifications provided by the Department, prior to construction or reconstruction.

(The Department does not advise the construction or reconstruction of bedrock wells extending into the Precambrian crystalline 'basement' bedrock in this outer area. This is because it is difficult to obtain water in a sufficient quantity from this bedrock. Further hydrofracturing the well, in an attempt to increase the yield of water, is **not** allowed in this area.)

All new wells constructed or existing wells reconstructed in this outer area shall also be sampled for VOCs at the completion of the well. The water sample shall be analyzed according to the requirements of an approved Safe Drinking Water Act analytical method in accordance with Section NR 809.725, Table B, Wis. Admin. Code.

(Within both the Inner & Outer Areas, the Department may -- for any specific well -- require additional well water sampling, water treatment or permanent abandonment of the well. At the time of future property transfer, disclosure of the information about the well, water quality, water sampling requirements or any maintenance requirements for water treatment equipment, is the responsibility of the property owner. Any cross-contamination of aquifer strata caused by migration from a contaminated well may be the responsibility of the well owner.)

JUSTIFICATION FOR ESTABLISHING THIS "SPECIAL WELL CASING PIPE DEPTH AREA"

Justification for establishing this "Special Well Casing Pipe Depth Area" is as follows:

- Vinyl chloride and cis-1,2-Dichloroethylene (DCE) and other Volatile Organic Compounds have been found in water samples from private supply wells and from monitoring wells in this area near the Ripon FF/NN (County Highways) Landfill. Concentrations of vinyl chloride in the water samples from several of these wells exceeded the State Groundwater (NR 140) Enforcement Standard of

0.2 µg/L. The highest concentration of vinyl chloride found in a private well was 7.0 µg/L, which is 14 times the Enforcement Standard.

- The approximate landfill boundary and its geographic location are indicated on the accompanying map. According to Department files, this site was operated as a licensed landfill from 1969 to 1983. The entire site (approximately 7.3 acres) was used for disposal of commercial, municipal and industrial solid wastes. Further, approximately 3.3 million gallons of processed sludge from the Ripon Wastewater Treatment Facility was disposed of in this landfill. The approved Landfill Abandonment Plan required testing of groundwater from five on-site monitoring wells. In 1984, vinyl chloride was detected in a residential well located 350 feet south of the landfill. Further testing of wells confirmed the presence of vinyl chloride with some concentrations exceeding the Groundwater (NR 140, Wis. Adm. Code) Enforcement Standard. (The City of Ripon acquired this property on February 13, 2004.)

- In 1989 a replacement well was constructed for a private residential property with funding from a grant from the Well Compensation Program. This well was installed to replace an existing contaminated well on this property. The existing well was contaminated with vinyl chloride. The new well was installed 450 feet south of the landfill. It was constructed with cement-grouted casing extending to a depth of 300 feet. Although the construction and grouting of this well went perfectly according to plan, water from this deeply cased & grouted well was also contaminated with vinyl chloride. This well subsequently had to be abandoned and the property was condemned since there was no alternate water supply available to serve the residence.

- The Ripon FF/NN Landfill was placed on the Superfund National Priorities list on May 31, 1994. A *Record of Decision* was issued on February 1996 to specify a requirement for remedial action. A new composite cap and additional monitoring wells were installed during this remedial action in the summer of 1996. A 5-year review was completed on May 22, 2001. In October and November of 2001, vinyl chloride was found in two down-gradient private wells. Both of these well owners were supplied with bottled water. In addition, water treatment systems were installed on the drinking water supply line of each of these wells. In November of 2002 a privately owned municipal water line was connected to each of these households, one located south of Koro road and the other located along Charles Street).

- This "Special Well Casing Pipe Depth Area" takes into account possible increased migration of the contaminant plume, within the aquifers, extending down-gradient from the landfill site to the south and west. This is possible due to increased pumping associated with a greater well density caused by future real estate development in this area.

