

Division of Environmental Remediation

2000 O&M Report
Patton's Busy Bee Disposal Site
Town of Alfred, Allegany County
Site Number 9-02-014

February 2001

2000 Operation and Maintenance Report

Patton's Busy Bee Disposal Site Site #902014



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Section I Executive Summary

In accordance with the 1996 Record of Decision for the Busy Bee Disposal site, the New York State Department of Environmental Conservation (DEC), Region 9 Division of Environmental Remediation (DER) staff have performed the required Operation and Maintenance inspections and sampling of the landfill cap, monitoring wells and selected residential drinking water wells associated with the Busy Bee Landfill Disposal site as prescribed in the current Operation and Maintenance (O&M) Plan.

Semi-annual site inspections examined the landfill cap, monitoring well integrity, and overall site conditions. The Site Inspection reports can be found in Appendix A.

Eight residential water supply wells are utilized periodically for off-site groundwater monitoring. For the year 2000 monitoring, four of these eight wells were sampled by DEC staff on October 18, 2000. The results of this sampling suggests that no impact from the landfill can be detected. The New York State Department of Health (NYS DOH) letter to the residents regarding the recent sampling can be found in Appendix B, while the residential well sampling data information sheets are provided in Appendix C.

The site monitoring wells were purged and sampled either on 10/18/00 or 10/19/00 by DEC staff. Site monitoring well data does not indicate a significant off-site release or continued degradation of ground water quality. Refer to Appendix D for the monitoring well purging and sample logs.

The site's four leachate collection tanks are checked by Region 9 Solid and Hazardous Waste staff and a log of leachate levels is being maintained. Leachate removal was performed by a NYSDEC Emergency Spill Remediation contractor, Op-Tech Environmental Services Inc. During 2000, approximately 139,700 gallons of leachate was removed from the collection tanks and disposed at the City of Hornell Wastewater Treatment Plant. Leachate collection tank monitoring data and removal logs are found in Appendix E.

Mowing of the landfill cover was performed by NYSDEC Division of Operations during September 2000. All warning signs installed around the perimeter of the site are in place and undamaged. General site photo's are found in Appendix F.

Recommendations for the year 2001 include continuation of the leachate hauling program, continuation of the general O&M activities that include mowing of the landfill cover and general maintenance of the site. The private drinking water well located at 242 Hartsville Hill Road was sampled for the first time this year this year. The owner is constructing a new single family home at this location with occupancy expected in December 2000. Due to the fact that this location has not been sampled previously it is recommended that this well be sampled again in 2001.



Section II Site Inspection

Semi-annual Inspections of the Busy Bee landfill were conducted on April 10 and October 19, 2000 to satisfy the requirements of the Operation and Maintenance Manual (September 1997 with addenda dated April 1999 and March 2000).

In general, no significant problems were discovered that would impact the integrity of the landfill cover system or leachate management. There were no observed areas of erosion of the cover system nor observed breakouts of leachate on the side slopes of the landfill or the down gradient hill sides. The areas of previously observed leachate seeps were inspected and found to be clear of leachate. Site Inspection reports were completed for these site inspections and are contained in Appendix A.

Section III Residential Well Samples

On October 18, 2000 the selected residential water supply wells were sampled by the NYSDEC Region 9 Division of Environmental Remediation staff. Four of the eight homes were sampled in accordance with the new sampling schedule identified in the March 2000 addendum to the O&M plan. The next residential well sampling will occur in the fall of 2001.

Inorganic compounds were detected in all drinking wells at various concentrations. Inorganic compounds are naturally occurring and are expected to be detected in groundwater. Iron and manganese was found in Sample #D7 at levels above the NYSDOH standards for public drinking water supplies.

No site related volatile organic compounds have been detected in the drinking water of the sampled water supply wells.

The data from the sampling of the residential wells was reviewed by the NYS DOH. Letters dated January 5, 2001 were sent from the NYS DOH to the owners of the sampled residential wells explaining the results of the sampling. The NYS DOH evaluation letters can be found in Appendix B. The actual well sample results are kept in the Region 9 office and available upon request.

The following Table III-1 & III-2 are a summary of the data obtained from the residential well samples.

The Record of Decision dated October 1996 required a residential drinking water sampling program for three years and an evaluation of the data collected. The sampling schedule for the residential wells was changed by addendum to the O&M plan dated March 2000 and as listed below.

<u>Year</u>	<u>Residential Wells</u>
2000	D1, D3, D5 & D7
2001	D1, D2, D4, D6 & D8
2002	D1, D3, D5 & D7
2003	D1, D2, D4, D6 & D8

The residential well identified here as D7 was first sampled in 2000. The owner is constructing a new single family home at this location and occupancy is expected in December 2000. Due to the fact that this location has not been sampled previously it is recommended that this well be sampled again in 2001.

After the year 2003 sampling event the frequency of the sampling will again be evaluated and revisions recommended.

Please refer to Appendix C for the Residential Well Sampling Data Sheets.

Residential Well Sample Locations

October 2000

Sample #D1
XXXX Clark Rd.
Alfred Station, NY 14803
(607) 587-8379

Sample #D3
XXXX Clark Rd.
Alfred Station, NY 14803

Sample #D5
XXXX Crosby Creek Rd.
Hornell, NY 14843

Sample #D7
XXXX Hartsville Hill Rd.
Alfred Station, NY 14803
(Note: Sample ID is A883D8)

