

# LETTER OF TRANSMITTAL

**Northern Environmental**<sup>SM</sup>  
 Hydrologists • Engineers • Geologists

715-762-1544

330 South 4th Avenue      1-800-498-3913  
 Park Falls, Wisconsin 54552      Fax 715-762-1844

DATE <u>02/13/06</u>	PROJECT NO. <u>DNR04-2400-0340</u>
ATTENTION <u>Mr. John Sager</u>	
RE <u>Tomahawk Tissue</u>	
<u>Landfill Results</u>	

TO: Mr. John Sager  
WDNR  
223 E Steinfest Road  
Antigo WI 54409-2777

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- Attached       Under separate cover
- Shop Drawings       Specifications       Plans
- Copy of letter       Samples       Change order
- \_\_\_\_\_

COPIES	DESCRIPTION
1	Groundwater Analytical Results (Inorganics, Metals, PAHs)
1	Groundwater Analytical Results (Dioxins, Furans, VOCs)



**THESE ARE TRANSMITTED (see code)**

- A. For Approval
- F. No Exceptions Taken
- J. Resubmit \_\_\_\_\_ Copies for Review
- B. For Your Use
- G. Make Noted Corrections
- K. Submit \_\_\_\_\_ Copies for Distribution
- C. As Requested
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- L. Return \_\_\_\_\_ Corrected Prints
- D. For Review and Comment
- I. \_\_\_\_\_
- M. Review and Sign \_\_\_\_\_
- E. For Bids Due \_\_\_\_\_ 19 \_\_\_\_\_

**REMARKS:**

Please find the above mentioned items attached. The historical results tables include the most recent data from sampling event 01/04/06. Results have been submitted to the bureau of Solid Waste Management.

Hollie DePuydt

COPY TO: \_\_\_\_\_

SIGNED: Hollie DePuydt

Table 2, Groundwater Analytical Results (Inorganic, Metals, PAHs), Tomahawk Tissue Landfill, Tomahawk, Wisconsin

Well ID	Date Sampled	QC Hold Time Met	Relevant and Significant Analytical Results																						
			Inorganic Results (mg/L)								Metals Results							PAHs (µg/L)							
			Total Alkalinity	Total Chloride	Total COD	Total Ammonia Nitrogen	Nitrate + Nitrite Nitrogen	Total Sulfate	Temperature (°C)	Conductivity (µS)	p.H. (s.u.)	Total Arsenic (µg/L)	Total Hardness (mg/L)	Total Cadmium (µg/L)	Total Chromium (µg/L)	Total Lead (µg/L)	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthylene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Dibenzo(a,h)anthracene	Fluoranthene	Naphthalene
WAC Preventive Action Limit (PAL) (µg/L)	NE	125	NE	NE	2	125	NE	NE	NE	5	NE	0.5	10	1.5	NE	NE	NE	NE	0.02	NE	NE	80	8		
WAC Enforcement Standard (ES) (µg/L)	NE	250	NE	NE	10	250	NE	NE	NE	50	NE	5	100	15	NE	NE	NE	NE	0.2	NE	NE	400	40		
WAC Minimum Increase (mg/L)	100	NE	25	2	NE	NE	NE	200	NE	NE	100	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
MW1	10/10/00	Yes	<18	<0.65	<18	<0.02	<0.08	10.0*	11.9	20	9.6	---	36.2	---	---	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**	
	11/07/00	Yes	<18	1.01*	20*	<0.02	<0.08	9.55*	9.8	20	9.8	---	23.7	---	---	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**	
	04/26/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	12/04/01	Yes	---	---	---	---	---	---	9.0	30	8.2	<1.3	---	<0.35	0.77	<1.4	---	---	---	---	---	---	---	---	
	05/08/02	Yes	---	---	---	---	---	---	4.9	50	8.8	<1.3	---	<0.08	7.9	1.9"J"	---	---	---	---	---	---	---	---	
	11/20/02	Yes	---	---	---	---	---	---	7.5	30	7.7	<3.4	---	<0.48	14	4.1"J"	---	---	---	---	---	---	---	---	---
	10/26/04	Yes	---	---	---	---	---	---	9.0	50	7.5	<7.4	---	<0.7	19	<4.1	---	---	---	---	---	---	---	---	---
	06/03/05	Yes	---	---	---	---	---	---	11.4	20	9.11	<0.19	---	<0.04	0.34"J"	1.4	---	---	---	---	---	---	---	---	---
	01/04/06	Yes	---	---	---	---	---	---	8.1	50	8.55	<0.19	---	0.05"J"	<3.1	<0.37	---	---	---	---	---	---	---	---	---
MW2	10/10/00	Yes	131	0.704*	20*	0.110	0.230*	7.18*	13.1	190	9.1	3.3	86.0	<0.4	6.4	1.4*	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**
	11/07/00	Yes	158	1.23*	23*	<0.02	<0.08	10.0*	10.9	240	9.3	---	122	---	---	---	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**
	04/26/01	Yes	---	---	---	---	---	---	11.6	180	6.8	3.0*	---	0.59*	2.1*	<1.1	---	---	---	---	---	---	---	---	---
	12/04/01	Yes	---	---	---	---	---	---	9.7	200	6.7	<1.3	---	0.38*	<0.71	<1.4	---	---	---	---	---	---	---	---	---
	05/08/02	Yes	---	---	---	---	---	---	5.9	150	9.5	<1.3	---	0.69	0.90"J"	1.2"J"	---	---	---	---	---	---	---	---	---
	11/20/02	Yes	---	---	---	---	---	---	8.6	110	8.0	<3.4	---	0.86"J"	1.2"J"	1.8"J"	---	---	---	---	---	---	---	---	---
	10/26/04	Yes	---	---	---	---	---	---	9.4	250	7.5	11"J"	---	<0.7	<3.1	<4.1	---	---	---	---	---	---	---	---	---
	06/03/05	Yes	---	---	---	---	---	---	9.8	130	10.22	<0.19	---	0.19"J"	1.3	0.50"J"	---	---	---	---	---	---	---	---	---
	01/04/06	Yes	---	---	---	---	---	---	10.4	140	9.29	0.24"J"	---	0.72"J"	<3.1	<0.37	---	---	---	---	---	---	---	---	---

Note:

- VOCs = Volatile Organic Compounds
- µg/L = micrograms per liter
- NE = Not established by Wisconsin Administrative Code (WAC)
- 6.3 = WAC Preventive Action Limit Exceeded
- 7.5 = WAC Enforcement Standard Exceeded
- 
- 
- <x = Not detected above laboratory detection limit of x
- \* or "J" = Analyte detected between laboratory Limit of Detection (LOD) and Limit of Quantitation (LOQ)
- PAHs = Polynuclear Aromatic Hydrocarbons
- mg/L = milligrams per liter
- °C = degrees Celsius
- µS = microsiemens
- s.u. = standard units
- \*\* = Naphthalene was analyzed in the PAH and VOC scan