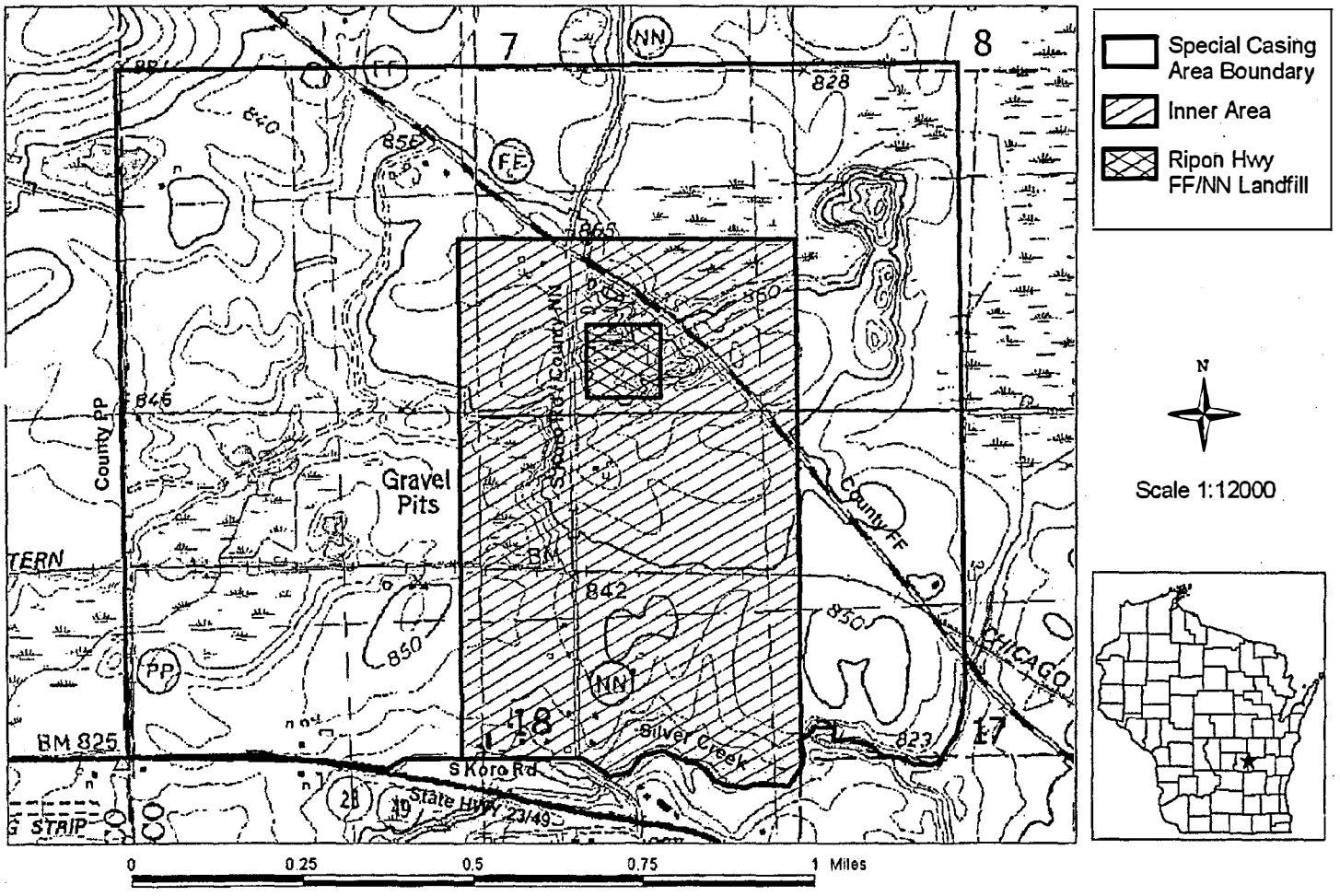
- This "Special Well Casing Pipe Depth Area" includes the entire area within the 1,200-foot radius 'set-back' well location requirement specified by s. NR 812.08(4)(g).

- Much of the area included in this "Special Well Casing Pipe Depth Area" contains gravel pits and wetlands. Volatile organic compounds were not detected in a sample of the surface water collected in this area.

