



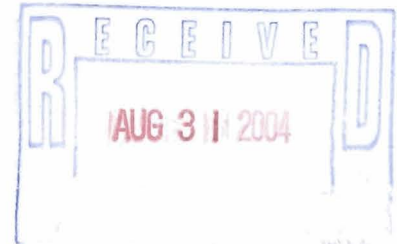
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May 21, 2004

Mr. Frank Tallerino
Commissioner of Public Works
City of Rome
City Hall, Suite 3C
198 N. Washington Street
Rome, New York 13440



RE: Tannery Road Landfill O&M
Quarterly Monitoring – First Quarter 2004
Monthly Inspections – February through April 2004

Dear Mr. Tallerino:

Delaware Engineering, P.C. is pleased to provide you with this letter report summarizing the results of the March 2004 ground water sampling at the Tannery Road Landfill for the City of Rome.

INTRODUCTION

On March 23, 2004, Delaware personnel measured the depth to water, obtained field parameter measurements and collected ground water samples from one upgradient monitoring well (MW-9S) and four downgradient monitoring wells (MW-1S, MW-4S, MW-5S and MW-7D). Downgradient monitoring well MW-3S was frozen and therefore the well was not sampled this quarter. Each well was purged of a minimum of three well volumes prior to sample collection. In addition, a leachate sample was collected from leachate monitoring wells MW-10 and MW-12. The depth to water was measured in leachate monitoring well MW-11.

Samples were analyzed for the NYSDEC Part 360 Routine parameters. The ground water analytical data are summarized in Table 1. Concentrations that exceed an applicable ground water standard or guidance value are presented in bold.

Monthly Operations and Maintenance (O&M) inspections were also conducted in February, March and April 2004. April inspection revealed erosion of the diversion berm west of the north down shoot. In the current condition a rainstorm has the potential to erode the topsoil and protective cover of the membrane. Repair of the diversion berm should be implemented to prevent further erosion and potential exposure of the

membrane. The three down shoots are starting to erode and should be repaired as needed. Two woodchuck holes were discovered in the north/west side of the landfill. The Inspection Checklists are attached, and data have been summarized in Tables 2 (Water Levels) and 3 (Pumping Hours and Gallons).

GROUND WATER METAL RESULTS

Review of the metals data indicates that each of the monitoring wells, including upgradient well MW-9S and leachate monitoring wells MW-10 and MW-12 exhibited iron concentrations above the New York State Department Of Environmental Conservation (NYSDEC) ground water standards. Manganese concentrations in all wells except MW-1S, MW-4S and leachate well LMW-12 exceeded the New York State Department of Environmental Conservation (NYSDEC) ground water standard of 0.3 milligrams per liter (mg/L). Downgradient ground water iron and manganese concentrations from all monitoring wells were significantly lower than the upgradient MW-9S concentration, indicating that the downgradient ground water iron concentrations are most likely to some extent naturally derived and related to the sample sediment load rather than being associated with the landfill. It should be noted that the ground water standard for iron and manganese is based on aesthetic reasons (*e.g.*, taste, staining of laundry and porcelain, *etc.*).

Samples collected from upgradient well MW-9S and down gradient monitoring well MW-7D as well as leachate wells LMW-10 and LMW-12 exhibited sodium concentrations above the NYSDEC ground water standard of 20 mg/L. The ground water standard for sodium is designed to protect those individuals who are on low sodium diets and the reported concentrations are not considered a threat to public health or the environment.

Potassium concentrations in the MW-4S and MW-7D ground water samples were higher than the upgradient MW-9S concentration. Leachate samples from leachate wells MW-10 and MW-12 exhibit high potassium concentrations. Data indicate that the higher downgradient ground water potassium concentrations is most likely related to a landfill affect on ground water. However, there is no ground water standard for potassium and reported downgradient ground water concentrations do not represent a significant environmental concern.

The ground water concentration of boron and magnesium in the LMW-10 and LMW-12 leachate well samples were above the ground water standard/guidance value (Boron 1 mg/L, Magnesium guidance value 35 mg/L). The upgradient MW-9S ground water magnesium value was above the value.

The ground water concentration of lead in ground water from upgradient well MW-9S and leachate well LMW-10 exceeded the NYSDEC ground water standard value 0.025 mg/L.

The high lead, iron and manganese concentrations in the MW-9S ground water sample are to a significant extent most likely related to the sample sediment load. The MW-9S field turbidity value (492 NTUs) indicates a significant sample sediment load. Because of the small grain size soil in which the monitoring wells are screened, sediment becomes entrained in the ground water during the purging and sampling process. Sediment present in a sample will have metal ions both sorbed to its surface and as an integral component of the sediment itself. When sediment-laden samples are preserved with acid in the field (per standard protocol), and especially when samples are prepared in the laboratory via hot acid digestion (also per standard protocol), metals will be desorbed from the sediment matrix, resulting in reported ground water metals concentrations that are higher than is actually dissolved in the ground water.

LEACHATE INDICATOR DATA

Ground water from down gradient monitoring wells MW-4S and MW-7D exhibited ammonia concentrations that were above the ground water standard as were the concentrations in the MW-10 and MW-12 leachate wells. The ammonia detected in the ground water monitoring well samples is most likely landfill related.

The MW-10 and MW-12 leachate well samples exhibited concentrations of bromide, chloride, TDS and total phenols that were above the respective ground water standards. The TDS and total phenols values in the ground water sample from monitoring well MW-7D were higher than the respective ground water standards.

Data indicate that the MW-4S and MW-7D ground water ammonia concentrations and the high TDS and total phenols values in the MW-7D ground water sample are most likely landfill derived. Ground water at the landfill perimeter continues to represent a potential source of ammonia to the adjacent wetlands.

FIELD PARAMETER DATA

Ground water from monitoring wells MW-1S, MW-4S, MW-5S and MW-7D exhibited field pH values below the NYSDEC ground water standard lower limit of 6.5. The low pH value is most likely representative of the natural conditions associated with the pitch pine wetland/bogs located adjacent to the landfill. These wetlands/bogs typically exhibit low pH values. MW-10 and MW-12 leachate sample pH values have historically generally been within the ground water standard range, at or near the lower limit.

Ground water Turbidity values for all the monitoring wells were above the ground water standard. Turbidity values above the NTU standards are most likely a result of sample method and well construction not landfill related.

DATA VALIDATION/DATA USABILITY

The usability of the March 2004 analytical data were evaluated by reviewing the available laboratory batch QA/QC data and comparison to the available historical data. In addition, the analytical results were validated by the laboratory's QA/QC department prior to their release of the data. The MW-4S, MW-7D, LMW-10 and LMW-12 total kjeldahl nitrogen (TKN) and ammonia results are considered estimated. TKN is a measurement of both ammonia and organic nitrogen and by definition an ammonia only analysis cannot exceed a TKN concentration. The laboratory reported ammonia concentration in the MW-4S, MW-7D, LMW-10 and LMW-12 samples was higher than the reported TKN values. The error is most likely a function of the high ammonia and TKN concentrations in these samples and was caused by analytical variability and variability in sample dilution, necessary to bring the concentrations within the linear range of the analysis. Although the data are estimated, the results are usable and all the March 2004 data are considered of sufficient quality to make informed decisions with respect to ground water and leachate quality.

O&M – MONTHLY INSPECTIONS

Operations and Maintenance (O&M) inspections were conducted in February 2004, March 2004, and April 2004. The Inspection Checklists are attached, and the data have been summarized in Tables 2 and 3. Table 2 summarizes the water level data for the site and Table 3 provides the operational data summary. A ground water contour map for March 2004 is provided in Figure 1.

Comparison of the March 2004 groundwater monitoring well elevation data to the MW-10 leachate well ground water elevation indicates an inward gradient in the vicinity of monitoring wells MW-3S and MW-9S since March. Comparison of the PZ-1, MW-1S, MW-7S and MW-7D ground water elevation data to the MW-12 leachate well ground water elevation, indicates a continuing outward gradient from the landfill in the vicinity of these monitoring wells.

SUMMARY

In summary, the MW-4S, MW-7D, LMW-10 and LMW-12 TKN results are considered estimated, however, all data are considered of sufficient quality to make informed decisions with respect to ground water quality. The elevated iron and manganese concentrations detected in the ground water monitoring wells are, to some extent, related to the sample sediment load. Data indicate that the MW-4S and MW-7D ground water ammonia concentrations and the MW-7D TDS and total phenols values landfill related.

The diversion berm on the north side of the landfill should be repaired to prevent further erosion and potential exposure of the liner membrane. The three down shoots are starting to erode and should be repaired as necessary. Two woodchuck holes were discovered on the north/west side of the landfill.

If you have any questions, please do not hesitate to call Gary Kerzic or me at 518-452-1290.

Sincerely,



Edward G. Fahrenkopf
Senior Environmental Scientist

cc: Susan Lasdin, NYSDEC

Attachment(s) Data Summary Tables
 Laboratory Reporting Sheets
 O&M Inspection Checklists: February 2004, March 2004, and
 April 2004
 Ground Water Contour Map: March 2004

TABLES

Table 1
City of Rome
Tannery Road Landfill
March 2004
Ground Water Data

	MW-1S	MW-3S	MW-4S	MW-5S	MW-7D	MW-9S	LMW-10	LMW-12	NYSDEC Ground Water Standard
Field Parameters									
Conductivity (umhos/cm)	24	NA	164	306	1,030	413	4,810	4,970	NS
pH (s.u.)	5.22	NA	5.64	6.15	6.23	6.98	6.59	6.57	6.5-8.5
Temperature (Deg C.)	4.2	NA	4.9	5.4	9.5	5.2	12.8	11.3	NS
Turbidity (NTU)	113	NA	10	41	59	492	189	83	5
Leachate Indicator Parameters (mg/L)									
Ammonia-Nitrogen	<0.03	NA	3.8	0.83	30	0.56	380	300	2
Biochemical Oxygen Demand (BOD5)	<4	NA	<4	<4	<10	<4	28	29	NS
Bromide	<0.1	NA	<0.1	<0.1	0.83	<0.1	3.7	5	2 (GV)
Chemical Oxygen Demand	18	NA	74	25	110	120	300	720	NS
Chloride	3.4	NA	2.5	4.2	56	3.5	450	370	250
Nitrate-Nitrogen	0.16	NA	<0.1	<0.1	0.23	<0.1	<0.1	0.55	10
Sulfate	7.4	NA	3.2	21	39	5.9	3.6	2	250
Total Alkalinity	<1	NA	41	110	320	220	2,000	1,800	NS
Total Dissolved Solids	32	NA	130	180	510	360	2,200	1,800	500
Total Hardness	7.8	NA	36	130	230	730	700	460	NS
Total Kjeldahl Nitrogen	0.53	NA	3.1	1.3	35	1.1	330	270	NS
Total Organic Carbon	4.1	NA	29	8.9	39	25	180	140	NS
Total Phenols	<0.002	NA	<0.002	<0.002	0.004	<0.002	0.017	0.022	0.001
Metals (mg/L)									
Boron	<0.5	NA	<0.5	<0.5	0.95	<0.5	3.8	3	1
Cadmium	<0.01	NA	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.005
Calcium	1.5	NA	8.8	42	57	180	120	77	NS
Iron	2.4	NA	4	9	34	67	38	44	0.3
Lead	<0.01	NA	<0.01	<0.01	0.012	0.043	0.028	0.015	0.025
Magnesium	<1	NA	3.5	5.7	22	66	96	64	35 (GV)
Manganese	0.049	NA	0.24	0.67	0.68	3	0.74	0.29	0.3
Potassium	<1	NA	12	5.1	37	7.8	350	270	NS
Sodium	1.1	NA	4.5	4.4	44	62	500	330	20

Notes:

- 1) Results in **bold** typeface indicate that the result exceeds the applicable standard.
- 2) GV indicates that the standard listed is a Guidance Value.
- 3) NA Not Accessible- Well was frozen.

Table 2
Water Level Elevation Data, Comparisons to MW-10 and MW-12
Tannery Road Landfill
Rome, New York

WELL	MEASURING POINT	DEPTH TO WATER (FT.)													
	ELEVATION (FT.)	3/12/03	4/30/03	5/29/03	6/25/03	7/16/03	8/21/03	9/17/03	10/15/2003	11/05/2003	12/16/2003	01/29/2004	2/25/04	3/23/04	4/16/04
MW-1S	449.59	5.17	5.18	4.49	5.25	6.75	6.6	7.48	6.1	4.87	4.86	5.77	6.86	4.75	4.66
MW-2S	459.44	7.29	7.67	6.39	7.29	9.06	8.25	9.65	7.78	6.54	6.71	8.21	8.78	6.51	6.59
MW-3S	456.4	Frozen	3.93	3.46	3.81	4.66	4.3	4.9	3.38	3.51	3.6	3.97	3.96	NA	3.58
MW-4S	456.19	3.91	4.03	3.70	3.87	4.6	4.43	5.5	3.95	3.83	3.81	4.18	4.18	3.76	3.86
MW-5S	457.15	4.6	4.86	4.21	4.7	5.79	5.31	6.99	4.66	4.36	4.16	5.1	5.24	4.34	4.43
MW-7S	452.25	8.53	7.62	7.46	7.71	8.92	9.3	10.61	9.91	8.44	7.81	8.31	8.93	7.91	7.52
MW-9S	456.38	3.95	4.1	3.80	3.93	4.55	4.27	4.77	3.78	3.76	3.72	3.98	3.91	3.77	3.75
MW-10	486.3	35.05	35.05	34.83	35.02	35.11	35.12	35.57	34.65	35.11	34.11	NA	35.25	35.11	35.25
MW-11	502.4	52.19	52.03	51.89	51.97	52.57	52.14	52.37	51.79	52.18	52.02	51.97	52.21	52.09	52.13
MW-12	483.11	32.79	32.38	32.28	32.36	32.59	32.81	33.19	32.77	32.87	32.48	32.46	32.74	32.55	32.47
PZ-1	454.37	6.53	6.37	5.68	6.6	8.14	8.12	9.18	7.77	5.58	5.81	6.95	7.51	5.77	5.57
MW-7D	451.79	8.91	7.49	7.45	7.88	9.05	9.49	10.57	9.73		7.98			8.05	7.45

	WATER LEVEL ELEVATION (FT.)														
WELL	3/12/03	4/30/03	5/29/03	6/25/03	7/16/03	8/21/03	9/17/03	10/15/2003	11/05/2003	12/16/2003	01/29/2004	2/25/04	3/23/04	4/16/04	
MW-1S	444.42	444.41	445.10	444.34	442.84	442.99	442.11	443.49	444.72	444.73	443.82	442.73	444.84	444.93	
MW-2S	452.15	451.77	453.05	452.15	450.38	451.19	449.79	451.66	452.9	452.73	451.23	450.66	452.93	452.85	
MW-3S	Frozen	452.47	452.94	452.59	451.74	452.1	451.5	453.02	452.89	452.8	452.43	452.44	NA	452.82	
MW-4S	452.28	452.16	452.49	452.32	451.59	451.76	450.69	452.24	452.36	452.38	452.01	452.01	452.43	452.33	
MW-5S	452.55	452.29	452.94	452.45	451.36	451.84	450.16	452.49	452.79	452.99	452.05	451.91	452.81	452.72	
MW-7S	443.72	444.63	444.79	444.54	443.33	442.95	441.64	442.34	443.81	444.44	443.94	443.32	444.34	444.73	
MW-9S	452.43	452.28	452.58	452.45	451.83	452.11	451.61	452.6	452.62	452.66	452.4	452.47	452.61	452.63	
MW-10	451.25	451.25	451.47	451.28	451.19	451.18	450.73	451.65	451.19	452.19	NR	451.05	451.19	451.05	
MW-11	450.21	450.37	450.51	450.43	449.83	450.26	450.03	450.61	450.22	450.38	450.43	450.19	450.31	450.27	
MW-12	450.32	450.73	450.83	450.75	450.52	450.3	449.92	450.34	450.24	450.63	450.65	450.37	450.56	450.64	
PZ-1	447.84	448	448.69	447.77	446.23	446.25	445.19	446.6	448.79	448.56	447.42	446.86	448.6	448.8	
MW-7D	442.88	444.3	444.34	443.91	442.74	442.3	441.22	442.06		443.81			443.74	444.34	

	WATER LEVEL ELEVATION DIFFERENCE (FT.) RELATIVE TO MW-12 ²														
WELL	3/12/03	4/30/03	5/29/03	6/25/03	7/16/03	8/21/03	9/17/03	10/15/2003	11/05/2003	12/16/2003	01/29/2004	2/25/04	3/23/04	4/16/04	
MW-1S	5.9	6.32	5.73	6.41	7.68	7.31	7.81	6.85	5.52	5.9	6.83	7.64	5.72	5.71	
MW-2S	-1.83	-1.04	-2.22	-1.4	0.14	-0.89	0.13	-1.32	-2.66	-2.1	-0.58	-0.29	-2.37	-2.21	
MW-3S	Frozen	-1.74	-2.11	-1.84	-1.22	-1.8	-1.58	-2.68	-2.65	-2.17	-1.78	-2.07	NA	-2.18	
MW-4S	-1.96	-1.43	-1.66	-1.57	-1.07	-1.46	-0.77	-1.9	-2.12	-1.75	-1.36	-1.64	-1.87	-1.69	
MW-5S	-2.23	-1.56	-2.11	-1.7	-0.84	-1.54	-0.24	-2.15	-2.55	-2.36	-1.4	-1.54	-2.25	-2.08	
MW-7S	6.6	6.1	6.04	6.21	7.19	7.35	8.28	8	6.43	6.19	6.71	7.05	6.22	5.91	
MW-9S	-2.11	-1.55	-1.75	-1.7	-1.31	-1.81	-1.69	-2.26	-2.38	-2.03	-1.75	-2.1	-2.05	-1.99	
MW-10	-0.93	-0.52	-0.64	-0.53	-0.67	-0.88	-0.81	-1.31	-0.95	-1.56	NA	NA	-0.63	-0.41	
MW-11	0.11	0.36	0.32	0.32	0.69	0.04	-0.11	-0.27	0.02	0.25	0.22	0.18	0.25	0.37	
MW-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PZ-1	2.48	2.73	2.14	2.98	4.29	4.05	4.73	3.74	1.45	2.07	3.23	3.51	1.96	1.84	
MW-7D	7.44	6.43	6.49	6.84	7.78	8	8.7	8.28		6.82			6.82	6.3	