**TABLE III-1 RESIDENTIAL WATER WELLS
VOLATILE ORGANIC COMPOUNDS
(ug/l)**

Parameter	D1 10/18/00	D3 10/18/00	D5 10/18/00	D7 10/18/00	D10 (D3 dup) 10/18/00
Chloromethane	1.3 U	1.3U	1.3U	1.3U	1.3U
Vinyl Chloride	1.3 U	1.3U	1.3U	1.3U	1.3U
Chloroethane	1.3 U	1.3U	1.3U	1.3U	1.3U
Bromomethane	1.3 U	1.3U	1.3U	1.3U	1.3U
1,1-Dichloroethene	1.3 U	1.3U	1.3U	1.3U	1.3U
Methylene Chloride	2.3	2.3	2.3	2.3	2.3
1,1-Dichloroethane	1.3 U	1.3U	1.3U	1.3U	1.3U
1,2-Dichloroethene (total)	1.3 U	1.3U	1.3U	1.3U	1.3U
Chloroform	1.3 U	1.3U	1.3U	1.3U	1.3U
1,2-Dichloroethane	1.3 U	1.3U	1.3U	1.3U	1.3U
1,1,1-Trichloroethane	1.3 U	1.3U	1.3U	1.3U	1.3U
Benzene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trichloroethene	1.3 U	1.3U	1.3U	1.3U	1.3U
1,2-Dichloropropane	1.3 U	1.3U	1.3U	1.3U	1.3U
Bromodichloromethane	1.3 U	1.3U	1.3U	1.3U	1.3U
cis-1,3-Dichloropropene	1.3 U	1.3U	1.3U	1.3U	1.3U
Toluene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Chlorobenzene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Ethylbenzene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Xylene (total)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Styrene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Isopropyl benzene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
n-Propylbenzene	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Bromobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
o & p chlorotoluene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
tert-Butyl benzene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U

**TABLE III-1 RESIDENTIAL WATER WELLS
VOLATILE ORGANIC COMPOUNDS
(ug/l)**

Parameter	D1 10/18/00	D3 10/18/00	D5 10/18/00	D7 10/18/00	D10 (D3 dup) 10/18/00
1,2,4-Trimethylbenzene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
sec-Butyl benzene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
p-cymene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,3-dichlorobenzene	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
1,4-dichlorobenzene	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
n-Butyl benzene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,2-dichlorobenzene	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
hexachlorobutadiene	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Naphthalene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1, 2, 3 -Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

U- compound not detected

J - compound detected below sample quantitation limit

NS- No Sample Collected

**Table III-2 RESIDENTIAL WATER WELLS
INORGANIC COMPOUNDS
(ug/l)**

Parameter	D1 10/18/00	D3 10/18/00	D5 10/18/00	D7 10/18/00	D10 (dup D3) 10/18/00
Aluminum	60.1 B	90.7 B	73.3 B	109 B	49.3 B
Antimony	6.4 B	10.2 B	8.1 B	7.0 B	5.5 U
Arsenic	4.4 B	3.3 U	3.3 U	3.3 U	3.3 U
Barium	88.2 B	246	116 B	55.1 B	239
Beryllium	0.60 U	0.60 B	0.60 U	0.60 U	0.60 U
Cadmium	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Calcium	50600	46700	52300	53200	45100
Chromium	1.6 B	1.0 U	1.0 U	1.0 U	1.0 U
Cobalt	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Copper	1.9 B	13.2 B	1.9 B	11.8 B	1.0 U
Iron	141	35.6	20.0 U	2740	20.0 U
Lead	2.6 U	2.6 U	2.6 U	3.3	2.6 U
Magnesium	21800	18,600	18,300	20700	18000
Manganese	36.1	1.0 U	1.7 B	382	1.0 U
Mercury	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Nickel	1.5 U	2.3 B	1.5 U	6.8 B	1.5 U
Potassium	2420 B	2410 B	2020 B	2220 B	2340 B
Selenium	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Sodium	9730	4930 B	8140	7180	5040
Thallium	5.0 U	5.0 U	5.0 U	6.4 B	5.0 U
Vanadium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Zinc	10.0 B	16.4 B	16.4 B	21.6	15.0 B

U- not detected at or above detection limit
B - detected below contract required detection limit
Shaded areas indicated exceedence of NYSDEC Ground Water Standards

Section IV Site Monitoring Wells

On October 19, 2000 the on-site monitoring wells were sampled by the NYSDEC Region 9 Division of Environmental Remediation staff. Each well was purged by either a dedicated hand bailer or a Grundfos pump to remove stagnant water from the well casing and allow fresh formation water to enter the well.

Low levels of volatile organic compounds were detected in MW-101D, MW-103D, MW-103I and MW-104I;

- Chlorobenzene and Dichlorodifluoromethane in MW-101D at 6.6 and 13 ug/l respectively.
- Cis-1,2-Dichloroethene and trichloroethene in MW-103D at 20 ug/l and 6.6 ug/l respectively.
- Cis-1,2-Dichloroethene and trichloroethene in MW-103I at 28 ug/l and 9.2 ug/l respectively.
- Cis-1,2-Dichloroethene and trichloroethene in MW-104I at 15 ug/l and 5 ug/l respectively

The NYSDEC groundwater standard for these compounds is 5 ug/l. These compounds were detected in previous sampling events at similar concentrations.

Inorganic compounds were detected in all monitoring wells at various concentrations. Inorganic compounds are naturally occurring and are expected to be detected in groundwater. However the following compounds were detected above the NYSDEC groundwater standards;

- Antimony was detected in MW-102D, MW-104D, MW-107IR, MW-107SR and MW-113 ranging from 5 to 36.2 ug/l. The antimony standard is 3 ug/l
- Arsenic was detected in MW-107IR and MW-107SR at 207 and 34.2 ug/l respectively. The arsenic standard is 25 ug/l.
- Barium was detected in MW-107IR at 2750 ug/l. The barium standard is 1000 ug/l.
- Beryllium was detected in MW-107IR at 19.6 ug/l. The beryllium standard is 3 ug/l.
- Chromium was detected in MW-107IR at 534 ug/l. The chromium standard is 50 ug/l.
- Copper was detected in MW-107IR at 421 ug/l. The copper standard is 200 ug/l.
- Iron was detected in every monitoring well except MW-102D ranging from 408 ug/l to 791,000 ug/l. The iron standard is 300 ug/l.
- Lead was detected in MW-107IR and MW-113 at 319 and 31 ug/l respectively. The lead standard is 25 ug/l.
- Manganese was in MW-101D, MW-101I, MW-104D, MW-107IR, MW-107SR and MW-113 ranging from 564 ug/l to 9770 ug/l. The standard for manganese is 300 ug/l.
- Nickel was detected in MW-107IR at 706 ug/l. The nickel standard is 100 ug/l.
- Sodium was detected in MW-101D at 57,900 ug/l. The sodium standard is 20,000 ug/l.
- Selenium was detected in MW-107IR at 28.7 ug/l. The selenium standard is 10 ug/l.