Special Well Casing Depth Area

T16N, R14E, Town of Ripon, Fond du Lac County

July 15, 2004



CHAPTER 4.16 *
UNIFORM DWELLING CODE, BUILDING PERMITS AND FEES, AND RESTRICTIONS ON WATER SUPPLY WELLS

Sections:

4.16.01 Uniform Dwelling Code. As of the effective date listed below, the Town adopts the Wisconsin Uniform Dwelling Code.

4.16.01.1 Authority. These regulations are adopted under the authority granted by s. 101.65, Wisconsin Statutes.

4.16.01.2 Purpose. The purpose of this ordinance is to promote the general health, safety and welfare and to maintain required local uniformity with the administrative and technical requirements of the Wisconsin Uniform Dwelling Code.

4.16.01.3 Scope. The scope of this ordinance does not include any dwellings built before the effective date of this Ordinance. The scope of this Ordinance includes all new one- and two-family dwellings built after the effective date of this Ordinance. It also applies to all additions and alterations to such one- and two-family dwellings built after the effective date of this Ordinance, regardless of when such dwellings were built.

4.16.01.4 Wisconsin Uniform Dwelling Code Adopted. The Wisconsin Uniform Dwelling Code, Chs. Comm 20-25 of the Wisconsin Administrative Code, and all amendments thereto, is adopted and incorporated by reference and shall apply to all buildings within the scope of this 4.16.01, et seq., ordinance.

4.16.01.5 UDC Building Inspector. There is hereby created the position of Uniform Dwelling Code Building Inspector ("UDC Building Inspector"), who shall administer and enforce this 4.16.01, et seq. ordinance and shall be certified by the Division of Safety & Buildings, as specified by Wisconsin Statutes, Section 101.66(2), in the category of Uniform Dwelling Code Construction Inspector. Additionally, this or other assistant inspectors shall possess the certification categories of UDC HVAC, UDC Electrical and UDC Plumbing. The UDC Building Inspector shall be a separate position from the Town's Building Inspector, but applicable only for all buildings and other structures covered under this ordinance 4.16.01, et seq. Provided, however, at the Town's

* Amended October 11, 2004, and May 9, 2005 by Ordinance of the Town of Ripon.

discretion it may appoint the UDC Building Inspector to also act as the Building Inspector for non UDC building permits.

4.16.01.6 Building Permit Required. No person shall repair, alter, where such costs exceed $200.00 value for each such alteration in any twelve month period, build, add onto or alter any building within the scope of this ordinance without first obtaining a building permit for such work from the UDC building inspector. Any structural changes or major changes to mechanical systems that involve extensions shall require permits. Restoration or repair of an installation to its previous code-compliant condition as determined by the UDC building inspector is exempted from permit requirements. Residing, re-roofing, finishing of interior surfaces and installation of cabinetry shall include permit requirements if it exceeds the dollar amount as stated herein.

4.16.01.7 Building Permit Fee. The building permit fees shall be as determined under 4.16.02.

4.16.01.8 Penalties. The enforcement of this section and all other laws and ordinances relating to building shall be by means of the withholding of building permits, imposition of forfeitures and injunctive action. Forfeitures shall be as provided in Ordinance 4.17.

4.16.01.9 Effective Date. This ordinance under 4.16.01 shall be effective October 11, 2004, upon passage and publication as provided by law.

4.16.02 Building Permit Fee. A fee collected by the Town Building Inspector and paid to the Town Treasurer in an amount determined by the Town Board is required to be paid by the applicant for a building permit prior to commencement of building, or for a certificate of occupancy where no building permit was required. The fee shall be doubled if the building permit application occurs after commencement of building.

4.16.03 Board of Appeals Fee. A fee in an amount determined by the Town Board is required to be paid by the applicant for each application or appeal to the Board of Appeals, which fee shall be paid to the Town Treasurer and receipt therefor filed with the application. This fee shall not be required of any township officer acting in his official capacity. Provided, however, that for any appeal concerning the Uniform Dwelling Code under Ordinance 4.16.01, the Wisconsin Department of Commerce and not the Town of Ripon Board of Appeals shall be the forum to hear such appeals.