	WATER LEVEL ELEVATION DIFFERENCE (FT.) RELATIVE TO MW-10 ²													
WELL	3/12/03	4/30/03	5/29/03	6/25/03	7/16/03	8/21/03	9/17/03	10/15/2003	11/05/2003	12/16/2003	01/29/2004	2/25/04	3/23/04	4/16/04
MW-1S	6.83	6.84	6.37	6.94	8.35	8.19	8.62	8.16	6.47	7.46	NA	8.32	6.35	6.12
MW-2S	-0.90	-0.52	-1.58	-0.87	0.81	-0.01	0.94	-0.01	-1.71	-0.54	NA	0.39	-1.74	-1.80
MW-3S	Frozen	-1.22	-1.47	-1.31	-0.55	-0.92	-0.77	-1.37	-1.70	-0.61	NA	-1.39	NA	-1.77
MW-4S	-1.03	-0.91	-1.02	-1.04	-0.40	-0.58	0.04	-0.59	-1.17	-0.19	NA	-0.96	-1.24	-1.28
MW-5S	-1.30	-1.04	-1.47	-1.17	-0.17	-0.66	0.57	-0.84	-1.60	-0.80	NA	-0.86	-1.62	-1.67
MW-7S	7.53	6.62	6.68	6.74	7.86	8.23	9.09	9.31	7.38	7.75	NA	7.73	6.85	6.32
MW-9S	-1.18	-1.03	-1.11	-1.17	-0.64	-0.93	-0.88	-0.95	-1.43	-0.47	NA	-1.42	-1.42	-1.58
PZ-1	3.41	3.25	2.78	3.51	4.96	4.93	5.54	5.05	2.40	3.63	NA	4.19	2.59	2.25
MW-7D	8.37	-444.3	-444.34	-443.91	-442.74	-442.3	-441.22	-442.06		-443.81			7.45	6.71

Notes:

1) Water levels were collected from one upgradient monitoring well (MW-9S), six downgradient wells (MW-1S, MW-2S, MW-3S, MW-4S, MW-5S and MW-7S), one downgradient piezometer (PZ-1) and three leachate monitoring wells (MW-10), (MW-11), (MW-12).

2) A negative number indicates an inward gradient.

3) NA indicates monitoring well was not accessible due to frozen conditions

Table 3
Operational Data Summary
Tannery Road Landfill
Rome, New York

Pump Station at Tannery Road

Hour Meters	3/12/03	4/30/03	5/29/03	6/25/03	7/16/03	8/21/03	9/17/03	10/15/2003	11/05/2003	12/16/2003	01/29/2004	2/25/04	3/23/04	4/16/04	Total Hours Operated 3/12/2003 - 4/16/2004
Pump #1	33,898	35,123	35,833	36,513	37,008	37,646	38,131	38,672	39,178	40,249	41,356	41,949	42,673	43,319	9,421
Pump #2	29,284	30,304	30,886	31,453	31,863	32,388	32,751	33,161	33,547	34,367	35,225	35,687	36,253	36,765	7,481

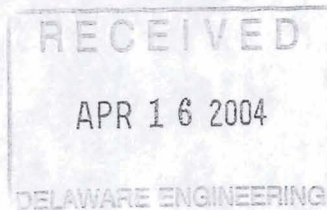
Totalizers in Meter Pit

	3/12/03	4/30/03	5/29/03	6/25/03	7/16/03	8/21/03	9/17/03	10/15/2003	11/05/2003	12/16/2003	01/29/2004	2/25/04	3/23/04	4/16/04	Total Flow (Gallons) 3/12/2003 - 4/16/2004
RW-1	3,733,800	3,798,200	3,835,400	3,870,700	3,897,100	3,942,300	3,975,400	4,009,300	4,034,800	4,085,300	4,139,800	4,173,000	4,205,200	4,229,400	495,600
RW-2	6,465,000	6,601,800	6,680,900	6,755,600	6,812,100	6,906,600	6,977,300	7,050,400	7,106,100	7,216,200	7,335,200	7,407,000	7,478,600	7,543,300	1,078,300
RW-3	1,738,100	1,823,000	1,894,100	1,934,300	1,959,400	1,961,400	1,975,900	2,028,100	2,066,000	2,164,200	2,252,800	2,256,700	2,300,200	2,323,700	585,600
RW-4	998,300	1,207,200	1,405,100	1,582,100	1,703,600	1,808,100	1,838,600	1,881,800	1,924,000	2,080,800	2,266,600	2,371,100	2,478,400	2,571,200	1,572,900
Total	112,000	495,000	385,300	327,200	229,500	246,200	148,800	202,400	161,300	415,600	447,900	213,400	254,600	205,200	3,732,400

Hour Meters

	3/12/03	4/30/03	5/29/03	6/25/03	7/16/03	8/21/03	9/17/03	10/15/2003	11/05/2003	12/16/2003	01/29/2004	2/25/04	3/23/04	4/16/04	Total Hours Operated 3/12/2003 - 4/16/2004
RW-1	102,870	104,531	105,498	106,402	107,085	108,412	109,348	110,345	111,095	112,592	114,176	115,219	116,198	121,279	18,409
RW-2	108,859	110,859	112,042	113,162	114,033	115,502	116,615	117,769	118,645	120,430	122,335	123,499	124,677	125,740	16,881
RW-3	229,983	240,539	247,369	253,865	258,842	260,161	261,744	268,434	273,464	283,235	293,761	300,255	306,718	312,459	82,476
RW-4	66,467	78,284	85,168	91,680	96,657	105,247	111,713	118,404	123,434	133,205	143,731	150,225	156,688	162,429	95,962

LABORATORY REPORTING SHEETS



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Laboratory Analysis Report For Delaware Engineering

Client Project ID:

Tannery Rd. Landfill

LSL Project ID: **0404237**

Receive Date/Time: 03/24/04 14:53

Project Received by: GS

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This report was reviewed by:

Gale Sutton
Life Science Laboratories, Inc.

Date:

4-13-04

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering Albany, NY

Sample ID: MW-1S LSL Sample ID: 0404237-001
Location: City of Rome
Sampled: 03/23/04 11:58 Sampled By: BZ
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
Analyte					
(1) EPA 200.7 Total Hardness as CaCO3					
Hardness, Total	7.8	mg/l	3/26/04	3/26/04	PEF
(1) EPA 200.7 Total Metals					
Boron	<0.5	mg/l	3/26/04	3/26/04	PEF
Calcium	1.5	mg/l	3/26/04	3/26/04	PEF
Cadmium	<0.01	mg/l	3/26/04	3/26/04	PEF
Iron	2.4	mg/l	3/26/04	3/26/04	PEF
Potassium	<1	mg/l	3/26/04	3/26/04	PEF
Magnesium	<1	mg/l	3/26/04	3/26/04	PEF
Manganese	0.049	mg/l	3/26/04	3/26/04	PEF
Sodium	1.1	mg/l	3/26/04	3/26/04	PEF
Lead	<0.01	mg/l	3/26/04	3/26/04	PEF
(1) EPA 350.1 Ammonia					
Ammonia as N	<0.03	mg/l		4/2/04	DRB
(1) EPA 351.2 TKN as N					
Total Kjeldahl Nitrogen	0.53	mg/l	4/2/04	4/5/04	DRB
(1) EPA 405.1 BOD-5					
Biochemical Oxygen Demand, 5 Day	<4	mg/l		3/24/04 18:30	MM
(1) EPA 420.1 Recoverable Phenolics LL					
Phenolics, Total Recoverable	<0.002	mg/l	4/8/04	4/8/04	DWK
(1) EPA Method 300.0 A					
Bromide	<0.1	mg/l		3/24/04	RAF
Chloride	3.4	mg/l		3/24/04	RAF
Nitrate as N	0.16	mg/l		3/24/04 22:25	RAF
Sulfate	7.4	mg/l		3/24/04	RAF
(1) HACH 8000 COD					
Chemical Oxygen Demand	18	mg/l		4/5/04	DWK
(1) SM 18 2320B, Alkalinity as CaCO3					
Alkalinity	<1	mg/l		3/26/04	ASH
(1) SM 19 5310C TOC					
Total Organic Carbon	4.1	mg/l		3/26/04	TER
(1) SM18-2540C Total Dissolved Solids					
Total Dissolved Solids @ 180 C	32	mg/l		3/25/04	MM

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering Albany, NY

Sample ID: MW-4S LSL Sample ID: 0404237-002
Location: City of Rome
Sampled: 03/23/04 10:18 Sampled By: BZ
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
Analyte					
(I) EPA 200.7 Total Hardness as CaCO3					
Hardness, Total	36	mg/l	3/26/04	3/26/04	PEF
(I) EPA 200.7 Total Metals					
Boron	<0.5	mg/l	3/26/04	3/26/04	PEF
Calcium	8.8	mg/l	3/26/04	3/26/04	PEF
Cadmium	<0.01	mg/l	3/26/04	3/26/04	PEF
Iron	4.0	mg/l	3/26/04	3/26/04	PEF
Potassium	12	mg/l	3/26/04	3/26/04	PEF
Magnesium	3.5	mg/l	3/26/04	3/26/04	PEF
Manganese	0.24	mg/l	3/26/04	3/26/04	PEF
Sodium	4.5	mg/l	3/26/04	3/26/04	PEF
Lead	<0.01	mg/l	3/26/04	3/26/04	PEF
(I) EPA 350.1 Ammonia					
Ammonia as N	3.8	mg/l		4/2/04	DRB
(I) EPA 351.2 TKN as N					
Total Kjeldahl Nitrogen	3.1	mg/l	4/2/04	4/5/04	DRB
(I) EPA 405.1 BOD-5					
Biochemical Oxygen Demand, 5 Day	<4	mg/l		3/24/04 18:30	MM
(I) EPA 420.1 Recoverable Phenolics LL					
Phenolics, Total Recoverable	<0.002	mg/l	4/8/04	4/8/04	DWK
(I) EPA Method 300.0 A					
Bromide	<0.1	mg/l		3/24/04	RAF
Chloride	2.5	mg/l		3/24/04	RAF
Nitrate as N	<0.1	mg/l		3/24/04 23:17	RAF
Sulfate	3.2	mg/l		3/24/04	RAF
(I) HACH 8000 COD					
Chemical Oxygen Demand	74	mg/l		4/5/04	DWK
(I) SM 18 2320B, Alkalinity as CaCO3					
Alkalinity	41	mg/l		3/26/04	ASH
(I) SM 19 5310C TOC					
Total Organic Carbon	29	mg/l		3/26/04	TER
(I) SM18-2540C Total Dissolved Solids					
Total Dissolved Solids @ 180 C	130	mg/l		3/25/04	MM

- - LABORATORY ANALYSIS REPORT - -

Delaware Engineering Albany, NY

Sample ID:	MW-5S	LSL Sample ID:	0404237-003
Location:	City of Rome		
Sampled:	03/23/04 9:52	Sampled By:	BZ
Sample Matrix:	NPW		

Analytical Method			Prep Date	Analysis Date & Time	Analyst Initials
Analyte	Result	Units			
(1) EPA 200.7 Total Hardness as CaCO ₃					
Hardness, Total	130	mg/l	3/26/04	3/26/04	PEF
(1) EPA 200.7 Total Metals					
Boron	<0.5	mg/l	3/26/04	3/26/04	PEF
Calcium	42	mg/l	3/26/04	3/26/04	PEF
Cadmium	<0.01	mg/l	3/26/04	3/26/04	PEF
Iron	9.0	mg/l	3/26/04	3/26/04	PEF
Potassium	5.1	mg/l	3/26/04	3/26/04	PEF
Magnesium	5.7	mg/l	3/26/04	3/26/04	PEF
Manganese	0.67	mg/l	3/26/04	3/26/04	PEF
Sodium	4.4	mg/l	3/26/04	3/26/04	PEF
Lead	<0.01	mg/l	3/26/04	3/26/04	PEF
(1) EPA 350.1 Ammonia					
Ammonia as N	0.83	mg/l		4/2/04	DRB
(1) EPA 351.2 TKN as N					
Total Kjeldahl Nitrogen	1.3	mg/l	4/2/04	4/5/04	DRB
(1) EPA 405.1 BOD-5					
Biochemical Oxygen Demand, 5 Day	<4	mg/l		3/24/04 18:30	MM
(1) EPA 420.1 Recoverable Phenolics LL					
Phenolics, Total Recoverable	<0.002	mg/l	4/8/04	4/8/04	DWK
(1) EPA Method 300.0 A					
Bromide	<0.1	mg/l		3/24/04	RAF
Chloride	4.2	mg/l		3/24/04	RAF
Nitrate as N	<0.1	mg/l		3/24/04 23:35	RAF
Sulfate	21	mg/l		3/24/04	RAF
(1) HACH 8000 COD					
Chemical Oxygen Demand	25	mg/l		4/5/04	DWK
(1) SM 18 2320B, Alkalinity as CaCO ₃					
Alkalinity	110	mg/l		3/26/04	ASH
(1) SM 19 5310C TOC					
Total Organic Carbon	8.9	mg/l		3/26/04	TER
(1) SM18-2540C Total Dissolved Solids					
Total Dissolved Solids @ 180 C	180	mg/l		3/25/04	MM

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering Albany, NY

Sample ID: MW-7D LSL Sample ID: 0404237-004
Location: City of Rome
Sampled: 03/23/04 8:52 Sampled By: BZ
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
Analyte					
(1) EPA 200.7 Total Hardness as CaCO ₃					
Hardness, Total	230	mg/l	3/26/04	3/26/04	PEF
(1) EPA 200.7 Total Metals					
Boron	0.95	mg/l	3/26/04	3/26/04	PEF
Calcium	57	mg/l	3/26/04	3/26/04	PEF
Cadmium	<0.01	mg/l	3/26/04	3/26/04	PEF
Iron	34	mg/l	3/26/04	3/26/04	PEF
Potassium	37	mg/l	3/26/04	3/31/04	PEF
Magnesium	22	mg/l	3/26/04	3/26/04	PEF
Manganese	0.68	mg/l	3/26/04	3/26/04	PEF
Sodium	44	mg/l	3/26/04	3/26/04	PEF
Lead	0.012	mg/l	3/26/04	3/26/04	PEF
(1) EPA 350.1 Ammonia					
Ammonia as N	30	mg/l		4/2/04	DRB
(1) EPA 351.2 TKN as N					
Total Kjeldahl Nitrogen	35	mg/l	4/2/04	4/5/04	DRB
(1) EPA 405.1 BOD-5					
Biochemical Oxygen Demand, 5 Day	<10	mg/l		3/24/04 18:30	MM
This result should be considered an estimate due to low oxygen depletion.					
(1) EPA 420.1 Recoverable Phenolics LL					
Phenolics, Total Recoverable	0.0040	mg/l	4/8/04	4/8/04	DWK
(1) EPA Method 300.0 A					
Bromide	0.83	mg/l		3/24/04	RAF
Chloride	56	mg/l		3/24/04	RAF
Nitrate as N	0.23	mg/l		3/24/04 23:53	RAF
Sulfate	39	mg/l		3/24/04	RAF
(1) HACH 8000 COD					
Chemical Oxygen Demand	110	mg/l		4/5/04	DWK
(1) SM 18 2320B, Alkalinity as CaCO ₃					
Alkalinity	320	mg/l		3/26/04	ASH
(1) SM 19 5310C TOC					
Total Organic Carbon	39	mg/l		3/26/04	TER
(1) SM18-2540C Total Dissolved Solids					
Total Dissolved Solids @ 180 C	510	mg/l		3/25/04	MM