The concentration of inorganics in MW-107 cluster is noteworthy and will be watched closely in the upcoming annual monitoring events. MW-107 cluster is adjacent to the former Henry landfill.

The attached Tables IV-1, IV-2 & IV-3 provide a summary of the compounds detected in each well. The actual laboratory data sheets are maintained in the NYSDEC Region 9 Buffalo office and are available for review if requested.

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**TABLE IV-1 MONITORING WELLS
VOLATILE ORGANIC COMPOUNDS
(ug/l)**

Parameter (Std/guidance)	MW-101D 10/19/00	MW-101I 10/19/00	MW-102D 10/19/00	MW-103D 10/19/00	MW-103I 10/19/00
Bromochloromethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Bromodichloromethane (50 guidance)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Bromoform (50 guidance)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (5.0)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Chlorobenzene (5.0)	6.6	0.40 U	0.40 U	0.40 U	0.40 U
Dibromochloromethane (50 guidance)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Chloroethane (5.0)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (7.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (0.04)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,2-Dichlorobenzene (3.0)	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
1,3-Dichlorobenzene (3.0)	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
1,4-Dichlorobenzene (3.0)	0.90	0.40 U	0.40 U	0.40 U	0.40 U
Dichlorodifluoromethane (5.0)	13	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.23
1,2-dichloroethane (0.6)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1-Dichloroethene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
cis-1,2-dichloroethene (5.0)	0.20 U	0.20 U	0.20 U	20	28
trans-1,2-Dichloroethene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,2-Dichloropropane (1.0)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2,2-Dichloropropane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1-Dichloropropene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
*cis-1,3-Dichloropropene (0.4)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
*trans-1,3-Dichloropropene (0.4)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene (0.5)	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Methylene chloride (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1,1,2-Tetrachloroethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1,2,2-Tetrachloroethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Tetrachloroethene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1,1-Trichloroethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1,2-Trichloroethane (1.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trichloroethene (5.0)	0.20 U	0.20 U	0.20 U	6.6	9.2

TABLE IV-1 (cont.) MONITORING WELLS
VOLATILE ORGANIC COMPOUNDS
(ug/l)

Parameter (<i>Std/guidance</i>)	MW-101D 10/19/00	MW-101I 10/19/00	MW-102D 10/19/00	MW-103D 10/19/00	MW-103I 10/19/00
Trichlorofluoromethane (5.0)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane (0.04)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride (2.0)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

U- compound not detected

J - compound detected below sample quantitation limit

Shaded areas indicate exceedence of NYSDEC groundwater standards

italics indicates guidance value

* cis-1,3-dichloropropene and trans-1,3-dichloropropene total not to exceed 0.40 ug/l

TABLE IV-1 (cont.) MONITORING WELLS
VOLATILE ORGANIC COMPOUNDS
(ug/l)

Parameter (Std/guidance)	MW-104D 10/19/00	MW-104I 10/19/00	MW-107IR 10/19/00	MW-107SR 10/19/00	MW-108D 10/19/00
Bromochloromethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Bromodichloromethane (50 guidance)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Bromoform (50 guidance)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (5.0)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Chlorobenzene (5.0)	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Dibromochloromethane (50 guidance)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Chloroethane (5.0)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (7.0)	0.20 U	0.64	0.20 U	0.20 U	0.20 U
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (0.04)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,2-Dichlorobenzene (3.0)	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
1,3-Dichlorobenzene (3.0)	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
1,4-Dichlorobenzene (3.0)	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Dichlorodifluoromethane (5.0)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,2-Dichloroethane (0.6)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1-Dichloroethene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
cis-1,2-dichloroethene (5.0)	0.57	15	0.20 U	0.20 U	0.20 U
trans-1,2-Dichloroethene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,2-Dichloropropane (1.0)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
2,2-Dichloropropane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1-Dichloropropene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
*cis-1,3-Dichloropropene (0.4)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
*trans-1,3-Dichloropropene (0.4)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobutadiene (0.5)	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Methylene chloride (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1,1,2-Tetrachloroethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1,2,2-Tetrachloroethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Tetrachloroethene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1,1-Trichloroethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
1,1,2-Trichloroethane (1.0)	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trichloroethene (5.0)	0.20 U	5.0	0.20 U	0.20 U	0.20 U

TABLE IV-1 (cont.) MONITORING WELLS
VOLATILE ORGANIC COMPOUNDS
(ug/l)

Parameter (Std/guidance)	MW-104D 10/19/00	MW-104I 10/19/00	MW-107IR 10/19/00	MW-107SR 10/19/00	MW-108D 10/19/00
Trichlorofluoromethane (5.0)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane (0.04)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride (2.0)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

U- compound not detected

J - compound detected below sample quantitation limit

Shaded areas indicate exceedence of NYSDEC groundwater standards

italics indicates guidance value

* cis-1,3-dichloropropene and trans-1,3-dichloropropene total not to exceed 0.40 ug/l