Table 2, Groundwater Analytical Results (Inorganic, Metals, PAHs), Tomahawk Tissue Landfill, Tomahawk, Wisconsin

Well ID	Date Sampled	QC Hold Time (Met)	Relevant and Significant Analytical Results																						
			Inorganic Results (mg/L)							Metals Results							PAHs (µg/L)								
			Total Alkalinity	Total Chloride	Total COD	Total Ammonia Nitrogen	Nitrate + Nitrite Nitrogen	Total Sulfate	Temperature (°C)	Conductivity (µS)	p.H. (s.u.)	Total Arsenic (µg/L)	Total Hardness (mg/L)	Total Cadmium (µg/L)	Total Chromium (µg/L)	Total Lead (µg/L)	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthylene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Dibenzo(a,h)anthracene	Fluoranthene	Naphthalene
WAC Preventive Action Limit (PAL) (µg/L)	NE	125	NE	NE	2	125	NE	NE	NE	5	NE	0.5	10	1.5	NE	NE	NE	NE	0.02	NE	NE	80	8		
WAC Enforcement Standard (ES) (µg/L)	NE	250	NE	NE	10	250	NE	NE	NE	50	NE	5	100	15	NE	NE	NE	NE	0.2	NE	NE	400	40		
WAC Minimum Increase (mg/L)	100	NE	25	2	NE	NE	NE	200	NE	NE	100	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
MW3	10/10/00	Yes	178	19.7	56*	0.350	0.0800*	13.4	13.3	230	9.2	0.77*	132	<0.4	3.2*	<1.1	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**
	11/07/00	Yes	161	20.1	61	0.320	<0.08	11.4*	9.7	350	8.9	---	108	---	---	---	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**
	04/26/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	12/04/01	Yes	---	---	---	---	---	---	8.1	110	6.7	1.7*	---	0.68*	0.81*	1.5*	---	---	---	---	---	---	---	---	---
	05/08/02	Yes	---	---	---	---	---	---	5.4	110	9.2	2.2"J"	---	0.08"J"	2.6	1.1"J"	---	---	---	---	---	---	---	---	---
	11/20/02	Yes	---	---	---	---	---	---	6.5	320	7.7	<3.4	---	<0.48	1.8"J"	2.4"J"	---	---	---	---	---	---	---	---	---
	10/26/04	Yes	---	---	---	---	---	---	9.2	340	7.3	<7.4	---	<0.7	35	<4.1	---	---	---	---	---	---	---	---	---
	06/03/05	Yes	---	---	---	---	---	---	14.2	90	9.55	<0.19	---	<0.04	2.3	0.45"J"	---	---	---	---	---	---	---	---	---
	01/04/05	Yes	---	---	---	---	---	---	8.3	100	9.48	<0.19	---	<0.04	<3.1	<0.37	---	---	---	---	---	---	---	---	---
MW4	10/10/00	Yes	371	18.8	130	1.13	0.110*	8.35*	13.1	330	8.7	6.3	184	<0.4	43.6	<1.1	2.4	6.6	<0.28	<0.011	0.015*	0.13*	<0.090	0.062*	14**
	11/07/00	Yes	435	22.9	143	0.690	<0.08	5.86*	11.0	600	9.9	---	173	---	---	---	5.6	9.2	0.50*	<0.011	<0.012	<0.049	<0.090	<0.033	14**
	04/26/01	Yes	---	---	---	---	---	---	10.7	70	6.4	3.0*	---	2.5	4.7	<1.1	---	---	---	---	---	---	---	---	---
	12/04/01	Yes	---	---	---	---	---	---	9.9	290	6.3	4.9	---	2.0	3.1	<1.4	---	---	---	---	---	---	---	---	---
	05/08/02	Yes	---	---	---	---	---	---	6.1	140	8.4	5.7	---	<0.08	8.0	1.1"J"	---	---	---	---	---	---	---	---	---
	11/20/02	Yes	---	---	---	---	---	---	7.8	220	7.5	<3.4	---	<0.48	7.0	1.7"J"	---	---	---	---	---	---	---	---	---
	10/26/04	Yes	---	---	---	---	---	---	10.2	530	7.1	<7.4	---	<0.7	180	<4.1	---	---	---	---	---	---	---	---	---
	06/03/05	Yes	---	---	---	---	---	---	13.0	170	8.83	1.0	---	<0.04	2.5	3.1	---	---	---	---	---	---	---	---	---
	01/04/06	Yes	---	---	---	---	---	---	9.7	180	8.7	3.1	---	<0.04	7.7"J"	<0.37	---	---	---	---	---	---	---	---	---

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			Total Alkalinity	Total Chloride	Total COD	Total Ammonia Nitrogen	Nitrate + Nitrite Nitrogen	Total Sulfate	Temperature (°C)	Conductivity (µS)	p.H. (s.u.)	Total Arsenic (µg/L)	Total Hardness (mg/L)	Total Cadmium (µg/L)	Total Chromium (µg/L)	Total Lead (µg/L)	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthylene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Dibenzo(a,h)anthracene	Fluoranthene	Naphthalene	
WAC Preventive Action Limit (PAL) (µg/L)	NE	125	NE	NE	2	125	NE	NE	NE	5	NE	0.5	10	1.5	NE	NE	NE	NE	0.02	NE	NE	80	8			
WAC Enforcement Standard (ES) (µg/L)	NE	250	NE	NE	10	250	NE	NE	NE	50	NE	5	100	15	NE	NE	NE	NE	0.2	NE	NE	400	40			
WAC Minimum Increase (mg/L)	100	NE	25	2	NE	NE	NE	200	NE	NE	100	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE			
MW4A	10/10/00	Yes	417	7.97	44*	<0.02	0.0800*	<4	13.1	500	8.7	4.2	352	<0.4	5.3	<1.1	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	0.13	<0.30**	
	11/07/00	Yes	420	7.97	80	<0.02	<0.08	<3.50	11.1	580	9.5	---	356	---	---	---	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	0.11	<0.30**	
	04/26/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	12/04/01	Yes	---	---	---	---	---	---	10.1	440	6.5	7.3	---	0.35*	1.7*	<1.4	---	---	---	---	---	---	---	---	---	
	05/08/02	Yes	---	---	---	---	---	---	6.6	380	8.0	2.2"J"	---	<0.08	2.6	0.81"J"	---	---	---	---	---	---	---	---	---	
	11/20/02	Yes	---	---	---	---	---	---	7.9	290	7.4	4.1"J"	---	<0.48	7.2	4.5"J"	---	---	---	---	---	---	---	---	---	
	10/26/04	Yes	---	---	---	---	---	---	10.5	580	7.0	<7.4	---	<0.7	19	<4.1	---	---	---	---	---	---	---	---	---	
	06/03/05	Yes	---	---	---	---	---	---	13.7	240	8.28	0.91"J"	---	<0.04	1.6	0.42"J"	---	---	---	---	---	---	---	---	---	---
	01/04/06	Yes	---	---	---	---	---	---	10.2	270	8.36	3.3	---	<0.04	<3.1	<0.37	---	---	---	---	---	---	---	---	---	---
MW5	10/10/00	Yes	497	7.95	50*	0.140	0.100*	<4	13.3	610	8.9	2.2	442	<0.4	6.6	7.3	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	2.9**	
	11/07/00	Yes	487	7.56	131	<0.02	<0.08	3.73*	10.3	650	8.4	---	416	---	---	---	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	3.4**	
	04/26/01	Yes	---	---	---	---	---	---	11.1	420	6.0	3.2*	---	0.93*	8.1	2.3*	---	---	---	---	---	---	---	---	---	
	12/04/01	Yes	---	---	---	---	---	---	8.8	450	6.7	<1.3	---	<0.35	2.0*	2.7*	---	---	---	---	---	---	---	---	---	
	05/08/02	Yes	---	---	---	---	---	---	6.2	50	8.6	<1.3	---	0.73	1.1"J"	10	---	---	---	---	---	---	---	---	---	
	11/20/02	Yes	---	---	---	---	---	---	7.2	40	7.7	<3.4	---	<0.48	1.3"J"	3.7"J"	---	---	---	---	---	---	---	---	---	
	10/26/04	Yes	---	---	---	---	---	---	9.9	250	6.3	<7.4	---	<0.7	<3.1	<4.1	---	---	---	---	---	---	---	---	---	
	06/03/05	Yes	---	---	---	---	---	---	13.2	150	8.46	<0.19	---	<0.04	0.46"J"	0.44"J"	---	---	---	---	---	---	---	---	---	---
	01/04/06	Yes	---	---	---	---	---	---	9.2	200	8.84	<0.19	---	0.17"J"	<3.1	<0.37	---	---	---	---	---	---	---	---	---	---