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering Albany, NY

Sample ID: MW-9S LSL Sample ID: 0404237-005
Location: City of Rome
Sampled: 03/23/04 11:04 Sampled By: BZ
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
Analyte					
(1) EPA 200.7 Total Hardness as CaCO ₃					
Hardness, Total	730	mg/l	3/26/04	3/26/04	PEF
(1) EPA 200.7 Total Metals					
Boron	<0.5	mg/l	3/26/04	3/26/04	PEF
Calcium	180	mg/l	3/26/04	3/26/04	PEF
Cadmium	<0.01	mg/l	3/26/04	3/26/04	PEF
Iron	67	mg/l	3/26/04	3/26/04	PEF
Potassium	7.8	mg/l	3/26/04	3/26/04	PEF
Magnesium	66	mg/l	3/26/04	3/26/04	PEF
Manganese	3.0	mg/l	3/26/04	3/26/04	PEF
Sodium	62	mg/l	3/26/04	3/26/04	PEF
Lead	0.043	mg/l	3/26/04	3/26/04	PEF
(1) EPA 350.1 Ammonia					
Ammonia as N	0.56	mg/l		4/2/04	DRB
(1) EPA 351.2 TKN as N					
Total Kjeldahl Nitrogen	1.1	mg/l	4/2/04	4/5/04	DRB
(1) EPA 405.1 BOD-5					
Biochemical Oxygen Demand, 5 Day	<4	mg/l		3/24/04 18:30	MM
(1) EPA 420.1 Recoverable Phenolics LL					
Phenolics, Total Recoverable	<0.002	mg/l	4/8/04	4/8/04	DWK
(1) EPA Method 300.0 A					
Bromide	<0.1	mg/l		3/25/04	RAF
Chloride	3.5	mg/l		3/25/04	RAF
Nitrate as N	<0.1	mg/l		3/25/04 00:10	RAF
Sulfate	5.9	mg/l		3/25/04	RAF
(1) HACH 8000 COD					
Chemical Oxygen Demand	120	mg/l		4/5/04	DWK
(1) SM 18 2320B, Alkalinity as CaCO ₃					
Alkalinity	220	mg/l		3/26/04	ASH
(1) SM 19 5310C TOC					
Total Organic Carbon	25	mg/l		3/26/04	TER
(1) SM18-2540C Total Dissolved Solids					
Total Dissolved Solids @ 180 C	360	mg/l		3/25/04	MM

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering Albany, NY

Sample ID: MW-10 LSL Sample ID: 0404237-006
Location: City of Rome
Sampled: 03/23/04 13:05 Sampled By: BZ
Sample Matrix: NPW

Analytical Method		Result	Units	Prep Date	Analysis		Analyst Initials
Analyte					Date & Time		
(I)	EPA 200.7 Total Hardness as CaCO3						
	Hardness, Total	700	mg/l	3/26/04	3/26/04		PEF
(I)	EPA 200.7 Total Metals						
	Boron	3.8	mg/l	3/26/04	3/26/04		PEF
	Calcium	120	mg/l	3/26/04	3/26/04		PEF
	Cadmium	<0.01	mg/l	3/26/04	3/26/04		PEF
	Iron	38	mg/l	3/26/04	3/26/04		PEF
	Potassium	350	mg/l	3/26/04	4/5/04		PEF
	Magnesium	96	mg/l	3/26/04	3/26/04		PEF
	Manganese	0.74	mg/l	3/26/04	3/26/04		PEF
	Sodium	500	mg/l	3/26/04	3/31/04		PEF
	Lead	0.028	mg/l	3/26/04	3/26/04		PEF
(I)	EPA 350.1 Ammonia						
	Ammonia as N	380	mg/l		4/2/04		DRB
(I)	EPA 351.2 TKN as N						
	Total Kjeldahl Nitrogen	330	mg/l	4/2/04	4/5/04		DRB
(I)	EPA 405.1 BOD-5						
	Biochemical Oxygen Demand, 5 Day	28	mg/l		3/23/04	18:27	MM
(I)	EPA 420.1 Recoverable Phenolics LL						
	Phenolics, Total Recoverable	0.017	mg/l	4/8/04	4/8/04		DWK
(I)	EPA Method 300.0 A						
	Bromide	3.7	mg/l		3/25/04		RAF
	Chloride	450	mg/l		3/25/04		RAF
	Nitrate as N	<0.1	mg/l		3/25/04	00:28	RAF
	Sulfate	3.6	mg/l		3/25/04		RAF
(I)	HACH 8000 COD						
	Chemical Oxygen Demand	300	mg/l		4/5/04		DWK
(I)	SM 18 2320B, Alkalinity as CaCO3						
	Alkalinity	2000	mg/l		3/26/04		ASH
(I)	SM 19 5310C TOC						
	Total Organic Carbon	180	mg/l		3/26/04		TER
(I)	SM18-2540C Total Dissolved Solids						
	Total Dissolved Solids @ 180 C	2200	mg/l		3/25/04		MM

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering Albany, NY

Sample ID: MW-12 LSL Sample ID: 0404237-007
Location: City of Rome
Sampled: 03/23/04 12:26 Sampled By: BZ
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
Analyte					
(1) EPA 200.7 Total Hardness as CaCO ₃					
Hardness, Total	460	mg/l	3/26/04	3/26/04	PEF
(1) EPA 200.7 Total Metals					
Boron	3.0	mg/l	3/26/04	3/26/04	PEF
Calcium	77	mg/l	3/26/04	3/26/04	PEF
Cadmium	<0.01	mg/l	3/26/04	3/26/04	PEF
Iron	44	mg/l	3/26/04	3/26/04	PEF
Potassium	270	mg/l	3/26/04	4/2/04	PEF
Magnesium	64	mg/l	3/26/04	3/26/04	PEF
Manganese	0.29	mg/l	3/26/04	3/26/04	PEF
Sodium	330	mg/l	3/26/04	4/2/04	PEF
Lead	0.015	mg/l	3/26/04	3/26/04	PEF
(1) EPA 350.1 Ammonia					
Ammonia as N	300	mg/l		4/2/04	DRB
(1) EPA 351.2 TKN as N					
Total Kjeldahl Nitrogen	270	mg/l	4/2/04	4/5/04	DRB
(1) EPA 405.1 BOD-5					
Biochemical Oxygen Demand, 5 Day	29	mg/l		3/24/04 18:30	MM
(1) EPA 420.1 Recoverable Phenolics LL					
Phenolics, Total Recoverable	0.022	mg/l	4/8/04	4/8/04	DWK
(1) EPA Method 300.0 A					
Bromide	5.0	mg/l		3/25/04	RAF
Chloride	370	mg/l		3/25/04	RAF
Nitrate as N	0.55	mg/l		3/25/04 00:46	RAF
Sulfate	2.0	mg/l		3/25/04	RAF
(1) HACH 8000 COD					
Chemical Oxygen Demand	720	mg/l		4/5/04	DWK
(1) SM 18 2320B, Alkalinity as CaCO ₃					
Alkalinity	1800	mg/l		3/26/04	ASH
(1) SM 19 5310C TOC					
Total Organic Carbon	140	mg/l		3/26/04	TER
(1) SM18-2540C Total Dissolved Solids					
Total Dissolved Solids @ 180 C	1800	mg/l		3/25/04	MM

- - LABORATORY ANALYSIS REPORT - -

Delaware Engineering Albany, NY

Sample ID:	MS for MW-1S	LSL Sample ID:	0404237-008
Location:	City of Rome		
Sampled:	03/23/04 11:58	Sampled By:	BZ
Sample Matrix:	QC		

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
Analyte					
(I) EPA 200.7 Total Hardness as CaCO ₃					
Hardness, Total	N/A				
(I) EPA 200.7 Total Metals					
Boron	99	%R	3/26/04	3/26/04	PEF
Calcium	95	%R	3/26/04	3/26/04	PEF
Cadmium	98	%R	3/26/04	3/26/04	PEF
Iron	103	%R	3/26/04	3/26/04	PEF
Potassium	101	%R	3/26/04	3/26/04	PEF
Magnesium	97	%R	3/26/04	3/26/04	PEF
Manganese	100	%R	3/26/04	3/26/04	PEF
Sodium	81	%R	3/26/04	3/26/04	PEF
Lead	97	%R	3/26/04	3/26/04	PEF
(I) EPA 350.1 Ammonia					
Ammonia as N	75	%R		4/2/04	DRB
(I) EPA 351.2 TKN as N					
Total Kjeldahl Nitrogen	69	%R	4/9/04	4/12/04	DRB
(I) EPA 405.1 BOD-5					
Biochemical Oxygen Demand, 5 Day	N/A			3/24/04	MM
(I) EPA 420.1 Recoverable Phenolics LL					
Phenolics, Total Recoverable	88	%R	4/8/04	4/8/04	DWK
(I) EPA Method 300.0 A					
Bromide	94	% R		3/24/04 23:00	RAF
Chloride	82	% R		3/24/04 23:00	RAF
Nitrate as N	94	% R		3/24/04 23:00	RAF
Sulfate	93	% R		3/24/04 23:00	RAF
(I) HACH 8000 COD					
Chemical Oxygen Demand	96	%R		4/5/04	DWK
(I) SM 18 2320B, Alkalinity as CaCO ₃					
Alkalinity	96	%R		3/26/04	ASH
(I) SM 19 5310C TOC					
Total Organic Carbon	100	%R		3/26/04	TER
(I) SM18-2540C Total Dissolved Solids					
Total Dissolved Solids @ 180 C	N/A			3/25/04	MM

- - LABORATORY ANALYSIS REPORT - -

Delaware Engineering Albany, NY

Sample ID:	MSD for MW-1S	LSL Sample ID:	0404237-009
Location:	City of Rome		
Sampled:	03/23/04 11:58	Sampled By:	BZ
Sample Matrix:	QC		

Analytical Method				Prep Date	Analysis Date & Time	Analyst Initials
Analyte	Result	Units				
(1) EPA 200.7 Total Hardness as CaCO ₃						
Hardness, Total	N/A					
(1) EPA 200.7 Total Metals						
Boron	<1	RPD		3/26/04	3/26/04	PEF
Calcium	4.9	RPD		3/26/04	3/26/04	PEF
Cadmium	<1	RPD		3/26/04	3/26/04	PEF
Iron	6.8	RPD		3/26/04	3/26/04	PEF
Potassium	<1	RPD		3/26/04	3/26/04	PEF
Magnesium	<1	RPD		3/26/04	3/26/04	PEF
Manganese	4.5	RPD		3/26/04	3/26/04	PEF
Sodium	4.9	RPD		3/26/04	3/26/04	PEF
Lead	<1	RPD		3/26/04	3/26/04	PEF
(1) EPA 350.1 Ammonia						
Ammonia as N	<1	RPD			4/2/04	DRB
(1) EPA 351.2 TKN as N						
Total Kjeldahl Nitrogen	3	RPD		4/9/04	4/12/04	DRB
(1) EPA 405.1 BOD-5						
Biochemical Oxygen Demand, 5 Day	<1	RPD			3/24/04	MM
(1) EPA 420.1 Recoverable Phenolics LL						
Phenolics, Total Recoverable	<1	RPD		4/8/04	4/8/04	DWK
(1) EPA Method 300.0 A						
Bromide	<1	RPD			3/24/04 22:42	RAF
Chloride	3	RPD			3/24/04 22:42	RAF
Nitrate as N	7	RPD			3/24/04 22:42	RAF
Sulfate	4	RPD			3/24/04 22:42	RAF
(1) HACH 8000 COD						
Chemical Oxygen Demand	1	RPD			4/5/04	DWK
(1) SM 18 2320B, Alkalinity as CaCO ₃						
Alkalinity	<1	RPD			3/26/04	ASH
(1) SM 19 5310C TOC						
Total Organic Carbon	<1	RPD			3/26/04	TER
(1) SM18-2540C Total Dissolved Solids						
Total Dissolved Solids @ 180 C	6	RPD			3/25/04	MM

February 2004

O & M INSPECTION CHECKLIST

Page 1 of 2

66°F
Sunny 12° F light wind

Notes Problems

OK

35687.5

RW-4 150225

If YES, describe:

off
off-try to light
off
off-try to light
off-try to light
off-try to light

Page 2 of 2

Inspector:

<u>WELL No</u>	<u>Measure Pt Elev.</u>	<u>Depth to Water (ft)</u>	<u>Groundwater Elevation (ft)</u>	<u>Well Condition</u>
MW - 1S	449.59	6.86'	442.73	
MW - 2S	459.44	8.78	450.66	
MW - 3S	456.4	3.96'	452.44	
MW - 4S	456.19	4.18'	452.01	
MW - 5S	457.15	5.24'	451.91	
MW - 7S	452.25	8.93'	443.32	
MW - 9S	456.38	3.91'	452.47	
MW - 10	486.3	35.25'	451.05	
MW - 11	502.4	52.21'	450.19	
MW - 12	483.11	32.74'	450.37	
PZ - 1*	452	2.51	444.49	

* PZ-1 elevation needs to be surveyed, elevation is estimated.

NOTES:

mr-70 - 9.12'

mw-10 - 6.21'

MW-20 = 8.57'

mw-4D 5.04'

mw-50 5.33

Lock missing

March 2004

O & M INSPECTION CHECKLIST

**TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST**

Page 1 of 2

Date & Time: 3/23/04

Inspector: Brent Zimmer

Weather: Overcast 32°

GENERAL INSPECTION - To Be Completed Monthly

General Site Condition:

Gates - condition and locks for inner & outer gates:

OK Gate to landfill was unlocked

Access Road - surface/paving/snow

OK Snow

Overall appearance (trash/litter)

OK Snow

Pump Station at Tannery Road:

Condition: OK

Pump #1 Hours: 42 67 3

Pump #2 Hours: 36 25 3

Leachate Collection System:

Panel - note conditions and any alarms: OK None

Autodialer - test OK Did not test

Totallizers (on Panel display at Tannery Rd)

RW-1 398 6953

RW-3 419 49 32

RW-2 636 5807

RW-4 117 58 48

Panel/Wells on Landfill

Manholes along road - general condition, erosion, overflows

OK

Pump Well No's 1, 2, 3 & 4 - Well head condition/integrity

OK

Meter Pit - open lid, check heater, leaks, etc.

OK Some water

Panel note conditions and any alarms: OK

Totallizers (in meter pit)

RW-1 420 52

RW-3 23002

RW-2 74786

RW-4 24784

Hour Meters

RW-1 116198

RW-3 306718

RW-2 124677

RW-4 156688

Landfill Cover Inspection

Leachate seeps Any new seeps NO

If YES, describe:

Western seep condition:

OK

North seep condition:

OK

Gas vents - general condition

OK

- Unusual odors, list vents/describe.

None

Flares ignited

OK Look Page 2

Perimeter fence

OK Some gates off hinges

Erosion/animal burrows

NO

If YES, describe:

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 2 of 2

Date & Time: 3/23/04 Inspector: Brent Zimmer

Monitoring Well Water Level Data

<u>WELL No</u>	<u>Measure Pt Elev.</u>	<u>Depth to Water (ft)</u>	<u>Groundwater Elevation (ft)</u>	<u>Well Condition</u>
MW - 1S	449.59	<u>4.75</u>	<u>444.84</u>	<u>Good</u>
MW - 2S	459.44	<u>6.51</u>	<u>452.93</u>	<u>Good</u>
MW - 3S	456.4	<u>—</u>	<u>—</u>	<u>Frozen 3.39</u>
MW - 4S	456.19	<u>3.76</u>	<u>452.43</u>	<u>Good</u>
MW - 5S	457.15	<u>4.34</u>	<u>452.81</u>	<u>Good</u>
MW - 7S	452.25	<u>7.91</u>	<u>444.34</u>	<u>Good</u>
MW - 9S	456.38	<u>3.77</u>	<u>452.61</u>	<u>Good</u>
MW - 10	486.3	<u>35.11</u>	<u>451.19</u>	<u>Good</u>
MW - 11	502.4	<u>52.09</u>	<u>450.31</u>	<u>Good</u>
MW - 12	483.11	<u>32.55</u>	<u>450.56</u>	<u>Good</u>
PZ - 1*	454.37	<u>5.77</u>	<u>448.60</u>	<u>Good</u>

NOTES:

☐ Yes Ignited Flares: Yes / No

☐ Yes

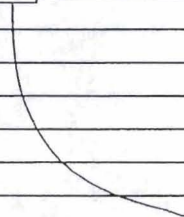
☐ No

☐ Yes

☐ No

☐ No

☐ No



April 2004

O & M INSPECTION CHECKLIST

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 4/16/04

Inspector: Brent Zimmer

Weather: Sunny Warm

GENERAL INSPECTION - To Be Completed Monthly

Notes Problems

General Site Condition:

Gates - condition and locks for inner & outer gates:

OK

Access Road - surface/paving/snow

OK

Overall appearance (trash/litter)

OK

Pump Station at Tannery Road:

Condition: OK

Pump #1 Hours: 43319

Pump #2 Hours: 36765

Leachate Collection System:

Panel - note conditions and any alarms: OK None

Autodialer - test OK Not Performed

Totallizers (on Panel display at Tannery Rd)

RW-1 401126

RW-3 4200941

RW-2 6430620

RW-4 1268734

Panel/Wells on Landfill

Manholes along road - general condition, erosion, overflows

OK Erosion

Pump Well No's 1, 2, 3 & 4 - Well head condition/integrity

OK

Meter Pit - open lid, check heater, leaks, etc.

OK

Panel note conditions and any alarms: OK

Totallizers (in meter pit)

RW-1 42294

RW-3 23237

RW-2 75433

RW-4 25712

Hour Meters

RW-1 121279

RW-3 312459

RW-2 125740

RW-4 162429

Landfill Cover Inspection

Leachate seeps Any new seeps NO

If YES, describe: _____

Western seep condition:

Some Erosion

North seep condition:

Erosion just west of the N. Seep

Gas vents - general condition

OK

- Unusual odors, list vents/describe.