**TABLE IV-1 MONITORING WELLS
VOLATILE ORGANIC COMPOUNDS
(ug/l)**

Parameter (Std/guidance)	MW-108D 10/19/00	MW-109 10/19/00	Dup MW-109 10/19/00	MW-113 10/19/00	
Bromochloromethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
Bromodichloromethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
Bromoform (5.0 guidance)	1.0 U	1.0 U	1.0 U	1.0 U	
Bromomethane (5.0)	1.0 U	1.0 U	1.0 U	1.0 U	
Carbon Tetrachloride (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
Chlorobenzene (5.0)	0.40 U	0.40 U	0.40 U	0.40 U	
Dibromochloromethane (5.0 guidance)	0.20 U	0.20 U	0.20 U	0.20 U	
Chloroethane (5.0)	1.0 U	1.0 U	1.0 U	1.0 U	
Chloroform (7.0)	0.20 U	0.20 U	0.20 U	0.20 U	
Chloromethane	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dibromo-3-chloropropane (0.04)	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	1.0 U	
Dibromomethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
1,2-Dichlorobenzene (3.0)	0.40 U	0.40 U	0.40 U	0.40 U	
1,3-Dichlorobenzene (3.0)	0.40 U	0.40 U	0.40 U	0.40 U	
1,4-Dichlorobenzene (3.0)	0.40 U	0.40 U	0.40 U	0.40 U	
Dichlorodifluoromethane (5.0)	1.0 U	1.0 U	1.0 U	1.0 U	
1,1-Dichloroethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
1,2-Dichloroethane (0.6)	0.20 U	0.20 U	0.20 U	0.20 U	
1,1-Dichloroethene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
cis-1,2-dichloroethene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
trans-1,2-Dichloroethene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
1,2-Dichloropropane (1.0)	1.0 U	1.0 U	1.0 U	1.0 U	
1,3-Dichloropropane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
2,2-Dichloropropane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
1,1-Dichloropropene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
*cis-1,3-Dichloropropene (0.4)	0.20 U	0.20 U	0.20 U	0.20 U	
*trans-1,3-Dichloropropene (0.4)	0.20 U	0.20 U	0.20 U	0.20 U	
Hexachlorobutadiene (0.5)	0.40 U	0.40 U	0.40 U	0.40 U	
Methylene chloride (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
1,1,1,2-Tetrachloroethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
1,1,2,2-Tetrachloroethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
Tetrachloroethene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
1,1,1-Trichloroethane (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	
1,1,2-Trichloroethane (1.0)	0.20 U	0.20 U	0.20 U	0.20 U	
Trichloroethene (5.0)	0.20 U	0.20 U	0.20 U	0.20 U	

TABLE IV-1 (cont.) MONITORING WELLS
VOLATILE ORGANIC COMPOUNDS
(ug/l)

Parameter (Std/guidance)	MW-108D 10/19/00	MW-109 10/19/00	Dup MW-109 10/19/00	MW-113 10/19/00	
Trichlorofluoromethane (5.0)	1.0 U	1.0 U	1.0 U	1.0 U	
1,2,3-Trichloropropane (0.04)	1.0 U	1.0 U	1.0 U	1.0 U	
Vinyl Chloride (2.0)	1.0 U	1.0 U	1.0 U	1.0 U	

U- compound not detected

J - compound detected below sample quantitation limit

Shaded areas indicate exceedence of NYSDEC groundwater standards

italics indicates guidance value

* cis-1,3-dichloropropene and trans-1,3-dichloropropene total not to exceed 0.40 ug/l

**Table IV-2 MONITORING WELLS
INORGANIC COMPOUNDS
(ug/l)**

Parameter (std/guidance)	MW-101D 10/19/00	MW-101I 10/19/00	MW-102D 10/19/00	MW-103D 10/19/00	MW-103I 10/19/00
Aluminum	43.6 B	8500	292	2470	780
Antimony (3)	5.0 U	5.0 U	5.0 B	5.0 U	5.0 U
Arsenic (25)	11.9	6.9 B	3.4 U	3.4 U	3.4 U
Barium (1000)	623 E	175 BE	81.0 BE	72.8 BE	59.6 BE
Beryllium (3)	0.50 U	0.57 B	0.50 U	0.50 U	0.50 U
Cadmium (5)	0.60 U	0.60 U	4.5 B	2.5 B	2.0 B
Calcium	135,000 E	81,300 E	43,200 E	20,900 E	19,400 E
Chromium (50)	2.0 B	9.0 B	1.2 U	1.8 B	1.2 U
Cobalt	5.4 B	6.9 B	1.0 U	1.5 B	1.0 U
Copper (200)	1.7 B	13.8 B	5.8 B	4.0 B	1.3 B
Iron (300)	1270	9190	249	2600	869
Lead (25)	2.6 U	4.9	2.6 U	4.5	4.7
Magnesium (35,000 guidance)	82,000 E	35,400 E	14,500 E	7,550 E	5,970 E
Manganese (300)	7,200 E	564 E	8.9 BE	94.9 E	37.1 E
Mercury (0.7)	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Nickel (100)	9.1 B	9.6 B	1.5 U	2.8 B	1.5 U
Potassium	11,900	7,810	2,620 B	2,590 B	1,910 B
Selenium (10)	7.3	5.0 U	5.0 U	5.0 U	5.0 U
Silver (50)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Sodium (20000)	57,900	6,700	3,960 B	4,140 B	4,290 B
Thallium (0.5 guidance)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vanadium	1.0 U	13.5 B	1.0 U	3.8 B	1.1 B
Zinc (2000 guidance)	8.0 B	47.4	12.6 B	13.2 B	9.8 B

U- not detected at or above detection limit

B - detected below contract required detection limit

E - value estimated due to interference

* - indicates duplicate analysis not within control limits

Shaded Area indicates exceedence of NYSDEC Ground Water Standards

Table IV-2 (cont) MONITORING WELLS
INORGANIC COMPOUNDS
(ug/l)

Parameter (std/guidance)	MW-104D 10/19/00	MW-104I 10/19/00	MW-107IR 10/19/00	MW-107SR 10/19/00	MW-108D 10/5/99
Aluminum	35,300	3,960	352,000	41,900	303
Antimony (3)	8.0 B	5.0 U	36.2 B	5.8 B	5.0 U
Arsenic (25)	32.7	3.4 U	207	34.2	3.4 U
Barium (1000)	334 E	109 BE	2,750 E	410 E	102 BE
Beryllium (3)	2.3 B	0.50 U	19.6	2.8 B	0.50 U
Cadmium (5)	0.60 U	0.60 U	2.2 B	0.60 U	0.76 B
Calcium	53,900 E	35,300 E	112,000 E	54,100 E	20,900 E
Chromium (50)	41.1	3.8 B	534	45.7	1.2 U
Cobalt	36.8 B	2.3 B	312	26.4 B	1.0 U
Copper (200)	57.1	6.7 B	421	48.2	2.9 B
Iron (300)	62,000	3,790	791,000	64,000	915
Lead (25)	59.7	6.7	319	20.3	2.6 U
Magnesium (35,000 guidance)	38,900 E	8,910 E	157,000 E	18,000 E	12,000 E
Manganese (300)	1,090 E	98.6 E	9,770 E	1,270 E	164 E
Mercury (0.7)	0.15 U	0.15 U	0.23 B	0.15 U	0.15 U
Nickel (100)	57.7	4.2 B	706	52.2	1.5 U
Potassium	14,000	3,260 B	55,200	14,200	2660 B
Selenium (10)	9.1	5.0 U	28.7	5.0 U	5.0 U
Silver (50)	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Sodium (20000)	5480	8,690	12,700	5,430	3,910 B
Thallium (0.5 guidance)	5.0 U	5.0 U	36.0	5.0 U	5.0 U
Vanadium	47.6 B	6.6 B	411	60.1	1.0 U
Zinc (2000 guidance)	145	71.1	1,470	142	15.8 B