Note:

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- 6.3 = WAC Preventive Action Limit Exceeded
- 7.5 = WAC Enforcement Standard Exceeded
- = Not analyzed
- <x = Not detected above laboratory detection limit of x
- \* or "J" = Analyte detected between laboratory Limit of Detection (LOD) and Limit of Quantitation (LOQ)
- PAHs = Polynuclear Aromatic Hydrocarbons
- mg/L = milligrams per liter
- °C = degrees Celsius
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Table 2, Groundwater Analytical Results (Inorganic, Metals, PAHs), Tomahawk Tissue Landfill, Tomahawk, Wisconsin

Well ID	Date Sampled	QC Hold Time Met	Relevant and Significant Analytical Results																						
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			Total Alkalinity	Total Chloride	Total COD	Total Ammonia Nitrogen	Nitrate + Nitrite Nitrogen	Total Sulfate	Temperature (°C)	Conductivity (µS)	p.H. (s.u.)	Total Arsenic (µg/L)	Total Hardness (mg/L)	Total Cadmium (µg/L)	Total Chromium (µg/L)	Total Lead (µg/L)	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthylene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Dibenzo(a,h)anthracene	Fluoranthene	Naphthalene
WAC Preventive Action Limit (PAL) (µg/L)	NE	125	NE	NE	2	125	NE	NE	NE	5	NE	0.5	10	1.5	NE	NE	NE	NE	0.02	NE	NE	80	8		
WAC Enforcement Standard (ES) (µg/L)	NE	250	NE	NE	10	250	NE	NE	NE	50	NE	5	100	15	NE	NE	NE	NE	0.2	NE	NE	400	40		
WAC Minimum Increase (mg/L)	100	NE	25	2	NE	NE	NE	200	NE	NE	100	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
MW6	10/10/00	Yes	217	1.26*	27*	<0.02	0.100*	<4	12.0	280	8.6	2.7	197	<0.4	3.8	<1.1	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**
	11/07/00	Yes	205	1.03*	20*	<0.02	<0.08	<3.50	10.0	290	8.7	---	180	---	---	---	<0.33	<0.37	<0.32	<0.013	<0.014	<0.056	<0.10	<0.038	<0.34**
	04/26/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	12/04/01	Yes	---	---	---	---	---	---	7.9	170	6.6	<1.3	---	<0.35	<0.71	<1.4	---	---	---	---	---	---	---	---	---
	05/08/02	Yes	---	---	---	---	---	---	6.2	330	8.1	2.5"J"	---	0.23"J"	1.7"J"	1.6"J"	---	---	---	---	---	---	---	---	---
	11/20/02	Yes	---	---	---	---	---	---	6.8	130	7.5	<3.4	---	0.74"J"	1.3"J"	1.8"J"	---	---	---	---	---	---	---	---	---
	10/26/04	Yes	---	---	---	---	---	---	9.0	380	6.9	<7.4	---	<0.7	<3.1	<4.1	---	---	---	---	---	---	---	---	---
	06/03/05	Yes	---	---	---	---	---	---	13.1	190	8.61	0.74"J"	---	<0.04	0.82"J"	0.45"J"	---	---	---	---	---	---	---	---	---
	01/04/06	Yes	---	---	---	---	---	---	8.2	190	8.2	1.1	---	<0.04	<3.1	<0.37	---	---	---	---	---	---	---	---	---
MW7	10/10/00	Yes	37.6*	0.818*	<18	<0.02	0.130*	9.15*	12.0	50	8.9	0.76*	74.1	<0.4	2.8*	3.4*	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**
	11/07/00	Yes	36.9*	0.818*	<18	<0.02	0.0800*	8.10*	9.8	50	10.5	---	72.5	---	---	---	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**
	04/26/01	Yes	---	---	---	---	---	---	---	---	---	<1.3	---	<0.4	<1.1	<1.1	---	---	---	---	---	---	---	---	---
	12/04/01	Yes	---	---	---	---	---	---	7.9	60	6.6	<1.3	---	<0.35	<0.71	<1.4	---	---	---	---	---	---	---	---	---
	05/08/02	Yes	---	---	---	---	---	---	5.9	50	8.2	<1.3	---	<0.08	2.1	3.6	---	---	---	---	---	---	---	---	---
	11/20/02	Yes	---	---	---	---	---	---	6.1	60	7.6	<3.4	---	<0.48	1.3"J"	2.7"J"	---	---	---	---	---	---	---	---	---
	10/26/04	Yes	---	---	---	---	---	---	9.1	120	7.0	<7.4	---	<0.7	<3.1	<4.1	---	---	---	---	---	---	---	---	---
	06/03/05	Yes	---	---	---	---	---	---	14.9	30	9.00	<0.19	---	<0.04	0.19"J"	1.9	---	---	---	---	---	---	---	---	---
	01/04/06	Yes	---	---	---	---	---	---	8.3	60	8.41	0.22"J"	---	0.16"J"	<3.1	<0.37	---	---	---	---	---	---	---	---	---

Note:

- VOCs = Volatile Organic Compounds
- µg/L = micrograms per liter
- NE = Not established by Wisconsin Administrative Code (WAC)
- 6.3 = WAC Preventive Action Limit Exceeded
- 7.5 = WAC Enforcement Standard Exceeded
- = Not analyzed
- <x = Not detected above laboratory detection limit of x
- \* or "J" = Analyte detected between laboratory Limit of Detection (LOD) and Limit of Quantitation (LOQ)
- PAHs = Polynuclear Aromatic Hydrocarbons
- mg/L = milligrams per liter
- °C = degrees Celsius
- µS = microsiemens
- s.u. = standard units
- \*\* = Naphthalene was analyzed in the PAH and VOC scan

Table 2, Groundwater Analytical Results (Inorganic, Metals, PAHs), Tomahawk Tissue Landfill, Tomahawk, Wisconsin

Well ID	Date Sampled	QC Hold Time Met	Relevant and Significant Analytical Results																						
			Inorganic Results (mg/L)									Metals Results						PAHs (µg/L)							
			Total Alkalinity	Total Chloride	Total COD	Total Ammonia Nitrogen	Nitrate + Nitrite Nitrogen	Total Sulfate	Temperature (°C)	Conductivity (µS)	p.H. (s.u.)	Total Arsenic (µg/L)	Total Hardness (mg/L)	Total Cadmium (µg/L)	Total Chromium (µg/L)	Total Lead (µg/L)	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthylene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Dibenzo(a,h)anthracene	Fluoranthene	Naphthalene
WAC Preventive Action Limit (PAL) (µg/L)	NE	125	NE	NE	2	125	NE	NE	NE	5	NE	0.5	10	1.5	NE	NE	NE	NE	0.02	NE	NE	80	8		
WAC Enforcement Standard (ES) (µg/L)	NE	250	NE	NE	10	250	NE	NE	NE	50	NE	5	100	15	NE	NE	NE	NE	0.2	NE	NE	400	40		
WAC Minimum Increase (mg/L)	100	NE	25	2	NE	NE	NE	200	NE	NE	100	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
MW8	10/10/00	Yes	<18	0.786*	20*	<0.02	0.110*	4.77*	12.8	10	9.3	1.5*	13.7	7.0	14.2	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**	
	11/07/00	Yes	<18	<0.65	<18	<0.02	<0.08	4.08*	10.6	10	9.1	---	7.6	---	---	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**	
	04/26/01	Yes	---	---	---	---	---	---	---	---	---	<1.3	---	<0.4	<1.1	<1.1	---	---	---	---	---	---	---	---	
	12/04/01	Yes	---	---	---	---	---	---	9.4	20	6.6	<1.3	---	<0.35	1.8*	<1.4	---	---	---	---	---	---	---	---	
	05/08/02	Yes	---	---	---	---	---	---	5.9	10	8.6	<1.3	---	0.36	0.74"J"	2.2"J"	---	---	---	---	---	---	---	---	
	11/20/02	Yes	---	---	---	---	---	---	7.4	10	7.8	<3.4	---	<0.48	1.7"J"	3.4"J"	---	---	---	---	---	---	---	---	---
	10/26/04	Yes	---	---	---	---	---	---	9.6	30	7.3	<7.4	---	<0.7	<3.1	<4.1	---	---	---	---	---	---	---	---	---
	06/03/05	Yes	---	---	---	---	---	---	13.8	10	8.70	<0.19	---	<0.04	<0.13	0.45"J"	---	---	---	---	---	---	---	---	---
	01/04/06	Yes	---	---	---	---	---	---	9	30	9.29	<0.19	---	0.40"J"	<3.1	<0.37	---	---	---	---	---	---	---	---	---
MW9	10/10/00	Yes	48.4*	4.71	26*	0.0500*	0.100*	15.8	13.2	140	10.3	11.4	267	<0.4	77.7	3.8	<0.29	<0.32	<0.28	0.012*	0.014*	<0.049	0.70	<0.033	<0.30**
	11/07/00	Yes	48.8*	2.04*	122	<0.02	<0.08	14.1	10.9	100	8.8	---	110	---	---	---	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	0.048*	<0.30**
	04/26/01	Yes	---	---	---	---	---	---	---	---	---	3.1*	---	<0.4	12.7	1.2*	---	---	---	---	---	---	---	---	---
	12/04/01	Yes	---	---	---	---	---	---	10.1	80	6.5	1.5*	---	<0.35	3.4	<1.4	---	---	---	---	---	---	---	---	---
	05/08/02	Yes	---	---	---	---	---	---	6.1	30	8.6	2.4"J"	---	<0.08	36	4.7	---	---	---	---	---	---	---	---	---
	11/20/02	Yes	---	---	---	---	---	---	8.6	40	7.8	4.7"J"	---	<0.48	120	17	---	---	---	---	---	---	---	---	---
	10/26/04	Yes	---	---	---	---	---	---	10.0	110	7.4	<7.4	---	<0.7	150	<4.1	---	---	---	---	---	---	---	---	---
	06/03/05	Yes	---	---	---	---	---	---	12.0	50	8.58	<0.19	---	<0.04	0.53"J"	0.45"J"	---	---	---	---	---	---	---	---	---
	01/04/06	Yes	---	---	---	---	---	---	9.3	90	9.51	<0.19	---	0.04"J"	<3.1	<0.37	---	---	---	---	---	---	---	---	---

Note:

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- 6.3 = WAC Preventive Action Limit Exceeded
- 7.5 = WAC Enforcement Standard Exceeded
- = Not analyzed
- <x = Not detected above laboratory detection limit of x
- \* or "J" = Analyte detected between laboratory Limit of Detection (LOD) and Limit of Quantitation (LOQ)
- PAHs = Polynuclear Aromatic Hydrocarbons
- mg/L = milligrams per liter
- °C = degrees Celsius
- µS = microsiemens
- s.u. = standard units
- \*\* = Naphthalene was analyzed in the PAH and VOC scan

Table 2, Groundwater Analytical Results (Inorganic, Metals, PAHs), Tomahawk Tissue Landfill, Tomahawk, Wisconsin