See sheet 2

Flares ignited

OK No, see sheet 2

Perimeter fence

OK

Erosion/animal burrows NO

If YES, describe: Few wood chuck holes, mole holes

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 2 of 2

Date & Time: 4/16/04 Inspector: Brent Zimmer

Monitoring Well Water Level Data

WELL No	Measure Pt Elev.	Depth to Water (ft)	Groundwater Elevation (ft)	Well Condition
MW - 1S	449.59	<u>4.66</u>	<u>444.93</u>	<u>Good</u>
MW - 2S	459.44	<u>6.59</u>	<u>452.85</u>	<u>Good</u>
MW - 3S	456.4	<u>3.58</u>	<u>452.82</u>	<u>Good</u>
MW - 4S	456.19	<u>3.86</u>	<u>452.33</u>	<u>Good</u>
MW - 5S	457.15	<u>4.43</u>	<u>452.72</u>	<u>Good</u>
MW - 7S	452.25	<u>7.52</u>	<u>444.73</u>	<u>Good</u> MW-7D = 7.45
MW - 9S	456.38	<u>3.75</u>	<u>452.63</u>	<u>Good</u>
MW - 10	486.3	<u>35.25</u>	<u>451.05</u>	<u>Good</u>
MW - 11	502.4	<u>52.13</u>	<u>450.27</u>	<u>Good</u>
MW - 12	483.11	<u>32.47</u>	<u>450.64</u>	<u>Good</u>
PZ - 1*	454.37	<u>5.57</u>	<u>448.80</u>	<u>Good</u>

NOTES:

☐ Ignited Flares: Yes / No

☐ Faint spark
No Flame

☐ Spark
No Flame

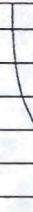
☐ Spark
No Flame

☐ Faint Spark
No Flame

☐ Faint Spark
No Flame

☐ Faint Spark
No Flame

☐ Faint Spark
No Flame



HISTORICAL

GROUND WATER DATA TABLES

City of Rome Tannery Road Landfill Monitoring Well MW-1S Ground Water Analytical Data																						
Date	03/01/99	06/01/99	09/01/99	12/01/99	03/01/00	06/01/00	09/01/00	12/01/00	03/01/01	06/01/01	09/01/01	12/01/01	03/28/02	06/17/02	09/24/02	12/18/02	03/12/03	06/25/03	09/17/03	12/16/2003	03/23/04	NYSDEC Ground Water Standard
Field Parameter																						
Conductivity (μ mhos/cm)	31	103	398	89	39	39	31	23	23	34	62	37	75	67	190	58	376	21	180	20	24	NS
pH (s.u.)	8.64	5.97	6.37	7	5.85	7.88	6.45	5.27	6.18	4.95	5.89	6.23	7.7	6.5	7.42		7.5	4.9	6.24	6.5	5.22	6.5 - 8.5
Temperature (deg C)	3.2	13.3	15.2	5.9	4.2	13	15.3		3.9	14.7	14.8	6.7	6	12.5	13.7	5.3	7.2	13	13.6	6	4.2	NS
Turbidity (NTU)	785	925	560	140	222	161	527	195	316	186	88	90	145	68	126	8	65	556	52	50	113	5
Part 360 Leachate Indicator Parameters																						
Ammonia-Nitrogen (mg/L)	<0.5	<0.5	2	<0.3	<0.3	<0.030	<0.030	<0.030	0.073	<0.030	0.089	<0.030	<0.030	<0.030	1.1	<0.030	0.14	<0.03	0.38	<0.03	<0.030	2
Biochemical Oxygen Demand (BOD5) (mg/L)	8	<4.0	<2.0	2	<2.0	30	<2.0	<4.0		<4.0	<4.0	<4.0	<4.0	4.6	12	<4.0	8.6	<4	<4.0	<4	<4.0	NS
Bromide (mg/L)	<0.2	<2.0	<2.0	<2.0	<2.0	2.5	<0.010	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	0.12	<0.100	<0.1	<0.1	<0.1	<0.1	<0.10	2
Chemical Oxygen Demand (mg/L)	52	100	25	14	12	6.7	96	19	36	26	34	14	24	45	66	9.9	<1.0	33	25	35	18	NS
Chloride (mg/L)	<1.0	31	28	3.7	2.3	450	3.3	2.5	2.9	2.4	3.8	2.5	2.7	2.7	6.4	2.6	36	3.8	8.2	2.5	3.4	250
Color (Pt-Co)		46					30					50	20				8					15
Nitrate-Nitrogen (mg/L)	<0.2	<0.2	<0.2	0.4	0.3	0.18	0.1	<0.100	0.15	0.15	0.16	<0.100	0.15	<0.100	0.13	0.14	<0.1	0.15	<0.1	<0.1	0.16	10
Sulfate (mg/L)	5	10	94	9.8	7.7	4.7	9.7	6.9	6.7	6.8	17	6.2	7	6	13	6.2	<1.0	7.9	15	6.9	7.4	250
Total Alkalinity (mg/L)	<10.0	37	84	7.8	9	1.9	15	1.2	1.4	2	12	1.9	<1.0	4	64	4	170	4	37	<1	<1.000	NS
Total Cyanide (mg/L)		<0.010					<0.010					<0.010	<0.010				<0.01					0.2
Total Dissolved Solids (mg/L)	140	140	260	39	30	1,900	26	<4.0	14	56	190	<4.0	170	26	120	42	280	30	120	34	32	500
Total Hardness (mg/L)	19	120	136	14	23	8	16	7.7	10	8.6	20	9.8	6.6	7.3	60	7.6	210	12	58	<7	7.8	NS
Total Kjeldahl Nitrogen (mg/L)	<0.5	2.4	1.3	<0.3	0.6	0.3	1.3	0.39	0.62	0.62	0.6	0.23	0.13	0.42	1.7	0.25	<0.1	0.27	0.58	0.34	0.53	NS
Total Organic Carbon (mg/L)	14	34	7	7.8	15.3	4.4	29	5.5	16	11	13	11.3	8.3	14	26	10	5.5	5.6	10	14	4.1	NS
Total Phenols (mg/L)	<0.005	<0.005	<0.001	0.004	0.001	<0.002	0.007	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	0.012	0.003	<0.002	0.0046	<0.002	<0.002	0.0034	<0.002	0.001
Part 360 Routine Metals																						
Boron (mg/L)		<0.100				<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.500	1
Cadmium (mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01	<0.010	0.005
Calcium (mg/L)	3.26	29.1	43.2	4.2	6.7	1.5	3.1	1.4	1.9	1.7	5.7	2.2	1	1.3	18	1.4	62	3.4	18	<1	1.5	NS
Iron (mg/L)	16.3	30.5	33.1	3.1	4.3	1.9	17	6.3	8.8	5.6	7.8	3.2	4.5	4.7	50	7.2	2	2.8	8.1	2.7	2.4	0.3*
Lead (mg/L)	0.012	0.029	0.01	<0.005	<0.005	<0.010	0.011	<0.010	<0.010	<0.010	<0.010	<1.0	<0.010	<0.010	0.02	<0.010	<0.01	<0.01	0.012	<0.01	<0.010	0.025
Magnesium (mg/L)	2.7	11.2	6.8	0.94	1.5	<1.0	2	1	1.3	1	1.5	<1.0	<1.0	<1.0	3.9	<1.0	14	<1.0	3.3	<1	<1.0	35 (GV)
Manganese (mg/L)	0.257	0.759	1.2	0.17	0.12	0.04	0.23	0.075	0.11	0.093	0.19	0.07	0.11	0.069	0.74	0.045	0.23	0.06	0.45	0.031	0.049	0.3*
Potassium (mg/L)	1.99	5.39	2.9	0.7	3.3	<1.0	1.2	<1.0	1.1	<1.0	1.2	<1.0	<1.0	<1.0	3.1	<1.0	1.2	<1.0	2.7	<1	<1.0	NS
Sodium (mg/L)	1.2	12.2	9.9	1.8	8.8	1.6	1.2	<1.0	1.2	<1.0	7.5	1.2	2.8	<1.0	4.9	<1.0	12	1.7	12	<1	1.1	20
Part 360 Additional Baseline Metals																						
Aluminum (mg/L)		32					25					5	8.9				3					NS
Antimony (mg/L)		<0.015					0.012					<0.010	<0.010				<0.01					0.003
Arsenic (mg/L)		0.018					<0.010					<0.010	<0.010				0.013					0.025
Barium (mg/L)		0.431					<0.2					<0.2	<0.2				<0.2					1
Beryllium (mg/L)		<0.003					<0.010					<0.010	<0.010				<0.01					0.003 (GV)
Chromium (mg/L)		0.047					0.01					<0.010	<0.010				<0.01					0.05
Chromium, Hexavalent (mg/L)		<0.010					<0.010					<0.010	<0.010				<0.01					0.05
Cobalt (mg/L)		<0.020					<0.010					<0.010	<0.010				<0.01					NS
Copper (mg/L)		0.041					0.022					<0.010	<0.010				0.012					0.2
Mercury (mg/L)		<0.0002					0.00053					<0.0002	0.000300				<0.0002					0.0007
Nickel (mg/L)		0.039					0.012					<0.010	<0.010				<0.01					0.1
Selenium (mg/L)		<0.005					<0.010					<0.010	<0.010				<0.01					0.01
Silver (mg/L)		<0.010					<0.010					<0.010	<0.010				<0.01					0.05
Thallium (mg/L)		<0.010					<0.010					<0.010	<0.010				<0.01					0.0005 (GV)
Vanadium (mg/L)		0.031					0.012					<0.010	<0.010				<0.01					NS
Zinc (mg/L)		0.149					0.1					0.04	0.033				0.094					2
Part 360 Volatile Organics																						
1,1,1,2-Tetrachloroethane (μ g/L)		<5.0					<5.0					<5.0	<5.0				<5					5
1,1,1-Trichloroethane (μ g/L)		<5.0					<5.0					<5.0	<5.0					<5				5
1,1,2,2-Tetrachloroethane (μ g/L)		<5.0					<5.0					<5.0	<5.0				<5	<5				5
1,1,2-Trichloroethane (μ g/L)		<5.0					<5.0					<5.0	<5.0				<5	<5				1
1,1-Dichloroethane (μ g/L)		<5.0					<5.0					<5.0	<5.0				<5	<5				5
1,1-Dichloroethene (μ g/L)		<5.0					<5.0					<5.0	<5.0				<5	<5				5
1,2,3-Trichloropropane (μ g/L)												<5.0	<5.0					<5				0.04
1,2-Dibromo-3-chloropropane (μ g/L)		<10.0					<5.0					<5.0	<5.0					<5				0.04

City of Rome
Tannery Road Landfill
MW-3S
Ground Water Analytical Data

Parameter	03/01/99	06/01/99	09/01/99	12/01/99	03/01/00	06/01/00	09/01/00	12/01/00	03/01/01	06/01/01	09/01/01	12/01/01	03/28/02	06/17/02	09/24/02	12/18/02	03/12/03	06/25/03
1,1,1-Trichloroethane (µg/L)		<5					<5					<5	<5				Frozen	<5
1,1,2,2-Tetrachloroethane (µg/L)		<5					<5					<5	<5				Frozen	<5
1,1,2-Trichloroethane (µg/L)		<5					<5					<5	<5				Frozen	<5
1,1-Dichloroethane (µg/L)		<5					<5					<5	<5				Frozen	<5
1,1-Dichloroethene (µg/L)		<5					<5					<5	<5				Frozen	<5
1,2,3-Trichloropropane (µg/L)							<5					<5	<5				Frozen	<5
1,2-Dibromo-3-chloropropane (µg/L)		<10					<5					<5	<5				Frozen	<5
1,2-Dibromoethane (EDB) (µg/L)		<5					<5					<5	<5				Frozen	<5
1,2-Dichlorobenzene (µg/L)		<5					<5					<5	<5				Frozen	<5
1,2-Dichloroethane (µg/L)		<5					<5					<5	<5				Frozen	<5
1,2-Dichloropropane (µg/L)		<5					<5					<5	<5				Frozen	<5
1,3-Dichlorobenzene (µg/L)		<5																
1,4-Dichloro-2-butene (µg/L)		<10																
1,4-Dichlorobenzene (µg/L)		<5					<5					<5	<5				Frozen	<5
2-Butanone (MEK) (µg/L)		<10					<10					<10	<10				Frozen	<10
2-Hexanone (µg/L)		<10					<10					<10	<10				Frozen	<10
4-Methyl 2-pentanone (µg/L)		<10					<10					<10	<10				Frozen	<10
Acetone (µg/L)		21					<10					<10	<10				Frozen	<10
Acrylonitrile (µg/L)		<<100					<20					<20	<20				Frozen	<20
Benzene (µg/L)		<5					<5					<5	<5				Frozen	<5
Bromochloromethane (µg/L)		<5					<5					<5	<5				Frozen	<5
Bromodichloromethane (µg/L)		<5										<5	<5				Frozen	<5
Bromoform (µg/L)		<5					<5					<5	<5				Frozen	<5
Bromomethane (µg/L)		<5					<5					<5	<5				Frozen	<5
Carbon disulfide (µg/L)		6					<5					<5	<5				Frozen	<5
Carbon tetrachloride (µg/L)		<5					<5					<5	<5				Frozen	<5
Chlorobenzene (µg/L)		<5					<5					<5	<5				Frozen	<5
Chloroethane (µg/L)		<5					<5					<5	<5				Frozen	<5
Chloroform (µg/L)		<5					<5					<5	<5				Frozen	<5
Chloromethane (µg/L)		<5					<5					<5	<5				Frozen	<5
cis-1,2-Dichloroethene (µg/L)		<5					<5					<5	<5				Frozen	<5
cis-1,3-Dichloropropene (µg/L)		<5					<5					<5	<5				Frozen	<5
Dibromochloromethane (µg/L)		<5					<5					<5	<5				Frozen	<5
Dibromomethane (µg/L)		<5					<5					<5	<5				Frozen	<5
Ethyl benzene (µg/L)		<5					<5					<5	<5				Frozen	<5
Iodomethane (µg/L)		<5					<20					<20	<10				Frozen	<10
Methylene Chloride (µg/L)		<5					<10					<10	<10				Frozen	<10
Styrene (µg/L)							<5					<5	<5				Frozen	<5
Tetrachloroethene (µg/L)		<5					<5					<5	<5				Frozen	<5
Toluene (µg/L)		<5					<5					<5	<5				Frozen	<5
trans-1,2-Dichloroethene (µg/L)		<5					<5					<5	<5				Frozen	<5
trans-1,3-Dichloropropene (µg/L)		<5					<5					<5	<5				Frozen	<5
trans-1,4-Dichloro-2-butene (µg/L)							<50					<50	<10				Frozen	<10
Trichloroethene (µg/L)		<5					<5					<5	<5				Frozen	<5
Trichlorofluoromethane (µg/L)		<5					<5					<5	<5				Frozen	<5
Vinyl Acetate (µg/L)		<50					<20					<20	<20				Frozen	<20
Vinyl Chloride (µg/L)		<5					<5					<5	<5				Frozen	<5
Xylenes (Total) (µg/L)		<5					<5					<5	<5				Frozen	<5

Notes

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) * indicates that the sum of these two analytes may not exceed 500 µg/L.
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) ** Indicates standard applies to the sum of the isomers

City of Rome
Tannery Road Landfill
MW-3S
Ground Water Analytical Data

Parameter	09/17/03	12/16/03	03/23/04	NYSDEC Ground Water Standards
Field Parameters				
Conductivity (μ mhos/cm)	1,150	1,000	Frozen	NS
pH (s.u.)	6.98	7.1	Frozen	6.5 - 8.5
Temperature (deg C)	15	7	Frozen	NS
Turbidity (NTU)	60	70	Frozen	5
Leachate Indicator Parameters				
Ammonia-Nitrogen (mg/L)	72	75	Frozen	2
Biochemical Oxygen Demand (BOD5) (mg/L)	<4.0	17	Frozen	NS
Bromide (mg/L)	<0.1	<0.1	Frozen	2
Chemical Oxygen Demand (mg/L)	96	120	Frozen	NS
Chloride (mg/L)	10	4.4	Frozen	250
Color (Pt-Co)	<0.1	0.17	Frozen	15
Nitrate-Nitrogen (mg/L)			Frozen	10
Sulfate (mg/L)	49	52	Frozen	250
Total Alkalinity (mg/L)	450	370	Frozen	NS
Total Cyanide	490	350	Frozen	0.2
Total Dissolved Solids (mg/L)			Frozen	500
Total Hardness (mg/L)	190	100	Frozen	NS
Total Kjeldahl Nitrogen (mg/L)	63	64	Frozen	NS
Total Organic Carbon (mg/L)	35	43	Frozen	NS
Total Phenols (mg/L)	<0.002	0.0053		0.001
Part 360 Routine Metals				
Boron (mg/L)	0.85	<0.5	Frozen	1
Cadmium (mg/L)	<0.01	<0.01	Frozen	0.005
Calcium (mg/L)	59	32	Frozen	NS
Iron (mg/L)	14	29	Frozen	0.3*
Lead (mg/L)	0.011	<0.01	Frozen	0.025
Magnesium (mg/L)	10	5.3	Frozen	35 (GV)
Manganesec (mg/L)	0.61	0.36	Frozen	0.3*
Potassium (mg/L)	94	79	Frozen	NS
Sodium (mg/L)	27	10	Frozen	20
Part 360 Baseline Metals				
Aluminum (mg/L)				NS
Antimony (mg/L)				0.003
Arsenic (mg/L)				0.025
Barium (mg/L)				1
Beryllium (mg/L)				0.003 (GV)
Chromium (mg/L)				0.05
Chromium, Hexavalent (mg/L)				0.05
Cobalt (mg/L)				NS
Copper (mg/L)				0.2
Mercury (mg/L)				0.0007
Nickel (mg/L)				0.1
Potassium (mg/L)	94			NS
Selenium (mg/L)				0.01
Silver (mg/L)				0.05
Thallium (mg/L)				0.0005 (GV)
Vanadium (mg/L)				NS
Zinc (mg/L)				2
Volatile Organics				
1,1,1,2-Tetrachloroethane (μ g/L)				5