U- not detected at or above detection limit

B - detected below contract required detection limit

E - value estimated due to interference

*- Duplicate analysis not within control limits

Shaded Area indicates exceedence of NYSDEC Ground Water Standards

Table IV-2 (cont) MONITORING WELLS
INORGANIC COMPOUNDS
(ug/l)

Parameter (std/guidance)	MW-108I 10/19/00	MW-109 10/19/00	Duplicate MW-109 10/19/00	MW-113 10/19/00	
Aluminum	382	119 B	98.1 B	19,400	
Antimony (3)	5.0 U	5.0 U	5.0 U	5.2 B	
Arsenic (25)	3.4 U	3.4 U	3.4 U	17.3	
Barium (1000)	60.8 BE	81.2 BE	85.1 BE	166 BE	
Beryllium (3)	0.50 U	0.50 U	0.50 U	1.2 B	
Cadmium (5)	0.60 U	0.60 U	0.60 U	2.5 B	
Calcium	33,300 E	23,900 E	25,500 E	67,100 E	
Chromium (50)	1.2 U	1.2 U	1.2 U	28.0	
Cobalt	1.0 U	1.0 U	1.0 U	19.2 B	
Copper (200)	2.3 B	3.2 B	4.3 B	109	
Iron (300)	408	1110	912	43,700	
Lead (25)	2.6 U	2.6 U	2.6 U	31.0	
Magnesium (35,000 guidance)	17,600 E	9,090 E	9,330 E	26,600 E	
Manganese (300)	8.8 BE	98.5 E	107 E	1210 E	
Mercury (0.7)	0.15 U	0.15 U	0.15 U	0.15 U	
Nickel (100)	1.5 U	1.6 B	1.7 B	42.3	
Potassium	3,290 B	2,560 B	2,580 B	12,900	
Selenium (10)	5.0 U	5.0 U	5.0 U	5.0 U	
Silver (50)	1.5 U	0.15 U	1.5 U	1.5 U	
Sodium (20000)	3,300 B	3900 B	3920 B	5550	
Thallium (0.5 guidance)	5.0 U	5.0 U	5.0 U	5.0 U	
Vanadium	1.0 U	1.0 U	1.0 U	26.7 B	
Zinc (2000 guidance)	11.3 B	12.2 B	16.9 B	248	

U- not detected at or above detection limit

B - detected below contract required detection limit

E - value estimated due to interference

*- Duplicate analysis not within control limits

N - Spiked sample recovery not within control limits

Shaded Area indicates exceedence of NYSDEC Ground Water Standards

Section V Leachate Management

The leachate generated from the Patton's Busy Bee landfill is collected in four on site underground collection tanks. Staff from the Region 9 Division's of Solid and Hazardous Waste and Environmental Remediation monitor the leachate levels in the tanks approximately once a month. During periods of high leachate generation (spring & early summer) the tanks are checked more frequently. Conversely, during the winter months accessibility to the tanks is restricted due to weather conditions and therefore less frequent monitoring can be performed.

Based on the results of the tank monitoring, leachate is removed by a contracted leachate hauler when the leachate levels reach at least 75% capacity in any one of the tanks. During 2000, approximately 139,700 gallons of leachate was removed from the collection tanks and disposed at the City of Hornell Wastewater Treatment plant. During the 2000 calender year the leachate was removed by a NYSDEC Spill Remediation contractor, Op-Tech Environmental Services, Inc. because the normal leachate hauling contracts were not renewed. The NYSDEC has entered into a new 3 year contract with a local contractor to remove leachate from the site. The new contract was awarded in January 2001.

The following tables provide information on the leachate monitoring and removal activities. A sample from leachate tank BB-T1S was collected on 10/19/00 and is summarized in Table V-1 & V-2. The actual data is located in the Region 9 office and will be provided upon request.

Please refer Appendix E for Leachate Collection Tank Monitoring and Leachate Removal Logs.

**TABLE V-1 Leachate Collection Tank
Volatile Organic Compounds
(ug/l)**

Parameter	BB-T2-S 10/19/00
Bromochloromethane	0.20 U
Bromodichloromethane	0.20 U
Bromoform	1.0 U
Bromomethane	1.0 U
Carbon Tetrachloride	0.20 U
Chlorobenzene	0.40 U
Dibromochloromethane	0.20 U
Chloroethane	1.0 U
Chloroform	0.20 U
Chloromethane	1.0 U
1,2-Dibromo-3-chloropropane	1.0 U
1,2-Dibromoethane	1.0 U
Di Bromomethane	0.20 U
1,2-Dichlorobenzene	0.40 U
1,3-Dichlorobenzene	0.40 U
1,4-Dichlorobenzene	0.54
Dichlorodifluoromethane	3.1
1,1-Dichloroethane	2.5
1,2-Dichloroethane	0.20 U
1,1-Dichloroethene	0.21
cis-1,3-dichloroethene	57
trans-1,2-Dichloroethene	3.9
1,2-Dichloropropane	1.0 U
1,3-Dichloropropane	0.20 U
2,2-Dichloropropane	0.20 U
1,1-Dichloropropene	0.64
cis-1,3-Dichloropropene	0.20 U
trans-1,3-Dichloropropene	0.20 U
Hexachlorobutadiene	0.40 U
Methylene chloride	0.20 U
1,1,1,2-Tetrachloroethane	0.20 U
1,1,2,2-Tetrachloroethane	0.20 U
Tetrachloroethene	0.20 U
1,1,1-Trichloroethane	1.0
1,1,2-Trichloroethane	0.20 U

Trichloroethene	30
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**TABLE V-1 (cont.) Leachate Collection Tank
Volatile Organic Compounds
(ug/l)**

Parameter	BB-T2-S 10/19/00
Trichlorofluoromethane	1.0 U
1,2,3-Trichloropropane	1.0 U
Vinyl Chloride	26