4.16.04 Zoning Ordinance Amendment or Variance Fee. A fee in an amount to be determined by the Town Board is required for any petition for the amendment or variance of zoning ordinances, which fee shall be paid to the Town Treasurer and receipt therefor filed with the application. This fee shall not be required of any town-ship officer acting in his official capacity.

4.16.05 Restrictions on Water Supply Wells. As of the effective date listed below, the Town adopts restrictions on water supply wells in the following described water supply protection area.

4.16.05.1 Findings. The following findings have been determined applicable to this Ordinance.

A. Some of the water supply wells serving some residents in the Town of Ripon who live on Charles Street and the north-south leg of S. Koro Road have been contaminated by one or more volatile organic compounds ("VOCs") in concentrations which the Wisconsin Departments of Natural Resources ("DNR") and Health and Family Services ("DHFS") have determined are sufficient to constitute a threat to the residents' health and welfare, necessitating the abandonment of the contaminated wells and the connecting of these residences to the public water supply extended into this area for that purpose.

B. Groundwater monitoring wells along the former railroad right-of-way east of South Koro Road have from time to time shown VOC contamination. Likewise, the groundwater monitoring well in the location of the former private water supply well serving the residence at the southwest corner of South Koro Road and Charles Street has recently shown contamination from a VOC above its enforcement standard.

C. The water bearing formation which serves the private water supply wells in the area south of the former railroad right-of-way and either side of South Koro Road is known to be in a stratum of bedrock in which the south/southwest direction of groundwater flow acquires a significant east to west flow vector.

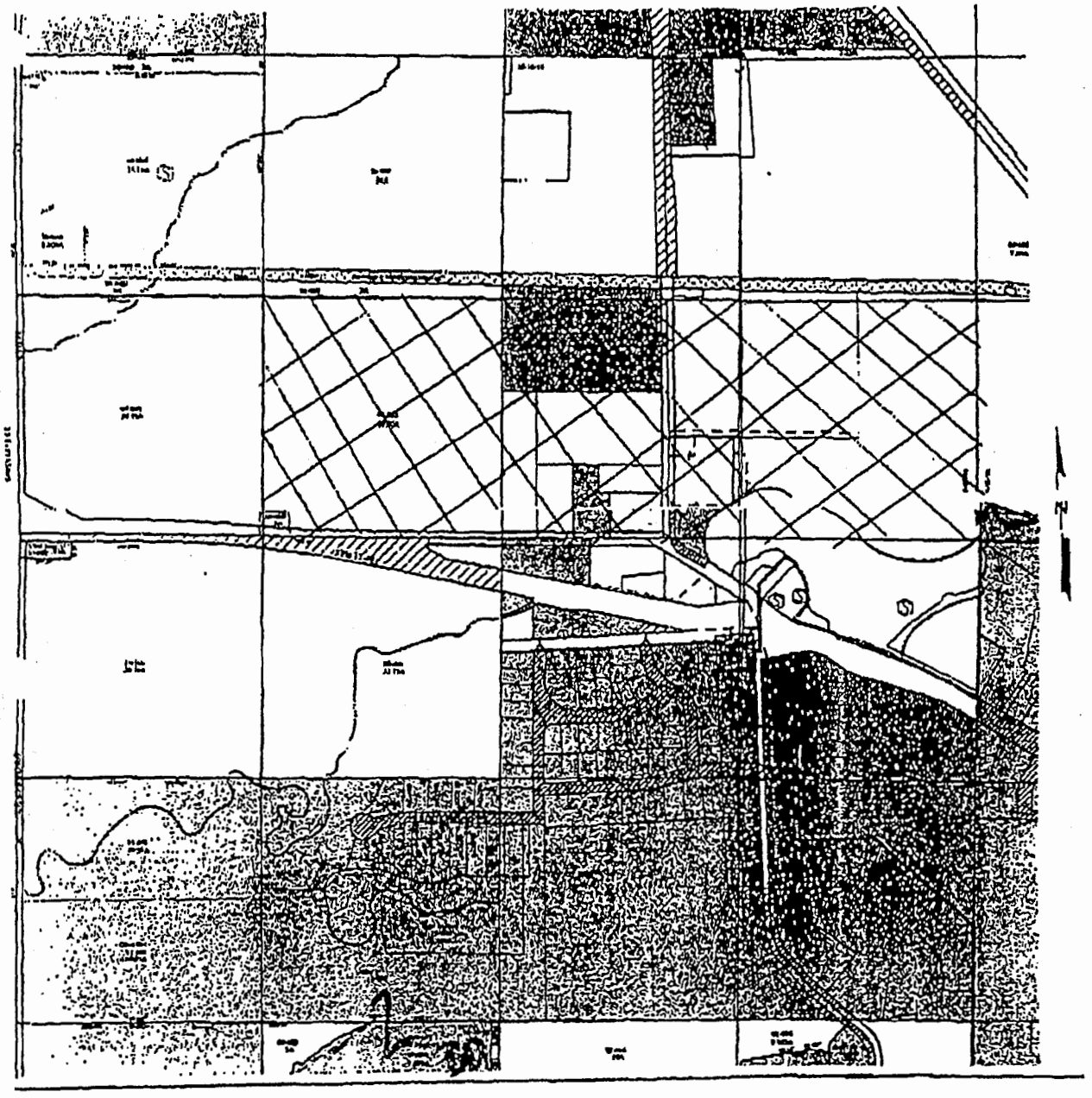
D. Public water supplies are monitored periodically for VOC contamination per the statutes and regulations enforced by the DNR and DHFS whereas private well owners have no such requirements.