City of Rome

Tannery Road Landfill

MW-3S

Ground Water Analytical Data

Parameter	09/17/03	12/16/03	03/23/04	NYSDEC
1,1,1,1-Trichloroethane (µg/L)				5
1,1,1,2,2-Tetrachloroethane (µg/L)				5
1,1,1,2,2-Trichloroethane (µg/L)				1
1,1,1-Dichloroethane (µg/L)				5
1,1,1-Dichloroethene (µg/L)				5
1,1,2,3-Trichloropropane (µg/L)				0.04
1,2-Dibromo-3-chloropropane (µg/L)				0.04
1,2-Dibromoethane (EDB) (µg/L)				5
1,2-Dichlorobenzene (µg/L)				3
1,2-Dichloroethane (µg/L)				0.6
1,2-Dichloropropane (µg/L)				1
1,3-Dichlorobenzene (µg/L)				3
1,4-Dichloro-2-butene (µg/L)				5
1,4-Dichlorobenzene (µg/L)				3
2-Butanone (MEK) (µg/L)				50 (GV)
2-Hexanone (µg/L)				50 (GV)
4-Methyl 2-pentanone (µg/L)				NS
Acetone (µg/L)				50 (GV)
Acrylonitrile (µg/L)				5
Benzene (µg/L)				1
Bromochloromethane (µg/L)				5
Bromodichloromethane (µg/L)				50 (GV)
Bromoform (µg/L)				50 (GV)
Bromomethane (µg/L)				5
Carbon disulfide (µg/L)				60 (GV)
Carbon tetrachloride (µg/L)				5
Chlorobenzene (µg/L)				5
Chloroethane (µg/L)				5
Chloroform (µg/L)				7
Chloromethane (µg/L)				5
cis-1,2-Dichloroethene (µg/L)				5
cis-1,3-Dichloropropene (µg/L)				0.4**
Dibromochloromethane (µg/L)				50 (GV)
Dibromomethane (µg/L)				5
Ethyl benzene (µg/L)				5
Iodomethane (µg/L)				5
Methylene Chloride (µg/L)				5
Styrene (µg/L)				5
Tetrachloroethene (µg/L)				5
Toluene (µg/L)				5
trans-1,2-Dichloroethene (µg/L)				5
trans-1,3-Dichloropropene (µg/L)				0.4**
trans-1,4-Dichloro-2-butene (µg/L)				5
Trichloroethene (µg/L)				5
Trichlorofluoromethane (µg/L)				5
Vinyl Acetate (µg/L)				NS
Vinyl Chloride (µg/L)				2
Xylenes (Total) (µg/L)				5

City of Rome
Tannery Road Landfill
MW-55
Ground Water Analytical Data

Parameter	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03
Field Parameter																			
Conductivity (umhos/cm)	869	340	6.75	7.3	6.46	6.75	6.85	219	456	163	433	227	232	223	112	252	227	208	102
pH (s.u.)	7.56	6.75	6.48	7.3	6.46	6.75	6.85	6.67	6.26	6.5	6.75	6.84	6.57	6.85	5.67	6.9	6.5	6.77	6.85
Temperature (deg C)	5.2	16.2	13.1	7	6.5	10.9	12.8	6.6	6	14.6	11.6	7.7	4.8	10.1	13.2	6.9	5.5	13.1	14.3
Turbidity (NTU)	64	533	204	162	74	55	198	46	35	42	68	36	47		837	0	27	334	202
Part 360 Leachate Indicator Parameters																			
Ammonia-Nitrogen (mg/L)	1.5	<0.5	<0.3	<0.3	0.11	0.11	0.34	1.3	0.34	0.34	1.4	0.43	0.82	0.26	0.09	0.57	0.65	0.71	0.058
Biochemical Oxygen Demand (BOD5) (mg/L)	11	11	2	2	20	20	<4.0	<4.0	<4.0	<4.0	4.7	<4.0	<4.0	<4.0	9.5	<4.0	<4.0	<4	<4.0
Bromide (mg/L)	<0.2	<0.2	<2.0	<2.0	1.3	<0.1	<0.1	<0.1	<0.1	<0.1	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chemical Oxygen Demand (mg/L)	71	45	32	20	24	32	5.2	26	37	32	43	23	31	18	62	20	16	69	22
Chloride (mg/L)	14	3	2.4	3.2	94	2.9	6	5	3.2	3.1	6	3.2	3.1	2.9	2.6	2.8	4.1	4	3.2
Color (Pt-Co)	<0.2	110	<0.2	0.8	0.6	0.16	<0.1	<0.1	<0.1	0.22	<0.1	<0.1	<0.1	<0.1	0.19	<0.1	<0.1	0.15	0.12
Sulfate (mg/L)	37	40	28	31	51	16	44	60	42	34	53	36	23	18	21	23	21	22	16
Total Alkalinity (mg/L)	470	170	300	58	260	120	52	47	200	50	190	68	82	80	40	110	97	86	32
Total Cyanide (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total Dissolved Solids (mg/L)	430	130	230	150	360	730	140	150	300	120	240	200	78	110	180	170	160	170	92
Total Hardness (mg/L)	320	130	148	81	228	120	96	110	200	78	230	110	110	93	110	120	130	120	66
Total Kjeldahl Nitrogen (mg/L)	3.1	1.1	0.9	0.4	<0.3	0.61	0.69	0.8	1.8	0.67	1.6	0.62	0.89	0.39	1.4	0.63	0.66	0.79	0.37
Total Organic Carbon (mg/L)	22	15	15.1	17.1	16.8	9.7	9.1	8.5	13	7.2	13	9.6	11	6.5	22	8.1	8.1	10	5.7
Total Phenols (mg/L)	<0.005	<0.005	<0.001	0.003	0.001	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0097	0.0033	<0.002	<0.002	<0.002	<0.002
Part 360 Routine Metals																			
Boron (mg/L)	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium (mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium (mg/L)	97.8	35	23.3	69.9	35	27	31	64	23	72	35	35	30	8.2	27	41	42	39	20
Iron (mg/L)	31.4	20.8	14.2	9.3	24.8	7.6	11	15	10	15	6.1	12	97	11	10	11	10	11	13
Lead (mg/L)	<0.003	0.0056	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.022	<0.01	<0.01	<0.01	<0.01
Magnesium (mg/L)	18.6	10.2	9.8	5.5	13	7.9	6.7	10	5.1	12	6	5.3	4.2	4.2	9.5	5	5.3	4.8	4
Manganese (mg/L)	12.2	4.16	6.5	2.6	8.5	2.8	1.4	2.6	0.37	2.5	1.4	1.6	4.4	1.4	3.6	1.4	0.92	0.65	0.48
Potassium (mg/L)	8.94	4.89	3.4	3.8	6.6	5	4.7	5.1	24	9.4	5.6	4.8	4.2	4.2	5.1	5	4.7	4.6	3.3
Sodium (mg/L)	12.1	3.34	11	3.1	5.3	1.9	1.3	<1.0	3.8	4.8	1.4	1.6	1	1	<1.0	1.4	1.5	2.2	<1
Part 360 Additional Baseline Metals																			
Aluminum (mg/L)	3.2	2									0.41	0.54						0.73	
Antimony (mg/L)	<0.015	0.022									<0.01	<0.01	<0.01					<0.01	
Arsenic (mg/L)	0.0138	<0.01									<0.01	0.013	<0.2					0.031	
Barium (mg/L)	0.0655	<0.2									<0.2	<0.2	<0.2					<0.2	
Beryllium (mg/L)	<0.003	<0.01									<0.01	<0.01	<0.01					<0.01	
Chromium (mg/L)	0.0109	<0.01									<0.01	<0.01	<0.01					<0.01	
Chromium, Hexavalent (mg/L)	<0.01	<0.01									<0.01	<0.01	<0.01					<0.01	
Cobalt (mg/L)	<0.02	<0.01									<0.01	<0.01	<0.01					<0.01	
Copper (mg/L)	0.0295	0.014									<0.01	<0.01	<0.01					<0.01	
Mercury (mg/L)	<0.0002	0.0027									<0.0002	<0.0002	<0.0002					<0.0002	
Nickel (mg/L)	<0.03	<0.01									<0.01	<0.01	<0.01					<0.01	
Selenium (mg/L)	<0.005	<0.01									<0.01	<0.01	<0.01					<0.01	
Silver (mg/L)	<0.01	<0.01									<0.01	<0.01	<0.01					<0.01	
Thallium (mg/L)	<0.01	<0.01									<0.01	<0.01	<0.01					<0.01	
Vanadium (mg/L)	<0.3	<0.01									<0.01	<0.01	<0.01					<0.01	
Zinc (mg/L)	0.0827	0.058									0.013	0.032						0.041	
Part 360 Volatile Organics																			
1,1,1,2-Tetrachloroethane (ug/L)	<5.0	<5.0									<5.0	<5.0	<5.0					<5	
1,1,1-Triachloroethane (ug/L)	<5.0	<5.0									<5.0	<5.0	<5.0					<5	
1,1,2,2-Tetrachloroethane (ug/L)	<5.0	<5.0									<5.0	<5.0	<5.0					<5	
1,1,2-Trichloroethane (ug/L)	<5.0	<5.0									<5.0	<5.0	<5.0					<5	

City of Rome
Tannery Road Landfill
MW-55
Ground Water Analytical Data

Parameter	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03
1,1-Dichloroethane (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
1,2-Dibromomethane (EDB) (ug/L)	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
1,2-Dichlorobenzene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
1,2-Dichloropropene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
1,3-Dichlorobenzene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
1,4-Dichloro-2-butene (ug/L)	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
2-Butanone (MEK) (ug/L)	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10	<10	<10	<10	<10	<10
2-Hexanone (ug/L)	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10	<10	<10	<10	<10	<10
4-Methyl 2-pentanone (ug/L)	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10	<10	<10	<10	<10	<10
Acetone (ug/L)	<100.0	<20.0	<5.0	<20.0	<5.0	<5.0	<5.0	<20.0	<5.0	<5.0	<5.0	<20.0	<5.0	<5	<5	<5	<5	<20	<20
Benzene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Bromochloromethane (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Bromodichloromethane (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Bromoforn (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Bromomethane (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Carbon disulfide (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Carbon tetrachloride (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Chlorobenzene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Chloroethane (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Chloromethane (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Dibromochloromethane (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Dibromomethane (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Ethyl benzene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Iodomethane (ug/L)	<5.0	<20.0	<10.0	<20.0	<5.0	<5.0	<5.0	<20.0	<10.0	<5.0	<5.0	<20.0	<10.0	<5	<5	<5	<10	<10	<10
Methylene Chloride (ug/L)	<5.0	<5.0	<10.0	<10.0	<5.0	<5.0	<5.0	<10.0	<10.0	<5.0	<5.0	<10.0	<10.0	<10	<10	<10	<10	<10	<10
Styrene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Tetrachloroethene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Toluene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
trans-1,4-Dichloro-2-butene (ug/L)	<5.0	<50.0	<5.0	<50.0	<5.0	<5.0	<5.0	<50.0	<10.0	<5.0	<5.0	<10.0	<5.0	<5	<5	<5	<5	<5	<10
Trichloroethene (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Vinyl Acetate (ug/L)	<50.0	<20.0	<5.0	<20.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<5.0	<20.0	<20.0	<5	<5	<5	<5	<20	<20
Vinyl Chloride (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
Xylenes (Total) (ug/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5
1,2-Dichloroethene - Total	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	<5

Notes

1) < indicates not detected at or above the listed value

2) NS indicates that no standard has been promulgated.

3) * indicates that the sum of these two analytes may not exceed 500 µg/L.

4) GV indicates that the value listed is a guidance value rather than a standard.

5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.

6) ** indicates standard applies to the sum of the isomers

City of Rome
Tannery Road Landfill
MW-5S
Ground Water Analytical Data

Parameter	12/16/2003	3/23/04	NYSDEC Ground Water Standard
<u>Field Parameter</u>			
Conductivity (µmhos/cm)	230	306	NS
pH (s.u.)	6.9	6.15	6.5 - 8.5
Temperature (deg C)	7	5.4	NS
Turbidity (NTU)	140	41	5
<u>Part 360 Leachate Indicator Parameters</u>			
Ammonia-Nitrogen (mg/L)	0.4	0.83	2
Biochemical Oxygen Demand (BOD5) (mg/L)	<4	<4.0	NS
Bromide (mg/L)	<0.1	<0.1	2
Chemical Oxygen Demand (mg/L)	32	25	NS
Chloride (mg/L)	4.3	4.2	250
Color (Pt-Co)			15
Nitrate-Nitrogen (mg/L)	0.18	<0.1	10
Sulfate (mg/L)	14	21	250
Total Alkalinity (mg/L)	100	110	NS
Total Cyanide (mg/L)			0.2
Total Dissolved Solids (mg/L)	160	180	500
Total Hardness (mg/L)	110	130	NS
Total Kjeldahl Nitrogen (mg/L)	0.59	1.3	NS
Total Organic Carbon (mg/L)	10	8.9	NS
Total Phenols (mg/L)	<0.002	<0.002	0.001
<u>Part 360 Routine Metals</u>			
Boron (mg/L)	<0.5	<0.5	1
Cadmium (mg/L)	<0.01	<0.01	0.005
Calcium (mg/L)	35	42	NS
Iron (mg/L)	30	9	0.3*
Lead (mg/L)	<0.01	<0.01	0.025
Magnesium (mg/L)	4.9	5.7	35 (GV)
Manganese (mg/L)	1	0.67	0.3*
Potassium (mg/L)	4.7	5.1	NS
Sodium (mg/L)	2.1	4.4	20
<u>Part 360 Additional Baseline Metals</u>			
Aluminum (mg/L)			NS
Antimony (mg/L)			0.003
Arsenic (mg/L)			0.025
Barium (mg/L)			1
Beryllium (mg/L)			0.003 (GV)
Chromium (mg/L)			0.05
Chromium, Hexavalent (mg/L)			0.05
Cobalt (mg/L)			NS
Copper (mg/L)			0.2
Mercury (mg/L)			0.0007
Nickel (mg/L)			0.1
Selenium (mg/L)			0.01
Silver (mg/L)			0.05
Thallium (mg/L)			0.0005 (GV)
Vanadium (mg/L)			NS
Zinc (mg/L)			2
<u>Part 360 Volatile Organics</u>			
1,1,1,2-Tetrachloroethane (µg/L)			5
1,1,1-Trichloroethane (µg/L)			5
1,1,2,2-Tetrachloroethane (µg/L)			5
1,1,2-Trichloroethane (µg/L)			1

City of Rome
Tannery Road Landfill
MW-5S
Ground Water Analytical Data

Parameter	12/16/2003	3/23/04	NYSDEC Ground Water Standard
1,1-Dichloroethane ($\mu\text{g/L}$)			5
1,1-Dichloroethene ($\mu\text{g/L}$)			5
1,2,3-Trichloropropane ($\mu\text{g/L}$)			0.04
1,2-Dibromo-3-chloropropane ($\mu\text{g/L}$)			0.04
1,2-Dibromoethane (EDB) ($\mu\text{g/L}$)			5
1,2-Dichlorobenzene ($\mu\text{g/L}$)			3
1,2-Dichloroethane ($\mu\text{g/L}$)			0.6
1,2-Dichloropropane ($\mu\text{g/L}$)			1
1,3-Dichlorobenzene ($\mu\text{g/L}$)			3
1,4-Dichloro-2-butene ($\mu\text{g/L}$)			5
1,4-Dichlorobenzene ($\mu\text{g/L}$)			3
2-Butanone (MEK) ($\mu\text{g/L}$)			50 (GV)
2-Hexanone ($\mu\text{g/L}$)			50 (GV)
4-Methyl 2-pentanone ($\mu\text{g/L}$)			NS
Acetone ($\mu\text{g/L}$)			50 (GV)
Acrylonitrile ($\mu\text{g/L}$)			5
Benzene ($\mu\text{g/L}$)			1
Bromochloromethane ($\mu\text{g/L}$)			5
Bromodichloromethane ($\mu\text{g/L}$)			50 (GV)
Bromoform ($\mu\text{g/L}$)			50 (GV)
Bromomethane ($\mu\text{g/L}$)			5
Carbon disulfide ($\mu\text{g/L}$)			60 (GV)
Carbon tetrachloride ($\mu\text{g/L}$)			5
Chlorobenzene ($\mu\text{g/L}$)			5
Chloroethane ($\mu\text{g/L}$)			5
Chloroform ($\mu\text{g/L}$)			7
Chloromethane ($\mu\text{g/L}$)			5
cis-1,2-Dichloroethene ($\mu\text{g/L}$)			5
cis-1,3-Dichloropropene ($\mu\text{g/L}$)			0.4**
Dibromochloromethane ($\mu\text{g/L}$)			50 (GV)
Dibromomethane ($\mu\text{g/L}$)			5
Ethyl benzene ($\mu\text{g/L}$)			5
Iodomethane ($\mu\text{g/L}$)			5
Methylene Chloride ($\mu\text{g/L}$)			5
Styrene ($\mu\text{g/L}$)			5
Tetrachloroethene ($\mu\text{g/L}$)			5
Toluene ($\mu\text{g/L}$)			5
trans-1,2-Dichloroethene ($\mu\text{g/L}$)			5
trans-1,3-Dichloropropene ($\mu\text{g/L}$)			0.4**
trans-1,4-Dichloro-2-butene ($\mu\text{g/L}$)			5
Trichloroethene ($\mu\text{g/L}$)			5
Trichlorofluoromethane ($\mu\text{g/L}$)			5
Vinyl Acetate ($\mu\text{g/L}$)			NS
Vinyl Chloride ($\mu\text{g/L}$)			2
Xylenes (Total) ($\mu\text{g/L}$)			5
1,2-Dichloroethene - Total			