U- compound not detected

J - indicates an estimated value

**TABLE V-2 Leachate Collection Tank
Inorganic Compounds
(ug/l)**

Parameter	BB-T2S 10/19/00
Aluminum	35.7 B
Antimony	5.0 U
Arsenic	3.4 U
Barium	452 E
Beryllium	0.50 U
Cadmium	0.60 U
Calcium	160,000 E
Chromium	1.9 B
Cobalt	4.8 B
Copper	2.1 B
Iron	8,890
Lead	2.8 B
Magnesium	87,900 E
Manganese	3,720 E
Mercury	0.15 U
Nickel	16.5 B
Potassium	80,700
Selenium	5.0 U
Silver	1.5 U
Sodium	396,000
Thallium	5.0 U
Vanadium	1.0 U
Zinc	18.0 B

U- not detected at or above detection limit

B - detected below contract required detection limit

E - value estimated due to interference

*- Duplicate analysis not within control limits

Section VI Status of Previous Recommendations

As recommended in the 1998 O&M Report for the Busy Bee Disposal Site the removal of the leachate collected on site is continuing. Even with the lack of a contract for leachate hauling, the NYSDEC accomplished the leachate removal using a NYSDEC Spill Remediation contractor.

Four of the eight designated residential drinking water wells were sampled and the data has been evaluated by the NYS DOH. All on-site monitoring wells were sampled and the data has been evaluated.

Semi-annual inspections of the landfill were conducted.

The landfill cover was mowed in September 2000.

Warning signs are still in-place along the perimeter of the site to warn hikers and hunters of the presence of the Busy Bee Hazardous Waste Landfill.

Leachate from the Henry landfill continues to flow into the local road side ditches during wet weather conditions. This landfill is not part of the Patton's inactive Hazardous waste site.

Section VII 2001 Recommendations

The following activities are recommended for the 2001 Operation and Maintenance Year:

- The removal of leachate on an as needed basis must continue to ensure the landfill is maintained in as dry as state as possible. The buildup of leachate during the period prior to the RI investigation is suspected as the cause of the groundwater contamination associated with the Busy Bee Landfill.
- Sampling of the selected residential drinking water wells on a rotating biennial basis, with the exception of well D1, shall continue. The following schedule will be followed:

<u>Year</u>	<u>Residential Wells</u>
2000	D1, D3, D5 & D7
2001	D1, D2, D4, D6, D7 & D8
2002	D1, D3, D5 & D7
2003	D1, D2, D4, D6 & D8

Well D7 should be added to the sampling schedule for the year 2001 due to the new home constructed at this location and the fact that the well was missed the past three years due to lack of well access. After the completion of the 2003 sampling event, the sampling frequency will be re-evaluated.

- Sampling of the on-site monitoring wells must continue to evaluate the effectiveness of the landfill cap and leachate collection system.
- Continuation of the Semi-annual inspections of the landfill.

- The landfill cap will require mowing, minor repair of animal burrows and general maintenance of the site. The mowing should be accomplished in the fall of 2001.
- The Henry Landfill, located directly north of the Busy Bee and not part of this O&M activity, should be maintained by the NYSDEC Solid Waste unit. Leachate continues to seep from the landfill along the northern perimeter and flows into the drainage ditches along Clark Road. MW-107 cluster adjacent to the Henry Landfill has shown elevated inorganic concentrations that may be attributed to the Henry Landfill.
- Collect surface water and sediment samples for inorganic analysis from the pond located immediately down gradient of the Henry Landfill and MW-107 cluster.
- Collect leachate sample from the collection tank located on the Henry landfill for inorganic analysis.

Section VIII Conclusions

The inspection, leachate removal activities, monitoring well and private well sampling have been performed in accordance with the O&M Plan developed for this site. The analysis of data collected indicate that there is no evidence of migration of site related compounds from the Busy Bee Landfill area into the surrounding properties. The NYS DOH has concluded that the private wells sampled as part of this project have not been impacted by site related compounds.

REFERENCES

NYSDEC, 1994, Technical Guidance for Screening Contaminated Sediments: New York State Department of Environmental Conservation Division of Fish and Wildlife, Albany, New York, 36p.

NYSDEC, 1994, Water Quality Regulations, Surface Water and Groundwater Classifications and Standards, New York State Codes, Rules and Regulations Title 6, Chapter X Parts 700-705: New York State Department of Environmental Conservation, Albany, New York, 61p.

NYSDEC, 1995, Determination of Soil Cleanup Objectives and Cleanup Levels: New York State Department of Environmental Conservation Division of Environmental Remediation Technical and Administrative Guidance Memorandum # HWR-95-4046, Albany, New York, 9p.

NYSDEC, 1995, Identification and Listing of Hazardous Wastes, New York State Codes, Rules and Regulations Title 6, Part 371: New York State Department of Environmental Conservation Division of Hazardous Substances Regulation, Albany, New York, 90p.

NYSDEC, 1996, Record of Decision, Patton's Busy Bee Disposal Site, Town of Alfred, Allegany County and Town of Hartsville, Steuben County, Site #902014

NYSDEC, 1997, Patton's Busy Bee Disposal Site, Town of Alfred, Allegany County, Town of Hartsville, Steuben County, Site #902014, Operation and Maintenance Manual

NYSDEC, 1998, Division of Water Technical and Operational Guidance Series (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations

URS Consultants, 1990, Engineering Investigation at Inactive Hazardous Waste Sites, Preliminary Site Assessment, Patton's Busy Bee Disposal Site, Site #902014, URS Corporation Buffalo New York

URS Consultants, 1995, Final Report, Remedial Investigation, Patton's Busy Bee Disposal Site, Site #902014, URS Corporation Buffalo New York

URS Consultants, 1996, Phase II Feasibility Study, Patton's Busy Bee Disposal Site, Site #902014, URS Corporation Buffalo New York

Appendix A

Semi-annual Inspection Reports

PATTON'S BUSY BEE DISPOSAL SITE

Alfred Station, New York

SITE NO. 9-02-014

SITE INSPECTION FORM

First Semi-Annual 2000

Name of Inspector: Brian P. Sadowski

Title: Senior Treatment Facility Operator

Date of Inspection: April 10, 2000

1. Leachate tanks being monitored regularly: ☒ Yes ☐ No
Date of last tank inspection: March 20, 2000. Date of most recent inspection: April 10, 2000

2. Access road condition: **G** Good **O** Fair **G** Poor

Comments: Fair condition upgradient and to BB-T1. Poor condition on top of cap and grade to BB-T2.