E. Pumping of groundwater for household and other uses in a stratum where contamination is present or is periodically present can contribute to the spread of the contamination whereas public water supplies that serve the affected residences in the Area are drawn from deeper strata and are a substantial distance away and, thus, do not influence the direction of groundwater flow in the stratum with contamination.

F. Protecting persons from exposure to VOC contamination by requiring the use of a municipal water supply is necessary for those areas of the Town in which VOC contamination has already been detected, can be expected to be transported via known groundwater flow direction or has the reasonable potential to be drawn due to the influence of increased groundwater pumping associated with new private wells that would be constructed as a consequence of new residential or other development.

G. Such an area requiring protection of persons subject to disposal exists in the Town in the rectangular area bounded on the north by the former right-of-way of the Chicago and Northwestern Railroad; on the east by the section line running north and south between Section 18, Town 16 North, Range 14, and Section 17, Town 16 North, Range 14 East; on the south by the line running east and west between the north and south halves of Section 18, Town 16 North, Range 14, and, on the west by the line running north-south between the southeast ¼ and southwest ¼ of the northwest ¼ of Section 18, Town 16 North, Range 14. The area so bounded to be referred to herein as the Water Supply Protection Area is shown in the cross hatched area on the following map:

TOWN OF RIPON – Fond du Lac County, WI
1" = 400'
Section 18, Town 16, Range 14



H. Obtaining water from a contaminated water supply constitutes a threat to public health and safety; the spreading of contamination by pumping from a water supply that is contaminated or can draw contamination is a threat to the environment.

I. Connection to a public water supply system, particularly where contaminated groundwater is known to be present, or is reasonably likely to become present through groundwater flow or the influence of pumping wells will protect the public health and safety and the environment and will increase the value of the structures supplied by that public water supply system.

J. It is, therefore, in the public interest to prohibit in the Water Supply Protection Area the construction of new water supply wells or increased pumping by existing wells when the latter occurs to supply new construction, and for any building or other construction.

4.16.05.2 Restrictions. Based upon the above Findings, the following restrictions are imposed:

A. A Water Supply Protection Area is hereby established in the area described in the Findings.

B. No person may construct or arrange for the construction of a new water supply well to serve any new structure in the Water Supply Protection Area.