City of Rome Tannery Road Landfill MW-4S Ground Water Analytical Data																						
Parameter	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	NYSDEC Ground Water Standard
Field Parameter																						
Conductivity (μ mhos/cm)	672	1,590	2,010	444	338	334	429	374	204	247	555	177	125	161	807	163	137	123	685	207	164	NS
pH (s.u.)	7.05	6.43	6.23	7.11	6.18	6.36	6.14	6.04	5.81	5.7	6.07	6.07	5.96	6.05	8.3		5.7	5.96	6.14	5.5	5.64	6.5 - 8.5
Temperature (deg C)	5.7	15.8	15	7.1	6.3	11	14.3	6.8	5.3	15.6	12.7	7.7	5.9	11.5	13.5	6.8	5.5	14.4	15.3	6	4.9	NS
Turbidity (NTU)	137	77	87	86	40	79	58	33	29	24	19	18	17		91	0	25	147	116	6	10	5
Part 360 Leachate Indicator Parameters																						
Ammonia-Nitrogen (mg/L)	26	<0.5	90	15	14	15	24	18	7.4	9.8	32	3.1	1.7	3.5	39	2.3	2.6	1.7	35	4.2	3.8	2
Biochemical Oxygen Demand (BOD5) (mg/L)	62	6	34	24	23	<2.0	14	<20.0		12	25	<10.0	<10.0	<10.0	49	<10.0	6.6	4.7	15	<4	<4.0	NS
Bromide (mg/L)	<0.2	<0.2	<2.0	<2.0	<2.0	<0.1	<0.1	<0.1	<0.1	0.12	0.24	<0.1	<0.1	<0.1	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2
Chemical Oxygen Demand (mg/L)	540	44	22	110	120	110	160	140	110	98	160	88	62	84	230	44	54	75	220	87	74	NS
Chloride (mg/L)	50	3	200	23	100	2.7	21	16	7.1	8.7	43	5.6	4.5	5.3	99	4.6	5.3	3.8	98	4.8	2.5	250
Color (Pt-Co)		140					250					300	250					175				15
Nitrate-Nitrogen (mg/L)	<0.2	<0.2	<0.2	0.6	0.3	0.15	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.25	0.13	<0.1	0.15	<0.1	10
Sulfate (mg/L)	24	32	11	56	52	28	40	35	11	17	49	27	17	15	20	39	24	14	25	31	3.2	250
Total Alkalinity (mg/L)	200	120	660	110	99	99	140	100	57	91	170	23	27	48	280	20	24	34	200	30	41	NS
Total Cyanide (mg/L)		<0.01					<0.01					<0.01	<0.01					<0.01				0.2
Total Dissolved Solids (mg/L)	320	5,100	810	330	240	160	340	250	170	200	300	180	160	150	530	130	150	140	560	80	130	500
Total Hardness (mg/L)	42	110	94	49	36	41	46	44	31	40	56	42	34	36	77	42	35	35	130	37	36	NS
Total Kjeldahl Nitrogen (mg/L)	26	0.8	70	4.6	12	23	24	20	8.2	12	34	4.6	2.1	4.9	47	2.4	2.8	2	35	4.3	3.1	NS
Total Organic Carbon (mg/L)	71	21	47.8	35.5	39.3	45	56	62	42	43	61	33	30	41	84	21	24	27	78	32	29	NS
Total Phenols (mg/L)	0.056	<0.005	0.008	0.012	0.003	0.0023	0.0028	0.0028	<0.002	0.003	0.0024	<0.002	0.0022	0.0093	0.0056	0.0022	<0.002	<0.002	0.0045	0.0036	<0.002	0.001
Part 360 Routine Metals																						
Boron (mg/L)		<0.1				0.53	0.71				<0.5	0.65	<0.5	<0.5	<0.5	1.1		<0.01	1.4	<0.5	<0.5	1
Cadmium (mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.005
Calcium (mg/L)	11.2	29.8	24.4	12.6	9.1	10	12	11	7.7	9.6	14	10	8.5	8.8	20	10	8.7	8.7	34	9.1	8.8	NS
Iron (mg/L)	5.2	32.8	10.3	5.3	4.4	3.9	5.5	6.5	4.9	6.6	6.9	6.6	5.2	5.2	21	4.8	4.2	3.9	9.4	3.4	4	0.3*
Lead (mg/L)	<0.003	0.0085	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.025
Magnesium (mg/L)	3.35	8.28	8.1	4.3	3.2	3.7	4.1	4.2	3	3.9	4.9	4	3.2	3.3	6.3	3.8	3.2	3.1	10	3.5	3.5	35 (GV)
Manganese (mg/L)	0.335	4.11	0.62	0.41	0.31	0.33	0.35	0.38	0.3	0.37	0.48	0.38	0.32	0.32	0.55	0.27	0.24	0.22	0.88	0.2	0.24	0.3*
Potassium (mg/L)	28.6	4.86	57	34.2	24.1	33	31	35	16	24	33	14	9.7	11	42	13	10	10	48	12	12	NS
Sodium (mg/L)	35.8	3.43	150	27.9	18.1	21	32	18	7.4	13	46	5.7	5.2	4	81	4.6	4.7	3.1	100	4	4.5	20
Part 360 Additional Basiline Metals																						
Aluminum (mg/L)		2.77						1.8					1.1	1.2				1.4				NS
Antimony (mg/L)		<0.015					<0.01						<0.01	<0.01				<0.01				0.003
Arsenic (mg/L)		0.027					<0.01						<0.01	<0.01				0.011				0.025
Barium (mg/L)		0.0855					<0.2						<0.2	<0.2				<0.2				1
Beryllium (mg/L)		<0.003					<0.01						<0.01	<0.01				<0.01				0.003 (GV)
Chromium (mg/L)		0.0097					<0.01						<0.01	<0.01				<0.01				0.05
Chromium, Hexavalent (mg/L)		<0.01					<0.01						<0.01	<0.01				<0.01				0.05
Cobalt (mg/L)		<0.02					<0.01						<0.01	<0.01				<0.01				NS
Copper (mg/L)		0.0258					<0.01						<0.01	<0.01				<0.01				0.2
Mercury (mg/L)		<0.0002					<0.0002						<0.0002	<0.0002				<0.0002				0.0007
Nickel (mg/L)		<0.03					0.021						<0.01	<0.01				<0.01				0.1
Selenium (mg/L)		<0.005					<0.01						<0.01	<0.01				<0.01				0.01
Silver (mg/L)		<0.01					<0.01						<0.01	<0.01				<0.01				0.05
Thallium (mg/L)		<0.01					<0.01						<0.01	<0.01				<0.01				0.0005 (GV)
Vanadium (mg/L)		<0.3					0.011						<0.01	<0.01				<0.01				NS
Zinc (mg/L)		0.0508					0.032						0.012	0.024				0.049				2
Part 360 Volatile Organics																						
1,1,1,2-Tetrachloroethane (μ g/L)		<5.0					<5.0						<5.0	<5.0				<5				5
1,1,1-Trichloroethane (μ g/L)		<5.0					<5.0						<5.0	<5.0			<5	<5				5
1,1,2,2-Tetrachloroethane (μ g/L)		<5.0					<5.0						<5.0	<5.0			<5	<5				5
1,1,2-Trichloroethane (μ g/L)		<5.0					<5.0						<5.0	<5.0			<5	<5				1

City of Rome Tannery Road Landfill MW-4S Ground Water Analytical Data																							
Parameter	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	NYSDEC Ground Water Standard	
1,1-Dichloroethane ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				5	
1,1-Dichloroethene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				5	
1,2,3-Trichloropropane ($\mu\text{g/L}$)							<5.0					<5.0	<5.0					<5				0.04	
1,2-Dibromo-3-chloropropane ($\mu\text{g/L}$)		<10.0					<5.0					<5.0	<5.0					<5				0.04	
1,2-Dibromoethane (EDB) ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0					<5				5	
1,2-Dichlorobenzene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0					<5				3	
1,2-Dichloroethane ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				0.6	
1,2-Dichloropropane ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				1	
1,3-Dichlorobenzene ($\mu\text{g/L}$)		<5.0																				<5	
1,4-Dichloro-2-butene ($\mu\text{g/L}$)		<10.0																				<5	
1,4-Dichlorobenzene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0					<5				3	
2-Butanone (MEK) ($\mu\text{g/L}$)		<10.0					<10.0					<10.0	<10.0				<10	<10				50 (GV)	
2-Hexanone ($\mu\text{g/L}$)		<10.0					<10.0					<10.0	<10.0				<10	<10				50 (GV)	
4-Methyl 2-pentanone ($\mu\text{g/L}$)		<10.0					<10.0					<10.0	<10.0				<10	<10				NS	
Acetone ($\mu\text{g/L}$)		<10.0					<10.0					<10.0	<10.0				<10	<10				50 (GV)	
Acrylonitrile ($\mu\text{g/L}$)		<100.0					<20.0					<20.0	<20.0					<20				5	
Benzene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				1	
Bromochloromethane ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0					<5				5	
Bromodichloromethane ($\mu\text{g/L}$)		<5.0										<5.0	<5.0				<5	<5				50 (GV)	
Bromoform ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				50 (GV)	
Bromomethane ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				5	
Carbon disulfide ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				60 (GV)	
Carbon tetrachloride ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				5	
Chlorobenzene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				5	
Chloroethane ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				5	
Chloroform ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				7	
Chloromethane ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				5	
cis-1,2-Dichloroethene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0					<5				5	
cis-1,3-Dichloropropene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				0.4**	
Dibromochloromethane ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				50 (GV)	
Dibromomethane ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0					<5				5	
Ethyl benzene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				5	
Iodomethane ($\mu\text{g/L}$)		<5.0					<20.0					<20.0	<10.0					<10				5	
Methylene Chloride ($\mu\text{g/L}$)		<5.0					<10.0					<10.0	<10.0				<10	<10				5	
Styrene ($\mu\text{g/L}$)							<5.0					<5.0	<5.0				<5	<5				5	
Tetrachloroethene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				5	
Toluene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				5	
trans-1,2-Dichloroethene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0					<5				5	
trans-1,3-Dichloropropene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				0.4**	
trans-1,4-Dichloro-2-butene ($\mu\text{g/L}$)							<50.0					<50.0	<10.0					<10				5	
Trichloroethene ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				5	
Trichlorofluoromethane ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0					<5				5	
Vinyl Acetate ($\mu\text{g/L}$)		<50.0					<20.0					<20.0	<20.0					<20				NS	
Vinyl Chloride ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				2	
Xylenes (Total) ($\mu\text{g/L}$)		<5.0					<5.0					<5.0	<5.0				<5	<5				5	
1,2-Dichloroethene - Total																	<5						

- Notes**
- 1) < indicates not detected at or above the listed value
 - 2) NS indicates that no standard has been promulgated.
 - 3) * indicates that the sum of these two analytes may not exceed 500 $\mu\text{g/L}$.
 - 4) GV indicates that the value listed is a guidance value rather than a standard.
 - 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
 - 6) ** Indicates standard applies to the sum of the isomers

City of Rome
Tannery Road Landfill
MW-7D
Ground Water Analytical Data

Parameter	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	NYSDEC Ground Water Standard
Field Parameters																						
Conductivity (µmhos/cm)	1,330	1,120	1,620	1,300	1,320	1,710	1,220	1,270	1,350	1,200	1,090	1,290	1,440	1,430	503	1,110	1,150	775	1,080	370	1,030	NS
pH (s.u.)	6.64	6.53	6.4	7.92	6.5	6.88	6.41	6.46	6.2	5.96	6.39	6.31	5.96	6.25	5.4		6.3	6.42	6.48	6.9	6.23	6.5 - 8.5
Temperature (deg C)	8.1	14.5	13.2	8.1	8.4	13.3	11.5	9	8.9	12.7	11.2	10.1	9	11.6	11.6	9.5	5.5	12.1	11.7	9	9.5	NS
Turbidity (NTU)	160	42	94	247	128	83	98	62	97	112	152	53	29		345	61	69	999	128	30	59	5
Part 360 Leachate Indicator Parameters																						
Ammonia-Nitrogen (mg/L)	47	25	47	36	33	58	41	37	46	40	47	39	43	46	22	34	39	40	38	8.4	30	2
Biochemical Oxygen Demand (BOD5) (mg/L)	19	17	17	11	11	4.4	10	<20.0		13	14	<20.0	<20.0	<10.0	9.3	<20.0	<10.0	12	7.1	<10	<10.0	NS
Bromide (mg/L)	<0.2	<0.2	<2.0	<2.0	<2.0	<0.1	1.1	1	0.93	0.74	0.75	0.64	0.8	1	0.21	0.11	0.85	0.89	0.88	<0.1	0.83	2
Chemical Oxygen Demand (mg/L)	570	140	14	110	120	150	140	120	140	120	120	120	130	130	150	100	120	150	120	76	110	NS
Chloride (mg/L)	81	70	88	84	68	3.3	65	59	74	62	46	56	76	72	21	7	55	57	54	8.8	56	250
Color (Pt-Co)		280					750					850	750					600				15
Nitrate-Nitrogen (mg/L)	<0.2	<0.2	<0.2	1.5	4.9	0.16	<0.1	<0.1	0.13	<0.1	<0.1	<0.1	0.16	<0.1	0.23	<0.1	<0.1	<0.1	<0.1	0.72	0.23	10
Sulfate (mg/L)	<5.0	35	12	28	34	9.3	41	44	35	47	45	52	58	61	47	8.6	54	57	49	28	39	250
Total Alkalinity (mg/L)	670	370	710	470	450	680	460	440	430	470	430	390	460	470	160	360	390	410	340	120	320	NS
Total Cyanide (mg/L)		<0.01					<0.01					<0.01	<0.01				<0.01					0.2
Total Dissolved Solids (mg/L)	540	540	710	660	610	400	590	600	670	570	480	650	720	650	420	520	580	640	580	240	510	500
Total Hardness (mg/L)	300	260	350	310	244	390	320	270	280	270	260	250	270	280	140	240	270	270	310	97	230	NS
Total Kjeldahl Nitrogen (mg/L)	44	36	36	24	26	680	50	51	52	43	50	39	50	44	26	36	41	41	25	6.4	35	NS
Total Organic Carbon (mg/L)	55	48	45.9	38.5	38.1	60	48	55	49	44	43	47	50	46	50	41	42	27	43	28	39	NS
Total Phenols (mg/L)	0.01	<0.005	0.01	0.014	0.006	0.0055	0.004	0.004	0.0026	0.0034	0.0039	0.0042	0.0027	0.012	0.0044	0.003	0.0032	0.003	0.0024	NA	0.004	0.001
Part 360 Routine Metals																						
Boron (mg/L)		0.7				1.7	1.2			<0.5	0.83	<0.5	0.99	0.83	<0.5			1.1	1.2	<0.5	0.95	1
Cadmium (mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.005
Calcium (mg/L)	62.9	61.1	74.9	64.2	56.4	87	77	66	70	66	64	65	71	71	35	63	69	80	76	24	57	NS
Iron (mg/L)	41.1	39.2	40.8	37.7	33.2	53	45	38	41	42	39	40	40	40	35	34	41	47	45	27	34	0.3*
Lead (mg/L)	0.0071	0.0041	0.006	0.014	0.006	<0.01	<0.01	<0.01	<0.01	0.013	0.014	<0.01	<0.01	<0.01	0.035	0.014	<0.01	<0.01	0.018	<0.01	0.012	0.025
Magnesium (mg/L)	33.6	25.9	39.5	36.5	25.1	41	32	25	25	25	25	22	24	25	14	20	25	29	28	9.1	22	35 (GV)
Manganese (mg/L)	0.837	0.84	0.82	0.89	0.87	0.96	0.85	0.73	0.8	0.76	0.76	0.7	0.73	0.71	0.67	0.65	0.72	0.82	0.85	0.83	0.68	0.3*
Potassium (mg/L)	54.8	40.9	48	50.5	38.4	60	46	66	43	39	41	37	40	43	23	40	39	47	39	20	37	NS
Sodium (mg/L)	46.1	39.6	60	55.5	50.5	83	64	48	54	56	59	50	53	57	15	37	52	58	47	9.9	44	20
Part 360 Additional Baseline Metals																						
Aluminum (mg/L)		0.439					1					1.2	0.83					2.3				NS
Antimony (mg/L)		<0.015					0.034					<0.01	<0.01				<0.01					0.003
Arsenic (mg/L)		<0.01					0.011					<0.01	<0.01				0.026					0.025
Barium (mg/L)		0.217					<0.2					0.43	0.49				0.61					1
Beryllium (mg/L)		<0.003					<0.01					<0.01	<0.01				<0.01					0.003 (GV)
Chromium (mg/L)		<0.005					<0.01					<0.01	<0.01				<0.01					0.05
Chromium, Hexavalent (mg/L)		<0.01					<0.01					<0.01	<0.01				<0.01					0.05
Cobalt (mg/L)		<0.02					<0.01					<0.01	<0.01				<0.01					NS
Copper (mg/L)		<0.01					<0.01					0.022	<0.01				<0.01					0.2
Mercury (mg/L)		<0.0002					<0.0002					<0.0002	<0.0002				<0.0002					0.0007
Nickel (mg/L)		<0.03					<0.01					<0.01	<0.01				<0.01					0.1
Selenium (mg/L)		<0.005					<0.01					<0.01	<0.01				<0.01					0.01
Silver (mg/L)		<0.01					<0.01					<0.01	<0.01				<0.01					0.05
Thallium (mg/L)		0.0105					<0.01					<0.01	<0.01				<0.01					0.0005 (GV)
Vanadium (mg/L)		<0.3					0.013					0.013	0.01				0.018					NS
Zinc (mg/L)		0.056					0.067					0.036	0.034				0.097					2
Part 360 Volatile Organics																						
1,1,1,2-Tetrachloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0				<5					5
1,1,1-Trichloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0				<5	<5				5
1,1,2,2-Tetrachloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0				<5	<5				5
1,1,2-Trichloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0				<5	<5				1
1,1-Dichloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0				<5	<5				5