Well ID	Date Sampled	QC Hold Time Met	Relevant and Significant Analytical Results																						
			Inorganic Results (mg/L)									Metals Results					PAHs (µg/L)								
			Total Alkalinity	Total Chloride	Total COD	Total Ammonia Nitrogen	Nitrate + Nitrite Nitrogen	Total Sulfate	Temperature (°C)	Conductivity (µS)	p.H. (s.u.)	Total Arsenic (µg/L)	Total Hardness (mg/L)	Total Cadmium (µg/L)	Total Chromium (µg/L)	Total Lead (µg/L)	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthylene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Dibenzo(a,h)anthracene	Fluoranthene	Naphthalene
WAC Preventive Action Limit (PAL) (µg/L)	NE	125	NE	NE	2	125	NE	NE	NE	5	NE	0.5	10	1.5	NE	NE	NE	NE	0.02	NE	NE	80	8		
WAC Enforcement Standard (ES) (µg/L)	NE	250	NE	NE	10	250	NE	NE	NE	50	NE	5	100	15	NE	NE	NE	NE	0.2	NE	NE	400	40		
WAC Minimum Increase (mg/L)	100	NE	25	2	NE	NE	NE	200	NE	NE	100	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
MW10	10/10/00	Yes	211	1.24*	<18	<0.02	<0.08	13.3	12.8	270	9.7	8.0	253	<0.4	50.4	2.5*	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**
	11/07/00	Yes	208	0.812*	58*	<0.02	0.0800*	10.3*	10.2	300	8.9	---	201	---	---	---	<0.29	<0.32	<0.28	<0.011	<0.012	<0.049	<0.090	<0.033	<0.30**
	04/26/01	Yes	---	---	---	---	---	---	---	---	---	2.3*	---	0.47*	6.8	<1.1	---	---	---	---	---	---	---	---	---
	12/04/01	Yes	---	---	---	---	---	---	9.9	240	6.4	2.4*	---	0.48*	2.8	<1.4	---	---	---	---	---	---	---	---	---
	05/08/02	Yes	---	---	---	---	---	---	5.9	260	8.8	1.7"J"	---	0.33	8.0	1.4"J"	---	---	---	---	---	---	---	---	---
	11/20/02	Yes	---	---	---	---	---	---	8.5	160	7.4	<3.4	---	<0.48	8.1	3.2"J"	---	---	---	---	---	---	---	---	---
	10/26/04	Yes	---	---	---	---	---	---	9.6	430	7.3	<7.4	---	<0.7	80	<4.1	---	---	---	---	---	---	---	---	---
	06/03/05	Yes	---	---	---	---	---	---	12.4	200	8.90	2.1	---	<0.04	1.8	0.46"J"	---	---	---	---	---	---	---	---	---
	01/04/06	Yes	---	---	---	---	---	---	9.3	190	9.42	2.4	---	<0.04	<3.1	<0.37	---	---	---	---	---	---	---	---	---

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- 
- 
- <x = Not detected above laboratory detection limit of x
- \* or "J" = Analyte detected between laboratory Limit of Detection (LOD) and Limit of Quantitation (LOQ)
- PAHs = Polynuclear Aromatic Hydrocarbons
- mg/L = milligrams per liter
- °C = degrees Celsius
- µS = microsiemens
- s.u. = standard units
- \*\* = Naphthalene was analyzed in the PAH and VOC scan



Table 2, Groundwater Analytical Results (Dioxins, Furans, VOCs), Tomahawk Tissue Landfill, Tomahawk, Wisconsin

Well ID	Date Sampled	QC Hold Time Met	Relevant and Significant Analytical Results																			
			Dioxins and Furans (µg/L)				VOCs (µg/L)															
			Octachlorodibenzodioxin	Total Hepta-Furans	Trimethylbenzenes	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Chloroform	2-Chlorotoluene	n-Butylbenzene	sec-Butylbenzene	Chlorobenzene	Chloroethane	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Naphthalene	n-Propylbenzene	Toluene	Vinyl Chloride	Xylenes
WAC Preventive Action Limit (PAL) (µg/L)			NE	NE	96	60	125	15	0.6	NE	NE	NE	NE	80	140	NE	NE	8	NE	200	0.02	1000
WAC Enforcement Standard (ES) (µg/L)			NE	NE	480	600	1250	75	6	NE	NE	NE	NE	400	700	NE	NE	40	NE	1000	0.2	10000
WAC Minimum Increase (mg/L)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
MW1	10/10/00	Yes	--	--	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70**	<0.30	<0.10	<0.40	<0.30
	11/07/00	Yes	--	--	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70**	<0.30	<0.10	<0.40	<0.30
	04/26/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/04/01	Yes	--	--	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70	<0.30	<0.10	<0.40	<0.30
	05/08/02	Yes	--	--	<0.19	<0.11	<0.1	<0.31	<0.1	<0.16	<0.11	<0.1	<0.05	<0.6	<0.08	<0.07	<0.12	<0.1	<0.15	<0.08	<0.16	<0.34
	11/20/02	Yes	--	--	<1.33	<0.71	<0.58	<0.63	<0.45	<0.66	<0.65	<0.62	<0.58	<0.84	<0.53	<0.66	<0.58	<0.63	<0.95	<0.84	<0.11	<1.83
	10/26/04	Yes	--	--	<1.17	<0.52	<0.34	<0.63	<0.25	<0.3	<0.39	<0.21	<0.22	<0.38	<0.56	<0.19	<0.3	<0.6	<0.32	<0.57	<0.21	<1.74
	06/03/05	Yes	--	--	<1.25	<0.69	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17
	01/04/06	Yes	--	--	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17
MW2	10/10/00	Yes	--	--	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70**	<0.30	<0.10	7.5	<0.30
	11/07/00	Yes	--	--	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70**	<0.30	<0.10	0.94*	<0.30
	04/26/01	Yes	--	--	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70	<0.30	<0.10	<0.40	<0.30
	12/04/01	Yes	--	--	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70	<0.30	<0.10	6.3	<0.30
	05/08/02	Yes	--	--	<0.19	<0.11	<0.1	<0.31	<0.1	<0.16	<0.11	<0.1	<0.05	<0.6	<0.08	<0.07	<0.12	<0.1	<0.15	<0.08	<0.16	<0.34
	11/20/02	Yes	--	--	<1.33	<0.71	<0.58	<0.63	<0.45	<0.66	<0.65	<0.62	<0.58	<0.84	<0.53	<0.66	<0.58	<0.63	<0.95	<0.84	0.72	<1.83
	10/26/04	Yes	--	--	<1.17	<0.52	<0.34	<0.63	<0.25	<0.3	<0.39	<0.21	<0.22	<0.38	<0.56	<0.19	<0.3	<0.6	<0.32	<0.57	0.55"J"	<1.74
	06/03/05	Yes	--	--	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	0.47"J"	<1.17
	01/04/06	Yes	--	--	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	2.92	<1.17

Note:

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- NE = Not established by Wisconsin Administrative Code (WAC)
- 6.3 = WAC Preventive Action Limit Exceeded
- 7.5 = WAC Enforcement Standard Exceeded
- = Not analyzed
- <x = Not detected above laboratory detection limit of x
- \* or "J" = Analyte detected between laboratory Limit of Detection (LOD) and Limit of Quantitation (LOQ)
- PAHs = Polynuclear Aromatic Hydrocarbons
- mg/L = milligrams per liter
- °C = degrees Celsius
- µS = microsiemens
- s.u. = standard units
- \*\* = Naphthalene was analyzed in the PAH and VOC scan



Table 2, Groundwater Analytical Results (Dioxins, Furans, VOCs), Tomahawk Tissue Landfill, Tomahawk, Wisconsin