C. No person may connect an existing water supply well to any new structure in the Water Supply Protection Area for any purpose, including but not limited to functioning as a private or community water supply well for such new structure.

D. For the purposes of this section a new structure is any structure on which construction commenced after the date of publication following adoption of this ordinance by the Town of Ripon Town Board.

4.16.05.3 Connection to City of Ripon Water System. For all persons to whom subsection 4.16.05.2 applies, the following applies:

A. The City of Ripon, by resolution No. 2005, has agreed to extend and connect all properties located in the Water Supply Protection Area to City water by extending water service to such properties at the property owner's request without requiring annexation to the City of Ripon.

B. All City of Ripon costs and charges for extending City water to properties located in the Water Supply Protection Area shall be resolved between the City of Ripon and the property owner.

C. There shall be no such City extension to any property in the Water Supply Protection Area without the property owner and/or City of Ripon first complying with all applicable Town ordinances, including but not limited to obtaining a building permit pursuant to Town

Ordinance 4.16.02.

4.16.05.4 Effective Date. This ordinance under 4.16.05 shall be effective May 9, 2005, upon passage and publication as provided by law.

CHAPTER 4.17 *
GENERAL PENALTIES

Sections:

4.17.01 General Penalty. In all cases where a specific penalty has not been established by provisions of any other Town Zoning Ordinance, any person who shall violate any of the provisions of this Title 4 shall, at the discretion of the Town Board, be subject to a penalty, which shall be as follows:

A. First Offense--Penalty. Any person who shall violate any provision of any Town ordinance or part of an ordinance shall forfeit not less than one hundred dollars ($100.00) nor more than five hundred dollars ($500.00), together with the costs of prosecution, including reasonable attorney's fees (hereafter "costs of prosecution").

B. Second and Subsequent Offenses--Penalty. Any person who shall violate any Town ordinance or part of an ordinance who shall previously have violated the same ordinance within one year shall forfeit not less than two hundred fifty dollars ($250.00) nor more than one thousand dollars ($1,000.00) for the second and each such subsequent offense, together with costs of prosecution.

4.17.02 Continued Violations. Each day a violation continues or occurs shall constitute a separate offense.

4.17.03 Additional Remedies. In addition to the fines and other remedies imposed herein, the Town may maintain any appropriate action, including injunctive actions, to prevent or remove a