3. Vegetative cover: ☒ Good **G** Fair **G** Poor

Comments: Vegetation still dormant. At height from last 1999 mow by Operations.

4. Woody plants present on cap: **G** Yes ☒ No

5. Mowing required: **G** Yes **O** No

6. Condition of gas vents: ☒ Unobstructed **G** Obstructed **G** Damaged
G Missing

If damaged, describe:

7. Erosion of cap: ☒ None **G** Minor **G** Needs Repair
Describe repair needed:

8. Evidence of ponded water on cap: ☒ None **G** Suspected **G** Observed
Indicate location on map and describe:

9. Evidence of animal borrows on cap: ☒ No **G** Yes
If yes, backfill as required. Date backfilled:

10. Leachate seeps observed on cap: ☐ No ☒ Yes

If yes, indicate location(s) on site map. Describe appearance:

11. Other leachate seeps observed (not on cap): ☐ No ☒ Yes

If yes, indicate location(s) on site map. Describe appearance:

12. Litter present on or around landfill: ☒ No ☐ Yes

Comments: Two abandoned vehicles. Division of Operations out of Almond positioned them at the southeast corner of the site. Reference location is W-9. See map on previous reports.

13. Condition of monitoring wells. *Inspect each well and check boxes below as completed. All wells should be secured and locked. If damaged, identify well number and describe damage:*

☐ W-3	☐ W-8	☐ MW-101I	☐ MW-104I	☐ MW-107I
☐ W-4S	☐ W-9	☐ MW-101D	☐ MW-104D	☐ MW-108I
☐ W-4D	☐ W-10S	☐ MW-102I	☐ MW-105S	☐ MW-108D
☐ W-5	☐ W-10D	☐ MW-102D	☐ MW-105I	☐ MW-109
☐ W-6	☐ W-11	☐ MW-103I	☐ MW-106I	☐ MW-110
☐ W-7	☐ MW-101S	☐ MW-103D	☐ MW-107S	☐ MW-113

Additional Comments:

OP-TECH Environmental Services accompanied to site on 4/10/00. Suggested travel route for vac-trucks. Pointed out location of leachate tanks. OP-TECH to pump and dispose of up to 80,000 gal. of leachate when road conditions permit. Use of this contractor will continue until the long term pump and disposal contract is approved and awarded in Albany.

Send copies of completed form to:

Mr. Gerald Rider
NYSDEC Div. Env. Rem.
O&M Section
50 Wolf Road
Albany, NY 12233-7010

Mr. Michael Hinton
NYSDEC Div.of Env. Rem.
Region 9 Office
270 Michigan Avenue
Buffalo, NY 14203-2999

Ms. Mary Jane Peachey
NYSDEC Div.of Env. Rem.
Region 8 Office
6274 East Avon-Lima Road
Avon, NY 14414

PATTON'S BUSY BEE DISPOSAL SITE

Alfred Station, New York

SITE NO. 9-02-014

SITE INSPECTION FORM OCTOBER 2000

Name of Inspector: Michael J. Hinton
Title: Environmental Engineer II
Date of Inspection: October 19, 2000

1. Leachate tanks being monitored regularly: ☒ Yes ☐ No
Date of last tank inspection: October 19, 2000

2. Access road condition: ☒ Good ☒ Fair ☒ Poor

If poor, describe:

3. Vegetative cover: ☒ Good ☒ Fair ☒ Poor

If poor, describe:

4. Woody plants present on cap: ☒ Yes ☒ No

5. Mowing required: ☒ Yes ☒ No (mowed 9/20/00 by Div. Of Operations)

6. Condition of gas vents: ☒ Unobstructed ☒ Obstructed ☒ Damaged
☒ Missing

If damaged, describe: One gas vent up-heaved and tilted. Located near shed.

7. Erosion of cap: ☒ None ☒ Minor ☒ Needs Repair

Describe repair needed:

8. Evidence of ponded water on cap: ☒ None ☒ Suspected ☐ Observed
Indicate location on map and describe: Puddles observed in Power ROW. Not significant

9. Evidence of animal borrows on cap: ☒ No ☐ Yes
If yes, backfill as required. Date backfilled: Will address in spring of 2001

Page 1 of 2

10. Leachate seeps observed on cap: ☐ No ☒ Yes
If yes, indicate location(s) on site map. Describe appearance:

11. Other leachate seeps observed (not on cap): ☐ No ☒ Yes
If yes, indicate location(s) on site map. Describe appearance:

12. Litter present on or around landfill: ☒ No ☐ Yes
If yes, describe and indicate location(s) on site map:

13. Condition of monitoring wells. *Inspect each well and check boxes below as completed. All wells should be secured and locked. If damaged, identify well number and describe damage:*

☒ W-3	☒ W-8	☐ MW-101I	☐ MW-104I	☐ MW-107IR
☒ W-4S	☒ W-9	☐ MW-101D	☐ MW-104D	☐ MW-108I
☒ W-4D	☒ W-10S	☒ MW-102I	☒ MW-105S	☐ MW-108D
☒ W-5	☒ W-10D	☐ MW-102D	☒ MW-105I	☐ MW-109
☒ W-6	☒ W-11	☐ MW-103I	☒ MW-106I	☐ MW-113
☒ W-7	☒ MW-101S	☐ MW-103D	☐ MW-107SR	

Additional Comments:

Did not inspect un-used wells. Should consider formal abandonment of wells not used for long term monitoring.

Locks needed on MW-101 D&I, MW-104 D&I and MW-107 I&S

Long Term Monitoring of the groundwater wells and residential wells were completed on 10/19/2000.
Leachate Tanks BB-1 and BB-2 are partially full. Last pump out was 7/14/2000.