Well ID	Date Sampled	QC Hold Time Met	Relevant and Significant Analytical Results																			
			Dioxins and Furans (µg/L)				VOCs (µg/L)															
			Octachlorodibenzodioxin	Total Hepta-Furans	Trimethylbenzenes	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Chloroform	2-Chlorotoluene	n-Butylbenzene	sec-Butylbenzene	Chlorobenzene	Chloroethane	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Naphthalene	n-Propylbenzene	Toluene	Vinyl Chloride	Xylenes
WAC Preventive Action Limit (PAL) (µg/L)			NE	NE	96	60	125	15	0.6	NE	NE	NE	NE	80	140	NE	NE	8	NE	200	0.02	1000
WAC Enforcement Standard (ES) (µg/L)			NE	NE	480	600	1250	75	6	NE	NE	NE	NE	400	700	NE	NE	40	NE	1000	0.2	10000
WAC Minimum Increase (mg/L)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
MW3	10/10/00	Yes	0.000032812	0.000005795	<0.50	<0.30	<0.40	0.57*	<0.50	<0.40	<0.40	<0.30	2.4	<0.50	<0.10	<0.10	<0.20	<0.70**	<0.30	<0.10	<0.40	<0.30
	11/07/00	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	2.5	<0.50	<0.10	<0.10	<0.20	<0.70**	<0.30	<0.10	<0.40	<0.30
	04/26/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	12/04/01	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	0.85*	<0.50	<0.10	<0.10	<0.20	<0.70	<0.30	<0.10	<0.40	<0.30
	05/08/02	Yes	---	---	<0.19	0.21"J"	0.37	2.2	<0.1	<0.16	<0.11	<0.1	5.8	<0.6	0.45	0.58	<0.12	0.45	<0.15	<0.08	<0.16	0.83"J"
	11/20/02	Yes	---	---	0.75"J"	<0.71	0.81"J"	3.0	<0.45	<0.66	<0.65	<0.62	7.3	<0.84	<0.53	<0.66	<0.58	3.9	<0.95	5.1	<0.11	<1.83
	10/26/04	Yes	---	---	<1.17	<0.52	<0.34	0.68"J"	<0.25	<0.3	<0.39	<0.21	1.5	<0.38	<0.56	<0.19	<0.3	<0.6	<0.32	<0.57	<0.21	<1.74
	06/03/05	Yes	---	---	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17
	01/04/06	Yes	---	---	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17
MW4	10/10/00	Yes	0.000038662	<0.000002409	51	2.6	4.5	19	<0.50	1.2	10	1.0*	28	<0.50	<0.10	3.9	1.9	23**	5.8	1.6	<0.40	13.9
	11/07/00	Yes	---	---	49	2.6	4.9	21	<0.50	<0.40	11	1.2	34	<0.50	<0.10	3.8	2.1	21**	5.5	1.6	<0.40	13.3
	04/26/01	Yes	---	---	67	<0.30	2.3	13	<0.50	2.1	6.8	0.87*	23	<0.50	0.32	6.0	1.7	14	11	5.4	<0.40	15.2
	12/04/01	Yes	---	---	51	<0.30	3.4	16	<0.50	<0.40	7.7	1.4	19	<0.50	1.2	4.8	2.0	14	8.7	4.5	<0.40	12.6
	05/08/02	Yes	---	---	46	<0.11	2.3	11	<0.1	<0.16	1.4	0.77	19	<0.6	0.52	3.6	1.1	7.1	6.9	10	<0.16	11.6
	11/20/02	Yes	---	---	25.1	<0.71	2.6	13	<0.45	1.1"J"	<0.65	<0.62	18	<0.84	<0.53	1.4"J"	<0.58	6.9	2.2"J"	<0.84	<0.11	4.6"J"
	10/26/04	Yes	---	---	43.9	<0.52	1.8	6.7	<0.25	<0.3	1.4	0.87	7.4	<0.38	<0.56	4.9	0.85"J"	2.1	13	3.5	<0.21	3.8
	06/03/05	Yes	---	---	50	<0.86	4.1	19	<0.78	<0.42	2	1.1	27	<0.37	0.41"J"	4	1.9	8.3	7.3	2.5	<0.16	12.3
	01/04/06	Yes	---	---	28.2	<0.86	3.4	14.9	<0.78	<0.42	1.5"J"	0.88	20.2	<0.37	<0.3	2.42	1.13"J"	5	4.1	<0.52	<0.16	4.94"J"

Note:

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- 6.3 = WAC Preventive Action Limit Exceeded
- 7.5 = WAC Enforcement Standard Exceeded
- = Not analyzed
- <x = Not detected above laboratory detection limit of x
- \* or "J" = Analyte detected between laboratory Limit of Detection (LOD) and Limit of Quantitation (LOQ)
- PAHs = Polynuclear Aromatic Hydrocarbons
- mg/L = milligrams per liter
- °C = degrees Celsius
- µS = microsiemens
- s.u. = standard units
- \*\* = Naphthalene was analyzed in the PAH and VOC scan

Table 2, Groundwater Analytical Results (Dioxins, Furans, VOCs), Tomahawk Tissue Landfill, Tomahawk, Wisconsin

Well ID	Date Sampled	QC Hold Time Met	Relevant and Significant Analytical Results																			
			Dioxins and Furans (µg/L)					VOCs (µg/L)														
			Octachlorodibenzodioxin	Total Hepta-Furans	Trimethylbenzenes	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Chloroform	2-Chlorotoluene	n-Butylbenzene	sec-Butylbenzene	Chlorobenzene	Chloroethane	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Naphthalene	n-Propylbenzene	Toluene	Vinyl Chloride	Xylenes
WAC Preventive Action Limit (PAL) (µg/L)			NE	NE	96	60	125	15	0.6	NE	NE	NE	NE	80	140	NE	NE	8	NE	200	0.02	1000
WAC Enforcement Standard (ES) (µg/L)			NE	NE	480	600	1250	75	6	NE	NE	NE	NE	400	700	NE	NE	40	NE	1000	0.2	10000
WAC Minimum Increase (mg/L)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
MW6	10/10/00	Yes	---	---	2.1	<0.30	<0.40	0.55*	<0.50	<0.40	1.3	0.54*	<0.30	<0.50	<0.10	0.84	<0.20	1.3"J"***	0.59*	<0.10	<0.40	<0.30
	11/07/00	Yes	---	---	1.4	<0.30	<0.40	<0.40	<0.50	<0.40	0.78*	<0.30	<0.30	<0.50	<0.10	0.53	<0.20	<0.70**	0.44*	<0.10	<0.40	<0.30
	04/26/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	12/04/01	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70	<0.30	<0.10	<0.40	<0.30
	05/08/02	Yes	---	---	12.2	<0.11	<0.1	0.58"J"	<0.1	<0.16	0.55	0.67	0.85	<0.6	0.55	1.9	<0.12	0.91	1.9	0.33	<0.16	2.32
	11/20/02	Yes	---	---	<1.33	<0.71	<0.58	<0.63	<0.45	<0.66	<0.65	<0.62	<0.58	<0.84	<0.53	<0.66	<0.58	<0.63	<0.95	<0.84	<0.11	<1.83
	10/26/04	Yes	---	---	<1.17	<0.52	<0.34	<0.63	<0.25	<0.3	<0.39	<0.21	<0.22	<0.38	<0.56	<0.19	<0.3	<0.6	<0.32	<0.57	<0.21	<1.74
	06/03/05	Yes	---	---	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17
	01/04/06	Yes	---	---	0.51"J"	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17
MW7	10/10/00	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70**	<0.30	<0.10	<0.40	<0.30
	11/07/00	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70**	<0.30	<0.10	<0.40	<0.30
	04/26/01	Yes	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	12/04/01	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70	<0.30	<0.10	<0.40	<0.30
	05/08/02	Yes	---	---	<0.19	<0.11	<0.1	<0.31	<0.1	<0.16	<0.11	<0.1	<0.05	<0.6	<0.08	<0.07	<0.12	<0.1	<0.15	<0.08	<0.16	<0.34
	11/20/02	Yes	---	---	<1.33	<0.71	<0.58	<0.63	<0.45	<0.66	<0.65	<0.62	<0.58	<0.84	<0.53	<0.66	<0.58	<0.63	<0.95	<0.84	<0.11	<1.83
	10/26/04	Yes	---	---	<1.17	<0.52	<0.34	<0.63	<0.25	<0.3	<0.39	<0.21	<0.22	<0.38	<0.56	<0.19	<0.3	<0.6	<0.32	<0.57	<0.21	<1.74
	06/03/05	Yes	---	---	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17
	01/04/06	Yes	---	---	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<1.6	<0.56	<0.85	<0.56	<0.52	<0.16	<1.17