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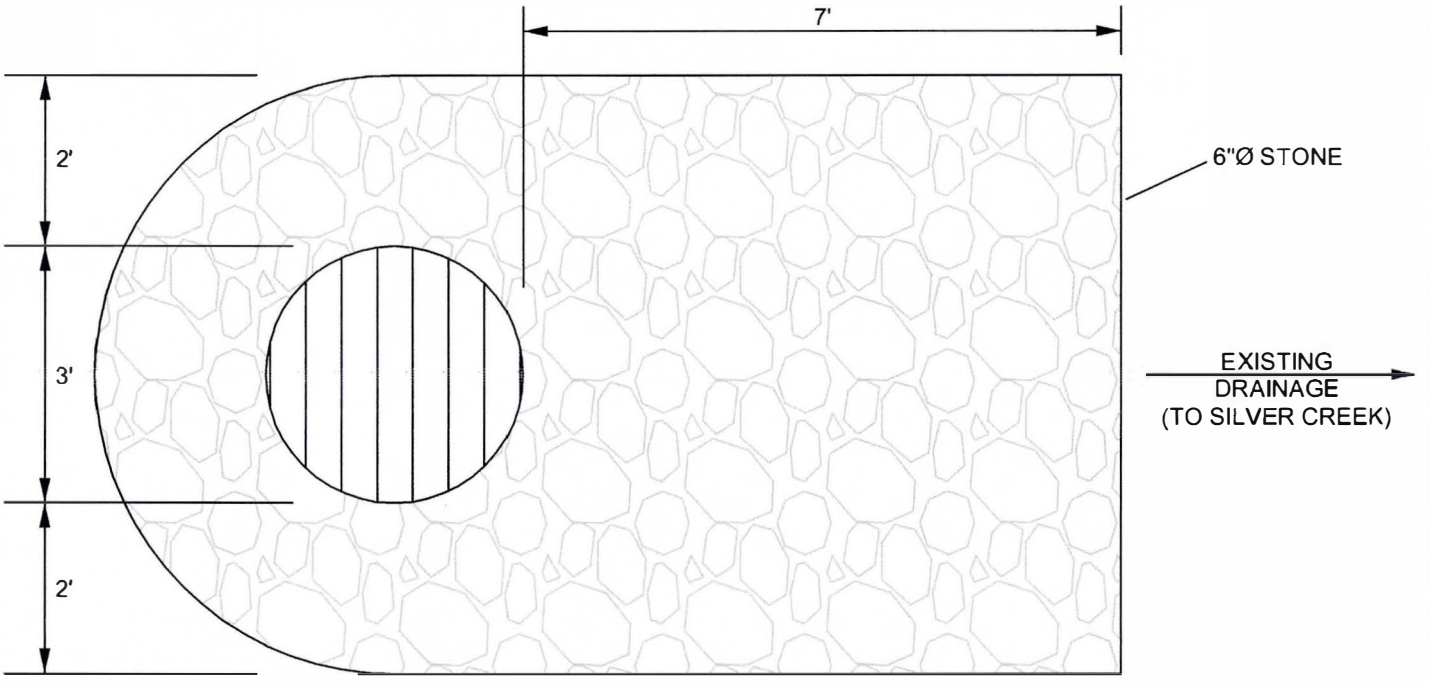
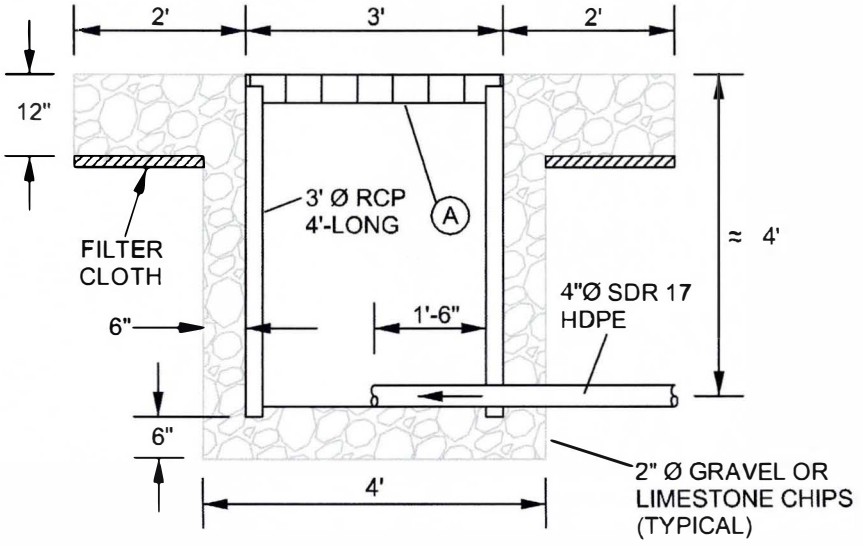
* Amended February 12, 1996, by Ordinance of the Town of Ripon.

** Amended October 21, 1996, by Ordinance adopted by the Town of Ripon, effective upon publication on November 6, 1996.



EFFLUENT DISCHARGE STRUCTURE PLAN



NOTES:

1. LOCATE (A) AT EXISTING GRADE.
2. (A) = NEENAH FOUNDRY R-2588-C OR EQUIVALENT.

EFFLUENT DISCHARGE STRUCTURE ELEVATION

FF/NN LANDFILL RIPON, WISCONSIN	DATE: 1/13/12	
	DESIGNED:	HJW
	CHECKED:	MRN
TYPICAL OUTFALL STRUCTURE	APPROVED:	MRN
	DRAWN:	HJW
	PROJ.: 117-2202040	
TETRA TECH	Figure A	

S:\CAD\RIPON\FS REPORT\2202040FIGA.DWG