City of Rome
Tannery Road Landfill
MW-7D
Ground Water Analytical Data

Parameter	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	NYSDDEC	Ground Water
1,1-Dichloroethene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5				5	Standard
1,2,3-Trichloropropane (ug/L)								<5.0				<5.0	<5.0					<5	<5			0.04	
1,2-Dibromooethane (EDB) (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			0.04	
1,2-Dichlorobenzene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
1,2-Dichloropropane (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			3	
1,2-Dichlorobenzene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			0.6	
1,2-Dichloropropane (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			1	
1,3-Dichlorobenzene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			3	
1,4-Dichloro-2-butene (ug/L)	<10.0							<10.0				<10.0	<10.0					<10	<10			5	
1,4-Dichlorobenzene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			3	
2-Butanone (MEK) (ug/L)	<10.0							<10.0				<10.0	<10.0					<10	<10			50 (GV)	
2-Hexanone (ug/L)	<10.0							<10.0				<10.0	<10.0					<10	<10			50 (GV)	
4-Methyl 2-pentanone (ug/L)	<10.0							<10.0				<10.0	<10.0					<10	<10			NS	
Acetone (ug/L)	<10.0							<10.0				<10.0	<10.0					<10	<10			50 (GV)	
Acrylonitrile (ug/L)	<100.0							<20.0				<20.0	<20.0				15	<20				5	
Benzene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			1	
Bromochloroethane (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
Bromodichloroethane (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			50 (GV)	
Bromomethane (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			50 (GV)	
Carbon disulfide (ug/L)	<18.0							<5.0				<5.0	<5.0					<5	<5			5	
Carbon tetrachloride (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			60 (GV)	
Chlorobenzene (ug/L)	23							<5.0				<5.0	5.8					<5	<5			5	
Chloroethane (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
Chloroform (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			7	
cis-1,2-Dichloroethene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
cis-1,3-Dichloropropene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			0.4**	
Dibromochloroethane (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			50 (GV)	
Dibromomethane (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
Ethyl benzene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
Iodomethane (ug/L)	<5.0							<20.0				<20.0	<10.0					<10	<10			5	
Methylene Chloride (ug/L)	<5.0							<10.0				<10.0	<10.0					<10	<10			5	
Methyl Styrene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
Tetrachloroethene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
Toluene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
trans-1,2-Dichloroethene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
trans-1,3-Dichloropropene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
trans-1,4-Dichloro-2-butene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			0.4**	
Trichloroethene (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
Trichlorofluoromethane (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			5	
Vinyl Acetate (ug/L)	<50.0							<20.0				<20.0	<20.0					<20	<20			NS	
Vinyl Chloride (ug/L)	<5.0							<5.0				<5.0	<5.0					<5	<5			2	
Xylenes (Total) (ug/L)																						5	
1,2-Dichloroethene - Total		2							16				130					160	97				

Notes

1) < indicates not detected at or above the listed value

2) NS indicates that no standard has been promulgated.

3) * indicates that the sum of these two analytes may not exceed 500 µg/L.

4) GV indicates that the value listed is a guidance value rather than a standard.

5) Values in bold exceeded the applicable NYSDDEC ground water standard/guidance value.

6) ** Indicates standard applies to the sum of the isomers

City of Rome
Tannery Road Landfill
MW-9S
Ground Water Analytical Data

Parameter	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	NYSDEC Ground Water Standard
Field Parameters																						
Conductivity (µmhos/cm)	485	398	369	411	413	414	411	411	419	365	390	408	435	415	377	410	423	385	392	480	413	NS
pH (s.u.)	7.67	7.32	7.23	7.31	7.11	6.89	6.96	7.28	7.2	6.94	6.65	7.39	7.15	7.39	8.9		7.3	7.17	7.5	7.5	6.98	6.5 - 8.5
Temperature (deg C)	5.8	14.6	12.9	7.4	6.4	9.8	11	8.2	6.1	11.9	11.4	8.2	7.4	9.3	12.7	8	6.3	11.3	12.8	6	5.2	NS
Turbidity (NTU)	999	324	659	999	999	999	999	999	999	704	241	466	460	501	999	506	218	999	614	50	492	5
Part 360 Leachate Indicator Parameters																						
Ammonia-Nitrogen (mg/L)	<0.5	<0.5	<0.3	<0.3	<0.3	0.14	0.3	0.15	0.28	0.3	0.39	0.21	0.17	0.33	0.32	0.56	0.16	1.8	0.93	<0.03	0.56	2
Biochemical Oxygen Demand (BOD5) (mg/L)	<4.0	5	3.9	5	4.7	5.6	2.1	<4.0		<4.0	4.2	<4.0	<4.0	<4.0	18	4.5	<4.0	4.4	<4.0	<4	<4.0	NS
Bromide (mg/L)	<0.2	<0.2	<2.0	<2.0	<2.0	0.15	<0.1	<0.1	<0.1	0.17	0.12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2
Chemical Oxygen Demand (mg/L)	160	120	26	76	64	74	160	120	96	120	72	75	290	75	87	64	57	120	67	75	120	NS
Chloride (mg/L)	8	3	4.1	<2.0	2.6	3.3	3.3	3.3	3.4	3.2	3.6	3.3	3.2	3.4	3.3	3.2	3.2	3.2	3.4	3.4	3.5	250
Color (Pt-Co)		530					400					600	850					750				15
Nitrate-Nitrogen (mg/L)	<0.2	<0.2	<0.2	0.5	0.3	<0.1	<0.1	<0.1	<0.1	0.18	<0.1	0.17	0.16	<0.1	0.14	<0.1	<0.1	<0.1	<0.1	0.18	<0.1	10
Sulfate (mg/L)	5	8	12	8	12	8.5	2.3	4.7	4.2	2.9	3.1	8.6	15	8.4	3.2	6.2	19	15	3.2	8	5.9	250
Total Alkalinity (mg/L)	230	260	1400	260	270	240	270	280	230	260	240	210	240	250	230	250	240	250	220	240	220	NS
Total Cyanide (mg/L)		<0.01					<0.01					<0.01	<0.01					<0.01				0.2
Total Dissolved Solids (mg/L)	420	260	360	340	340	390	420	400	360	380	240	430	360	340	330	380	390	360	340	320	360	500
Total Hardness (mg/L)	1100	530	477.2904	489.5396	466	610	720	700	1200	300	420	390	460	360	650	730	380	400	410	150	730	NS
Total Kjeldahl Nitrogen (mg/L)	2.8	1.9	0.5	<0.3	<0.3	0.97	1.4	1.7	1	1.3	1	0.7	0.45	1.2	1.7	0.52	0.74	1.5	0.57	0.63	1.1	NS
Total Organic Carbon (mg/L)	30	29	28.6	38.5	32.6	32	31	36	35	30	29	32	29	31	32	26	24	32	25	28	25	NS
Total Phenols (mg/L)	<0.005	<0.005	<0.001	0.005	<0.001	0.0022	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0087	0.0035	<0.002	<0.002	0.0022	0.0026	0.0031	<0.002	0.001
Part 360 Routine Metals																						
Boron (mg/L)		<0.1				<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	1
Cadmium (mg/L)	0.0088	0.0053	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.005
Calcium (mg/L)	307	142	142	138	138	160	190	180	300	88	120	110	130	100	170	200	100	110	120	50	180	NS
Iron (mg/L)	85.3	47.8	28.2	26.8	14.3	37	56	56	110	21	30	24	29	26	48	52	25	36	29	2.6	67	0.3*
Lead (mg/L)	0.0381	0.021	0.011	0.017	0.008	<0.01	<0.01	0.043	0.042	0.012	0.012	0.011	0.017	0.014	0.034	0.041	<0.01	<0.01	0.023	<0.01	0.043	0.025
Magnesium (mg/L)	83.9	43.5	29.8	35.2	29.4	48	58	60	100	19	29	28	34	26	53	60	27	30	27	5.2	66	35 (GV)
Manganese (mg/L)	4.21	2.13	1.7	1.9	1.6	2.4	2.8	2.7	5	1.1	1.5	1.5	1.8	1.4	2.6	3	1.4	1.6	1.5	0.36	3	0.3*
Potassium (mg/L)	12.1	6.96	2.3	4.6	2.4	4.6	6.4	7.3	14	4.2	7.2	4.6	4.6	6.6	6.3	5.4	4.5	5.8	4.9	2.7	7.8	NS
Sodium (mg/L)	49.3	39.3	30	41.7	46	46	49	53	55	48	33	43	55	57	38	40	53	54	37	55	62	20
Part 360 Additional Baseline Metals																						
Aluminum (mg/L)		23.9					<0.01					12	12					18				NS
Antimony (mg/L)		<0.015					0.048					<0.01	<0.01					<0.01				0.003
Arsenic (mg/L)		<0.01					<0.01					0.016	0.019					0.035				0.025
Barium (mg/L)		0.201					0.23					<0.2	<0.2					0.2				1
Beryllium (mg/L)		<0.003					<0.01					<0.01	<0.01					<0.01				0.003 (GV)
Chromium (mg/L)		0.0592					<0.01					0.02	0.022					0.033				0.05
Chromium, Hexavalent (mg/L)		<0.01					<0.01					<0.01	<0.01					<0.01				0.05
Cobalt (mg/L)		<0.02					0.024					<0.01	<0.01					0.014				NS
Copper (mg/L)		0.0845					0.092					0.036	0.027					0.085				0.2
Mercury (mg/L)		<0.0002					<0.0002					<0.0002	<0.0002					<0.0002				0.0007
Nickel (mg/L)		0.0726					0.071					0.027	0.034					0.042				0.1
Selenium (mg/L)		<0.005					<0.01					<0.01	<0.01					<0.01				0.01
Silver (mg/L)		<0.01					<0.01					<0.01	<0.01					<0.01				0.05
Thallium (mg/L)		<0.01					<0.01					<0.01	<0.01					<0.01				0.0005 (GV)
Vanadium (mg/L)		0.047					0.048					0.023	0.024					0.037				NS
Zinc (mg/L)		0.184					0.2					0.063	0.081					0.13				2
Part 360 Volatile Organics																						
1,1,1,2-Tetrachloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				5
1,1,1-Trichloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0				<5	<5				5
1,1,2,2-Tetrachloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0				<5	<5				5
1,1,2-Trichloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0				<5	<5				1
1,1-Dichloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0				<5	<5				5

City of Rome
Tannery Road Landfill
MW-95
Ground Water Analytical Data

Parameter	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	NYSDEC	Ground Water
1,1-Dichloroethene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	Standard
1,2,3-Trichloropropane (ug/L)									<5.0			<5.0	<5.0					<5	<5			0.04	
1,2-Dibromo-3-chloropropane (ug/L)	<10.0								<5.0			<5.0	<5.0					<5	<5			0.04	
1,2-Dibromoethane (EDB) (ug/L)	<5.0								<5.0			<5.0	<5.0					<5	<5			5	
1,2-Dichlorobenzene (ug/L)	<5.0								<5.0			<5.0	<5.0					<5	<5			3	
1,2-Dichloroethane (ug/L)	<5.0								<5.0			<5.0	<5.0					<5	<5			0.6	
1,2-Dichloropropane (ug/L)	<5.0								<5.0			<5.0	<5.0					<5	<5			1	
1,3-Dichlorobenzene (ug/L)	<5.0								<5.0			<5.0	<5.0					<5	<5			3	
1,4-Dichloro-2-butene (ug/L)	<10.0								<10.0			<10.0	<10.0					<5	<5			5	
1,4-Dichlorobenzene (ug/L)	<5.0								<5.0			<5.0	<5.0					<5	<5			3	
2-Butanone (MEK) (ug/L)	<10.0								<10.0			<10.0	<10.0				<10	<10	<10			50 (GV)	
2-Hexanone (ug/L)	<10.0								<10.0			<10.0	<10.0				<10	<10	<10			50 (GV)	
4-Methyl 2-pentanone (ug/L)	<10.0								<10.0			<10.0	<10.0				<10	<10	<10			NS	
Acetone (ug/L)	<10.0								<10.0			<10.0	<10.0				<10	<10	<10			50 (GV)	
Acrylonitrile (ug/L)	<100.0								<20.0			<20.0	<20.0				<10	<20	<20			5	
Benzene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			1	
Bromochloroethane (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
Bromoforn (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			50 (GV)	
Bromomethane (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
Carbon disulfide (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			60 (GV)	
Carbon tetrachloride (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
Chlorobenzene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
Chloroethane (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
Chloroform (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			7	
Chloromethane (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
cis-1,2-Dichloroethene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
cis-1,3-Dichloropropene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			0.4**	
Dibromochloroethane (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			50 (GV)	
Dibromomethane (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
Ethyl benzene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
Iodomethane (ug/L)	<5.0								<20.0			<20.0	<10.0				<5	<5	<10			5	
Methylene Chloride (ug/L)	<5.0								<10.0			<10.0	<10.0				<10	<10	<10			5	
Methylene Chloride (ug/L)	<5.0								<10.0			<10.0	<10.0				<10	<10	<10			5	
Styrene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
Tetrachloroethene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
Toluene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
trans-1,2-Dichloroethene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
trans-1,3-Dichloropropene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			0.4**	
trans-1,4-Dichloro-2-butene (ug/L)	<5.0								<50.0			<50.0	<10.0				<5	<10	<10			5	
Trichloroethene (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
Trichlorofluoromethane (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
Vinyl Acetate (ug/L)	<50.0								<20.0			<20.0	<20.0				<5	<20	<20			NS	
Vinyl Chloride (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			2	
Xylenes (Total) (ug/L)	<5.0								<5.0			<5.0	<5.0				<5	<5	<5			5	
1,2-Dichloroethene - Total																	<5	<5	<5			5	

- Notes
- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) * indicates that the sum of these two analytes may not exceed 500 ug/L.
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) ** Indicates standard applies to the sum of the isomers