Note:

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Table 2, Groundwater Analytical Results (Dioxins, Furans, VOCs), Tomahawk Tissue Landfill, Tomahawk, Wisconsin

Well ID	Date Sampled	QC Hold Time Met	Relevant and Significant Analytical Results																			
			Dioxins and Furans (µg/L)		VOCs (µg/L)																	
			Octachlorodibenzodioxin	Total Hepta-Furans	Trimethylbenzenes	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Chloroform	2-Chlorotoluene	n-Butylbenzene	sec-Butylbenzene	Chlorobenzene	Chloroethane	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Naphthalene	n-Propylbenzene	Toluene	Vinyl Chloride	Xylenes
WAC Preventive Action Limit (PAL) (µg/L)			NE	NE	96	60	125	15	0.6	NE	NE	NE	NE	80	140	NE	NE	8	NE	200	0.02	1000
WAC Enforcement Standard (ES) (µg/L)			NE	NE	480	600	1250	75	6	NE	NE	NE	NE	400	700	NE	NE	40	NE	1000	0.2	10000
WAC Minimum Increase (mg/L)			NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
MW4A	10/10/00	Yes	---	---	0.41*	10	<0.40	1.6	<0.50	<0.40	5.9	0.68*	1.2	<0.50	<0.10	1.2	<0.20	2.0"J"***	0.31*	<0.10	<0.40	<0.30
	11/07/00	Yes	---	---	0.31*	1.2	<0.40	1.6	<0.50	<0.40	5.7	0.74*	2.3	<0.50	<0.10	1.3	<0.20	0.77"J"***	0.41*	<0.10	<0.40	<0.30
	04/26/01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	12/04/01	Yes	---	---	<0.50	0.92*	<0.40	1.1*	<0.50	<0.40	3.5	<0.30	1.4	1.1*	<0.10	<0.10	<0.20	<0.70	<0.30	<0.10	<0.40	<0.30
	05/08/02	Yes	---	---	<0.19	<0.11	0.22"J"	0.82"J"	<0.1	<0.16	<0.11	<0.1	<0.05	<0.6	<0.08	<0.07	<0.12	<0.1	<0.15	<0.08	<0.16	<0.34
	11/20/02	Yes	---	---	<1.33	<0.71	<0.58	1.2"J"	<0.45	<0.66	<0.65	<0.62	2.1	<0.84	<0.53	<0.66	<0.58	2.2	<0.95	<0.84	<0.11	<1.83
	10/26/04	Yes	---	---	<1.17	<0.52	<0.34	<0.63	<0.25	<0.3	<0.39	<0.21	<0.22	<0.38	<0.56	<0.19	<0.3	<0.6	<0.32	<0.57	<0.21	<1.74
	06/03/05	Yes	---	---	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17
	01/04/06	Yes	---	---	<1.15	<0.86	<0.64	1.1"J"	<0.78	<0.42	<0.61	<0.25	0.99	<0.37	<0.3	0.83"J"	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17
MW5	10/10/00	Yes	---	---	3.68*	0.92*	<0.40	2.2	<0.50	<0.40	4.7	0.64*	1.7	<0.50	<0.10	0.82	<0.20	6.1**	<0.30	<0.10	2.7	<0.30
	11/07/00	Yes	---	---	6.0	1.3	<0.40	2.3	<0.50	<0.40	5.6	0.87*	3.0	<0.50	<0.10	1.0	<0.20	5.5**	0.34*	0.35*	<0.40	<0.30
	04/26/01	Yes	---	---	1.7	<0.30	<0.40	<0.40	<0.50	<0.40	1.4	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	1.7*	<0.30	<0.10	<0.40	<0.30
	12/04/01	Yes	---	---	0.80	<0.30	<0.40	1.3	<0.50	<0.40	2.0	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70	<0.30	<0.10	<0.40	<0.30
	05/08/02	Yes	---	---	<0.19	<0.11	<0.1	<0.31	<0.1	<0.16	<0.11	<0.1	<0.05	<0.6	<0.08	<0.07	<0.12	<0.1	<0.15	<0.08	<0.16	<0.34
	11/20/02	Yes	---	---	<1.33	<0.71	<0.58	<0.63	<0.45	<0.66	<0.65	<0.62	<0.58	<0.84	<0.53	<0.66	<0.58	<0.63	<0.95	<0.84	<0.11	<1.83
	10/26/04	Yes	---	---	<1.17	<0.52	<0.34	<0.63	<0.25	<0.3	<0.39	<0.21	<0.22	<0.38	<0.56	<0.19	<0.3	<0.6	<0.32	<0.57	0.54"J"	<1.74
	06/03/05	Yes	---	---	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17
	01/04/06	Yes	---	---	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17