City of Rome Tannery Road Landfill Leachate Well MW-10 Analytical Data										
Parameter	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	NYSDEC Ground Water Standard
Field Parameters										
Conductivity (µmhos/cm)	4,940	4,970	5,440	3,780	4,050	4,810	5,600	4,300	4,810	NS
pH (s.u.)	6.48	6.63	7		6.6	6.5	6.78	6.4	6.59	6.5 - 8.5
Temperature (deg C)	12.8	15.2	17.2	10.4	7.6	19.7	15.8	9	12.8	NS
Turbidity (NTU)	356	183	585	164	207	383	47	430	189	5
Part 360 Leachate Indicator Parameters										
Ammonia-Nitrogen (mg/L)	200	260	270	200	280	280	270	230	380	2
Biochemical Oxygen Demand (BOD5) (mg/L)	38	24	46	34	30	20	36	43	28	NS
Bromide (mg/L)	2.6	3	3.9	1.9	2.1	3.2	3.8	2.3	3.7	2
Chemical Oxygen Demand (mg/L)	420	250	3,200	270	340	490	640	270	300	NS
Chloride (mg/L)	440	430	610	380	200	450	550	260	450	250
Color (Pt-Co)	1,400					600				15
Nitrate-Nitrogen (mg/L)	<0.1	0.16	0.17	<0.1	<0.1	0.15	0.76	0.54	<0.1	10
Sulfate (mg/L)	2.9	2.2	3.6	2.2	2.3	2.5	<1	2.3	3.6	250
Total Alkalinity (mg/L)	1,700	1,900	2,200	1,500	1,600	1,800	2,000	1,500	2,000	NS
Total Cyanide (mg/L)	<0.01					<0.01				0.2
Total Dissolved Solids (mg/L)	1,900	2,100	2,500	1,500	1,400	2,200	2,500	1,200	2,200	500
Total Hardness (mg/L)	580	580	690	480	550	750	790	430	700	NS
Total Kjeldahl Nitrogen (mg/L)	290	220	320	220	280	300	330	350	330	NS
Total Organic Carbon (mg/L)	160	150	230	99	120	120	230	110	180	NS
Total Phenols (mg/L)	0.016	0.02	0.015	0.026	<0.002	0.015	0.013	0.017	0.017	0.001
Part 360 Routine Metals										
Boron (mg/L)	2.5	2.7	3.7			3.4	4.4	1.6	3.8	1
Cadmium (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.005
Calcium (mg/L)	120	120	140	100	110	150		91	120	NS
Iron (mg/L)	62	60	70	48	58	61	68	52	38	0.3*
Lead (mg/L)	0.049	0.031	0.04	0.022	0.041	<0.01	0.014	0.022	0.028	0.025
Magnesium (mg/L)	68	67	83	53	65	94	100	50	96	35 (GV)
Manganese (mg/L)	1.3	1.5	2.4	1.6	1.5	1.7	2.7	1.3	0.74	0.3*
Potassium (mg/L)	190	200	340	180	230	230	410	220	350	NS
Sodium (mg/L)	430	460	600	250	270	420	630	250	500	20
Part 360 Additional Baseline Metals										
Aluminum (mg/L)	2.4					0.9				NS
Antimony (mg/L)	<0.01					<0.01				0.003
Arsenic (mg/L)	0.02					0.038				0.025
Barium (mg/L)	<0.2					0.32				1
Beryllium (mg/L)	<0.01					<0.01				0.003 (GV)
Chromium (mg/L)	0.031					0.019				0.05
Chromium, Hexavalent (mg/L)	<0.01					<0.01				0.05
Cobalt (mg/L)	0.012					0.017				NS
Copper (mg/L)	0.052					0.013				0.2
Mercury (mg/L)	0.0002					<0.0002				0.0007
Nickel (mg/L)	0.062					0.049				0.1
Selenium (mg/L)	<0.01					<0.01				0.01
Silver (mg/L)	<0.01					<0.01				0.05
Thallium (mg/L)	<0.01					<0.01				0.0005 (GV)
Vanadium (mg/L)	<0.01					0.012				NS
Zinc (mg/L)	0.16					0.11				2
Part 360 Volatile Organics										
1,1,1,2-Tetrachloroethane (µg/L)	<5.0					<5				5
1,1,1-Trichloroethane (µg/L)	<5.0				<5	<5				5
1,1,2,2-Tetrachloroethane (µg/L)	<5.0				<5	<5				5

City of Rome
Tannery Road Landfill
Leachate Well MW-10
Analytical Data

Parameter	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	NYSDEC Ground Water Standard
1,1,2-Trichloroethane ($\mu\text{g/L}$)	<5.0				<5	<5				1
1,1-Dichloroethane ($\mu\text{g/L}$)	<5.0				<5	<5				5
1,1-Dichloroethene ($\mu\text{g/L}$)	<5.0				<5	<5				5
1,2,3-Trichloropropane ($\mu\text{g/L}$)	<5.0					<5				0.04
1,2-Dibromo-3-chloropropane ($\mu\text{g/L}$)	<5.0					<5				0.04
1,2-Dibromoethane (EDB) ($\mu\text{g/L}$)	<5.0					<5				5
1,2-Dichlorobenzene ($\mu\text{g/L}$)	<5.0					<5				3
1,2-Dichloroethane ($\mu\text{g/L}$)	<5.0				<5	<5				0.6
1,2-Dichloropropane ($\mu\text{g/L}$)	<5.0				<5	<5				1
1,4-Dichlorobenzene ($\mu\text{g/L}$)	<5.0					<5				3
2-Butanone (MEK) ($\mu\text{g/L}$)	<10.0				<10	<10				50 (GV)
2-Hexanone ($\mu\text{g/L}$)	<10.0				<10	<10				50 (GV)
4-Methyl 2-pentanone ($\mu\text{g/L}$)	<10.0					<10				NS
Acetone ($\mu\text{g/L}$)	18				28	13				50 (GV)
Acrylonitrile ($\mu\text{g/L}$)	<20.0					<20				5
Benzene ($\mu\text{g/L}$)	5.5				5.7	<5				1
Bromochloromethane ($\mu\text{g/L}$)	<5.0					<5				5
Bromodichloromethane ($\mu\text{g/L}$)	<5.0				<5	<5				50 (GV)
Bromoform ($\mu\text{g/L}$)	<5.0				<5	<5				50 (GV)
Bromomethane ($\mu\text{g/L}$)	<5.0				<5	<5				5
Carbon disulfide ($\mu\text{g/L}$)	<5.0				<5	<5				60 (GV)
Carbon tetrachloride ($\mu\text{g/L}$)	<5.0				<5	<5				5
Chlorobenzene ($\mu\text{g/L}$)	<5.0				<5	<5				5
Chloroethane ($\mu\text{g/L}$)	33				33	22				5
Chloroform ($\mu\text{g/L}$)	<5.0				<5	<5				7
Chloromethane ($\mu\text{g/L}$)	<5.0				<5	<5				5
cis-1,2-Dichloroethene ($\mu\text{g/L}$)	<5.0					<5				5
cis-1,3-Dichloropropene ($\mu\text{g/L}$)	<5.0				<5	<5				0.4**
Dibromochloromethane ($\mu\text{g/L}$)	<5.0				<5	<5				50 (GV)
Dibromomethane ($\mu\text{g/L}$)	<5.0					<5				5
Ethyl benzene ($\mu\text{g/L}$)	29				<5	<5				5
Iodomethane ($\mu\text{g/L}$)	<10.0					<10				5
Methylene Chloride ($\mu\text{g/L}$)	<10.0				<10	<10				5
Styrene ($\mu\text{g/L}$)	<5.0				<5	<5				5
Tetrachloroethene ($\mu\text{g/L}$)	<5.0				<5	<5				5
Toluene ($\mu\text{g/L}$)	<5.0				<5	<5				5
trans-1,2-Dichloroethene ($\mu\text{g/L}$)	<5.0					<5				5
trans-1,3-Dichloropropene ($\mu\text{g/L}$)	<5.0				<5	<5				0.4**
trans-1,4-Dichloro-2-butene ($\mu\text{g/L}$)	<10.0					<10				5
Trichloroethene ($\mu\text{g/L}$)	<5.0				<5	<5				5
Trichlorofluoromethane ($\mu\text{g/L}$)	<5.0					<5				5
Vinyl Acetate ($\mu\text{g/L}$)	<20.0					<20				NS
Vinyl Chloride ($\mu\text{g/L}$)	<5.0				<5	<5				2
Xylenes (Total) ($\mu\text{g/L}$)	75				96	28				5
1,2-Dichloroethene - Total					<5					

Notes

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) * indicates that the sum of these two analytes may not exceed 500 $\mu\text{g/L}$.
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) ** Indicates standard applies to the sum of the isomers

City of Rome
Tonnerry Road Landfill
Leachate Well MW-12
Analytical Data

Parameter	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	NYSDEC Ground Water Standard
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Field Parameters

Conductivity (µmhos/cm)	3,400	3,430	3,850	3,900	4,470	4,770	4,560	4,940	4,080	3,820	4,100	5,090	4,750	4,490	5,700	4,430	4,820	4,500	4,550	4,600	4970	NS
pH (s.u.)	6.12	6.74	6.69	6.7	6.64	7.01	6.54	6.5	6.56	6.54	6.75	6.65	6.42	6.66	7.1	6.7	6.7	6.64	6.79	7.1	6.57	6.5 - 8.5
Temperature (deg C)	12.2	17.8	15.3	12	10.9	16	14.8	9.4	11.7	18.4	14.1	11.9	12.2	14.5	17	10.3	7.5	18.2	15.4	10	11.3	NS
Turbidity (NTU)	228	368	678	650	351	153	268	180	150	432	315	125	53	25	350	243	111	253	4	150	83	5

Part 360 Leachate Indicator Parameters

Ammonia-Nitrogen (mg/L)	150	120	170	160	210	260	250	250	200	190	240	270	200	210	220	200	240	280	270	230	300	2
Biochemical Oxygen Demand (BOD5) (mg/L)	17	34	16	16	34	37	30	29		5.5	40	25	<20.0	18	46	37	28	22	25	<20	29	NS
Bromide (mg/L)	2.1	<0.2	<2.0	5.1	4.47	4.8	5.4	5.7	4.2	3.9	3.9	4.3	4.4	4.5	4.8	4.8	5.2	4.4	5.2	4.8	5	2
Chemical Oxygen Demand (mg/L)	170	370	<10.0	270	380	400	440	440	360	170	31	240	97	280	410	400	360	420	430	380	720	NS
Chloride (mg/L)	280	330	320	330	370	500	410	510	320	330	460	330	350	340	470	460	320	370	350	290	370	250
Color (Pt-Co)		580					300					750	1500					750				15
Nitrate-Nitrogen (mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	0.21	<0.1	0.15	0.17	0.26	0.16	<0.1	0.38	0.19	0.2	0.25	0.28	0.19	0.19	0.41	0.55	10
Sulfate (mg/L)	180	6	11	<5.0	53	1.9	1.5	1.4	2.3	2.8	3	<1.0	2.3	1.9	2.2	2.5	2.2	2.3	2.2	2.6	2	250
Total Alkalinity (mg/L)	1400	1600	280	1400	990	990	1800	1800	1300	1700	1800	1800	1600	1800	1800	1700	1,900	1,800	1,700	1,700	1800	NS
Total Cyanide (mg/L)		<0.01					<0.01					<0.01						<0.01				0.2
Total Dissolved Solids (mg/L)	1500	1400	1630	1750	1830	2100	1900	2000	1800	1700	1700	2000	1700	1900	1900	1800	1,900	2,000	1,800	1,800	1800	500
Total Hardness (mg/L)	652	620	831	635	596	540	620	630	620	620	660	580	650	620	630	660	600	590	720	540	460	NS
Total Kjeldahl Nitrogen (mg/L)	160	180	170	160	200	260	280	270	210	190	230	250	210	200	240	220	270	330	270	280	270	NS
Total Organic Carbon (mg/L)	89	90	270	107	37.3	140	120	150	130	130	140	120	150	160	160	180	150	100	150	160	140	NS
Total Phenols (mg/L)	0.03	0.027	0.034	0.033	0.027	0.019	<0.002	0.02	0.02	0.024	0.021	0.02	0.019	0.024	0.021	0.017	<0.002	0.014	0.014	0.018	0.022	0.001

Part 360 Metals

Boron (mg/L)		2.7				3.4	3.4															
Cadmium (mg/L)	0.0058	0.0061	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	2.3	2.8	3	3.1	3	3	<0.01	<0.01	3.2	4	3	3	1
Calcium (mg/L)	133	120	172	117	110	93	110	110	110	100	120	100	110	110	110	120	100	100	130	97	<0.010	0.005
Iron (mg/L)	57.2	54.9	58.4	57.1	51.6	52	59	59	58	56	65	54	55	50	57	54	52	50	67	47	44	0.3*
Lead (mg/L)	0.0096	0.0061	0.022	0.011	0.012	<0.01	<0.01	0.026	<0.01	<0.01	<0.01	0.018	<0.01	<0.01	<0.01	0.018	0.015	<0.01	0.018	0.011	0.015	0.025
Magnesium (mg/L)	77.8	76.8	97.6	83.4	78	76	84	89	82	86	90	80	88	86	88	90	82	83	98	73	64	35 (GV)
Manganese (mg/L)	0.447	0.356	0.73	0.39	0.39	0.28	0.36	0.37	0.35	0.35	0.45	0.4	0.4	0.36	0.45	0.46	0.35	0.36	0.47	0.35	0.29	0.3*
Potassium (mg/L)	167	190	190	160	180	260	260	300	190	210	200	220	210	220	220	210	250	320	280	260	270	NS
Sodium (mg/L)	246	285	310	240	280	350	340	480	340	450	400	280	440	430	410	430	340	360	490	300	330	20

Part 360 Additional Baseline Metals

Aluminum (mg/L)		0.854					2.1					1.8	0.7					0.74				NS
Antimony (mg/L)		<0.015					0.031					<0.01	<0.01					0.01				0.003
Arsenic (mg/L)		0.351					0.4					0.4	0.35					0.041				0.025
Barium (mg/L)		<0.003					<0.01				<0.01	<0.01	<0.01	<0.01				<0.01				1
Chromium (mg/L)		<0.005					0.019					0.012	<0.01					0.015				0.003 (GV)
Chromium, Hexavalent (mg/L)		<0.01					<0.01					<0.01	<0.01					<0.01				0.05
Cobalt (mg/L)		<0.02					0.014					0.012	<0.01					0.012				NS
Copper (mg/L)		<0.01					0.014					<0.01	<0.01					<0.01				0.2
Mercury (mg/L)		<0.0002					<0.0002					0.0003	0.005					<0.0002				0.0007
Nickel (mg/L)		<0.03					0.039					0.031	0.024					0.036				0.1
Selenium (mg/L)		<0.005					<0.01					<0.01	<0.01					<0.01				0.01
Silver (mg/L)		<0.01					<0.01					<0.01	<0.01					<0.01				0.05
Thallium (mg/L)		<0.01					<0.01					<0.1	<0.01					0.014				0.0005 (GV)
Vanadium (mg/L)		<0.3					0.02					0.02	0.012					0.023				NS
Zinc (mg/L)		0.0388					0.13					0.071	0.022					0.046				2

Part 360 Volatile Organics

1,1,1,2-Tetrachloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				5
1,1,1-Trichloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				5
1,1,2,2-Tetrachloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				5
1,1,2-Trichloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				1
1,1-Dichloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				5
1,1-Dichloroethene (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				5
1,2,3-Trichloropropane (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				0.04
1,2-Dibromo-3-chloropropane (µg/L)		<10.0					<5.0					<5.0	<5.0					<5				0.04
1,2-Dibromoethane (EDB) (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				5
1,2-Dichlorobenzene (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				3
1,2-Dichloroethane (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				0.6
1,2-Dichloropropane (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				1
1,3-Dichlorobenzene (µg/L)		<5.0					<5.0					<5.0	<5.0					<5				3
1,4-Dichloro-2-butene (µg/L)		<10.0					<5.0					<5.0	<5.0					<5				5
1,4-Dichlorobenzene (µg/L)		1					<5.0					<5.0	<5.0					<5				3

City of Rome
Tannery Road Landfill
Leachate Well MW-12
Analytical Data

Parameter	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	NYSDEC Ground Water Standard
2-Butanone (MEK) (µg/L)	<10.0							<10.0	<10.0				<10	<10				50 (GV)
2-Hexanone (µg/L)	<10.0							<10.0	<10.0				<10	<10				50 (GV)
4-Methyl 2-pentanone (µg/L)	<10.0							<10.0	<10.0				<10	<10				NS
Acetone (µg/L)	<10.0							15	16				11	13				50 (GV)
Acrylonitrile (µg/L)	<100.0							<20.0	<20.0				<20.0	<20				5
Benzene (µg/L)	10							33	35				40	34				1
Bromochloromethane (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
Bromodichloromethane (µg/L)	<5.0							<5.0	<5.0				<5	<5				50 (GV)
Bromoform (µg/L)	<5.0							<5.0	<5.0				<5	<5				50 (GV)
Bromomethane (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
Carbon disulfide (µg/L)	<68							<5.0	<5.0				<5	<5				60 (GV)
Carbon tetrachloride (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
Chlorobenzene (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
Chloroethane (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
Chloroform (µg/L)	<5.0							<5.0	<5.0				<5	<5				7
Chloromethane (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
cis-1,2-Dichloroethene (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
cis-1,3-Dichloropropene (µg/L)	<5.0							<5.0	<5.0				<5	<5				0.4**
Dibromochloromethane (µg/L)	<5.0							<5.0	<5.0				<5	<5				50 (GV)
Dibromomethane (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
Ethyl benzene (µg/L)	2							<5.0	<5.0				<5	<5				5
Iodomethane (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
Methylene Chloride (µg/L)	<5.0							<20.0	<10.0				<10	<10				5
Styrene (µg/L)								<5.0	<5.0				<5	<5				5
Tetrachloroethene (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
Toluene (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
trans-1,2-Dichloroethene (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
trans-1,3-Dichloropropene (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
trans-1,4-Dichloro-2-butene (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
Trichloroethene (µg/L)	<5.0							<50.0	<10.0				<5	<5				0.4**
Trichlorofluoromethane (µg/L)								<5.0	<5.0				<5	<10				5
Vinyl Acetate (µg/L)	<5.0							<5.0	<5.0				<5	<5				5
Vinyl Chloride (µg/L)	<50.0							<5.0	<5.0				<5	<5				5
Xylenes (Total) (µg/L)	<5.0							<20.0	<20.0				<5	<20				NS
1,2-Dichloroethene - Total	15							26	17				11	<5				2
														<5				5

- Notes
- 1) < indicates not detected at or above the listed value
 - 2) NS indicates that no standard has been promulgated.
 - 3) * indicates that the sum of these two analytes may not exceed 500 µg/L.
 - 4) GV indicates that the value listed is a guidance value rather than a standard.
 - 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
 - 6) ** Indicates standard applies to the sum of the isomers

FIGURES

TANNERY ROAD LANDFILL
CITY OF ROME, NEW YORK

DELAWARE
ENGINEERING, P.C.
CIVIL AND ENVIRONMENTAL ENGINEERING

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