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Well ID	Date Sampled	QC Hold Time Met	Relevant and Significant Analytical Results																			
			Dioxins and Furans (µg/L)				VOCs (µg/L)															
			Octachlorodibenzodioxin	Total Hepta-Furans	Trimethylbenzenes	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Chloroform	2-Chlorotoluene	n-Butylbenzene	sec-Butylbenzene	Chlorobenzene	Chloroethane	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Naphthalene	n-Propylbenzene	Toluene	Vinyl Chloride	Xylenes
WAC Preventive Action Limit (PAL) (µg/L)	NE	NE	96	60	125	15	0.6	NE	NE	NE	NE	80	140	NE	NE	8	NE	200	0.02	1000		
WAC Enforcement Standard (ES) (µg/L)	NE	NE	480	600	1250	75	6	NE	NE	NE	NE	400	700	NE	NE	40	NE	1000	0.2	10000		
WAC Minimum Increase (mg/L)	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	
MW8	10/10/00	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70**	<0.30	<0.10	<0.40	<0.30
	11/07/00	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70**	<0.30	<0.10	<0.40	<0.30
	04/26/01	Yes	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	12/04/01	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70	<0.30	<0.10	<0.40	<0.30
	05/08/02	Yes	---	---	<0.19	<0.11	<0.1	<0.31	<0.1	<0.16	<0.11	<0.1	<0.05	<0.6	<0.08	<0.07	<0.12	<0.1	<0.15	<0.08	<0.16	<0.34
	11/20/02	Yes	---	---	<1.33	<0.71	<0.58	<0.63	<0.45	<0.66	<0.65	<0.62	<0.58	<0.84	<0.53	<0.66	<0.58	<0.63	<0.95	<0.84	<0.11	<1.83
	10/26/04	Yes	---	---	<1.17	<0.52	<0.34	<0.63	<0.25	<0.3	<0.39	<0.21	<0.22	<0.38	<0.56	<0.19	<0.3	<0.6	<0.32	<0.57	<0.21	<1.74
	06/03/05	Yes	---	---	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	0.31"J"	<1.17
	01/04/06	Yes	---	---	0.49"J"	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17
MW9	10/10/00	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70**	<0.30	<0.10	<0.40	<0.30
	11/07/00	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70**	<0.30	<0.10	<0.40	<0.30
	04/26/01	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70	<0.30	<0.10	<0.40	<0.30
	12/04/01	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	<0.10	<0.20	<0.70	<0.30	<0.10	<0.40	<0.30
	05/08/02	Yes	---	---	<0.19	<0.11	<0.1	<0.31	<0.1	<0.16	<0.11	<0.1	<0.05	<0.6	<0.08	<0.07	<0.12	<0.1	<0.15	<0.08	<0.16	<0.34
	11/20/02	Yes	---	---	<1.33	<0.71	<0.58	<0.63	<0.45	<0.66	<0.65	<0.62	<0.58	<0.84	<0.53	<0.66	<0.58	<0.63	<0.95	<0.84	<0.11	<1.83
	10/26/04	Yes	---	---	<1.17	<0.52	<0.34	<0.63	<0.25	<0.3	<0.39	<0.21	<0.22	<0.38	<0.56	<0.19	<0.3	<0.6	<0.32	<0.57	<0.21	<1.74
	06/03/05	Yes	---	---	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17
	01/04/06	Yes	---	---	<1.15	<0.86	<0.64	<0.96	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	<0.56	<0.5	<0.85	<0.56	<0.52	<0.16	<1.17

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- mg/L = milligrams per liter
- °C = degrees Celsius
- µS = microsiemens
- s.u. = standard units
- \*\* = Naphthalene was analyzed in the PAH and VOC scan



Table 2, Groundwater Analytical Results (Dioxins, Furans, VOCs), Tomahawk Tissue Landfill, Tomahawk, Wisconsin

Well ID	Date Sampled	QC Hold Time Met	Relevant and Significant Analytical Results																			
			Dioxins and Furans (µg/L)		VOCs (µg/L)																	
			Octachlorodibenzodioxin	Total Hepta-Furans	Trimethylbenzenes	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Chloroform	2-Chlorotoluene	n-Butylbenzene	sec-Butylbenzene	Chlorobenzene	Chloroethane	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Naphthalene	n-Propylbenzene	Toluene	Vinyl Chloride	Xylenes
WAC Preventive Action Limit (PAL) (µg/L)	NE	NE	96	60	125	15	0.6	NE	NE	NE	NE	80	140	NE	NE	8	NE	200	0.02	1000		
WAC Enforcement Standard (ES) (µg/L)	NE	NE	480	600	1250	75	6	NE	NE	NE	NE	400	700	NE	NE	40	NE	1000	0.2	10000		
WAC Minimum Increase (mg/L)	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE		
MW10	10/10/00	Yes	<0.000004182	<0.000002162	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	0.85*	<0.30	<0.30	<0.50	<0.10	4.3	<0.20	<0.70**	<0.30	<0.10	<0.40	<0.30
	11/07/00	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	0.88*	<0.30	<0.30	<0.50	<0.10	3.4	<0.20	<0.70**	<0.30	<0.10	<0.40	<0.30
	04/26/01	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	1.3	<0.20	<0.70	<0.30	<0.10	<0.40	<0.30
	12/04/01	Yes	---	---	<0.50	<0.30	<0.40	<0.40	<0.50	<0.40	<0.40	<0.30	<0.30	<0.50	<0.10	2.4	<0.20	<0.70	<0.30	<0.10	<0.40	<0.30
	05/08/02	Yes	---	---	3.09	<0.11	<0.1	<0.31	0.27"J"	0.52"J"	0.92	0.55	<0.05	<0.6	<0.08	6.1	<0.12	<0.1	0.86	0.55	<0.16	0.44"J"
	11/20/02	Yes	---	---	<1.33	<0.71	<0.58	<0.63	<0.45	<0.66	<0.65	<0.62	<0.58	<0.84	<0.53	1.8"J"	<0.58	<0.63	<0.95	2.9	<0.11	<1.83
	10/26/04	Yes	---	---	<1.17	<0.52	<0.34	<0.63	<0.25	<0.3	<0.39	<0.21	<0.22	<0.38	<0.56	1.5	<0.3	<0.6	<0.32	21	<0.21	<1.74
	06/03/05	Yes	---	---	0.4"J"	<0.86	<0.64	<0.69	<0.78	0.53"J"	<0.61	0.28"J"	<0.26	<0.37	<0.3	3	<0.5	<0.85	<0.56	1.42"J"	<0.16	<1.17
	01/04/06	Yes	---	---	<1.15	<0.86	<0.64	<0.69	<0.78	<0.42	<0.61	<0.25	<0.26	<0.37	<0.3	0.93"J"	<0.5	<0.85	<0.56	1.43"J"	<0.16	<1.17

Note:

VOCs = Volatile Organic Compounds

µg/L = micrograms per liter

NE = Not established by Wisconsin Administrative Code (WAC)

6.3 = WAC Preventive Action Limit Exceeded

7.5 = WAC Enforcement Standard Exceeded

--- = Not analyzed

<x = Not detected above laboratory detection limit of x

\* or "J" = Analyte detected between laboratory Limit of Detection (LOD) and Limit of Quantitation (LOQ)

PAHs = Polynuclear Aromatic Hydrocarbons

mg/L = milligrams per liter

°C = degrees Celsius

µS = microsiemens

s.u. = standard units

\*\* = Naphthalene was analyzed in the PAH and VOC scan