Send copies of completed form to:

Mr. Gerald Rider
NYSDEC Div. Env. Rem.
O&M Section
50 Wolf Road
Albany, NY 12233-7010

Michael Hinton
NYSDEC Div.of Env. Rem.
Region 9 Office
270 Michigan Avenue Buffalo,
NY. 14203

Ms. Mary Jane Peachey
NYSDEC Div. Of Env. Rem.
Region 8 Office
6274 East Avon-Lima Road
Avon, NY 14414

Appendix B

NYS DOH Resident Letter

Appendix C

Residential Well Sampling Data Sheets

RESIDENTIAL WELL SAMPLING

Form to be completed at time of sampling

DATE OF SAMPLING: **10/18/00**

TIME OF SAMPLING: **1345**

NAME OF SAMPLER: **Sadowski/Hinton/King** SAMPLE ID NUMBER: **A883-D1**

OWNER OF WELL:

Name: **Stephen Patton**

Telephone No.: **N/A**

Address: **5633 Clark Rd. Alfred Station NY 14803**

OCCUPANT OF HOUSE SERVED BY WELL (If other than owner):

Name: **Rented to College students**

Telephone No.: **Unknown**

Address:

WATER USE:

Domestic: **Yes** Number of persons using water: **3+**

Livestock: **No** Number and type of livestock:

Irrigation: **No** Acres Frequency

Other (specify)

WATER TREATMENT:

Chlorinator present? **No** Water Softener? **Yes**

Water Filter? **No** Type

Other (specify)

DESCRIBE WHERE WATER SAMPLE WAS OBTAINED: (e.g. outdoor faucet, kitchen tap) (Water should be sampled as close to well head as possible)

Sample collected from storage in basement before water softener

FUTURE USE: Are there any planned changes to current supply?

ADDITIONAL COMMENTS:

House up for sale, owner has moved to Texas. Home currently rented to college students.

RESIDENTIAL WELL SAMPLING

Form to be completed at time of sampling

DATE OF SAMPLING: **10/18/00**

TIME OF SAMPLING: **1400**

NAME OF SAMPLER: **Sadowski/Hinton**

SAMPLE ID NUMBER: **A883-D3**

OWNER OF WELL:

Name:

Telephone No.: **(607) 587-9104**

Address: **5771 Clark Rd. Alfred Station**

OCCUPANT OF HOUSE SERVED BY WELL (If other than owner):

Name:

Telephone No.:

Address:

WATER USE:

Domestic: **Yes**

Number of persons using water: **2**

Livestock: **Yes**

Number and type of livestock: **chickens**

Irrigation: **No**

Acres

Frequency

Other (specify)

WATER TREATMENT:

Chlorinator present? **No**

Water Softener? **No**

Water Filter? **No** Type

Other (specify)

DESCRIBE WHERE WATER SAMPLE WAS OBTAINED: (e.g. outdoor faucet, kitchen tap) (Water should be sampled as close to well head as possible)

Sample was collected from the kitchen sink

FUTURE USE: Are there any planned changes to current supply?

ADDITIONAL COMMENTS:

Duplicate sample collected at this location sample #A883-D10

RESIDENTIAL WELL SAMPLING

Form to be completed at time of sampling

DATE OF SAMPLING: **10/18/00**

TIME OF SAMPLING: **1420**

NAME OF SAMPLER: **Sadowski/Hinton**

SAMPLE ID NUMBER: **A883-D5**

OWNER OF WELL:

Name:

Telephone No.: **(607) 587-8790**

Address: **5545 Crosby Creek Rd. Hornell NY 14843**

OCCUPANT OF HOUSE SERVED BY WELL (If other than owner):

Name:

Telephone No.:

Address:

WATER USE:

Domestic: Yes No Number of persons using water

Livestock: Yes No Number and type of livestock

Irrigation: Yes No Acres Frequency

Other (specify)

WATER TREATMENT:

Chlorinator present? Yes No Water Softener? Yes No

Water Filter? Yes No Type

Other (specify)

DESCRIBE WHERE WATER SAMPLE WAS OBTAINED: (e.g. outdoor faucet, kitchen tap) (Water should be sampled as close to well head as possible)

Sample was collected from back yard spigot. Hose was disconnected and sample obtained directly from tap.

FUTURE USE: Are there any planned changes to current supply?

ADDITIONAL COMMENTS:

No one was home at time of sample collection.

RESIDENTIAL WELL SAMPLING

Form to be completed at time of sampling

DATE OF SAMPLING: **10/18/00**

TIME OF SAMPLING: **1440**

NAME OF SAMPLER: **Sadowski/Hinton**

SAMPLE ID NUMBER: **A883-D8**

(Sample Identified in Report as #D7)

OWNER OF WELL:

Name: **Scott and Tammy Cooper**

Telephone No.: **(607)478-8668**

Address: **9 First St. Andover NY 14806**

OCCUPANT OF HOUSE SERVED BY WELL (If other than owner):

Name: **Home Under Construction**

Telephone No.: **N/A**

Address: **242 Hartsville Hill Rd. Alfred Station NY 14803**

WATER USE: (please circle)

Domestic: Yes No

Livestock: Yes No

Irrigation: Yes No

Other (specify)

Number of persons using water: **5**

Number and type of livestock

Acres

Frequency

WATER TREATMENT:

Chlorinator present? Yes No

Water Softener? Yes No

Water Filter? Yes No Type

Other (specify) **None Planed**

DESCRIBE WHERE WATER SAMPLE WAS OBTAINED: (e.g. outdoor faucet, kitchen tap) (Water should be sampled as close to well head as possible)

Sample collected from well head through temporary hose

FUTURE USE: Are there any planned changes to current supply?

ADDITIONAL COMMENTS:

Owner expects to occupy home December 2000.

Appendix D

Well Purging and Sampling Log

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee				Site Number: 902014																																																																																					
Sampler: May/Hinton/Sadowski																																																																																									
Purge Date: 10/18/00		Start Purge:			End Purge:																																																																																				
Sample Date: 10/19/00					Sample Time:																																																																																				
Well Number: MW-101I 1. Total Casing and Screen Length (Ft): 61.94' 2. Casing Internal Diameter (in): 2" 3. Water Level Below Top of Casing (Ft.): 51.93' 4. Volume of Water in Casing (Gal.): 1.7 #1 - #3 X #2 (gal/ft) Volume of 3 Casings: 5.1 gal						<table style="margin: auto;"> <thead> <tr> <th style="padding: 5px;">Well ID</th> <th style="padding: 5px;">Vol.(gal/ft)</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">1"</td><td style="padding: 5px;">0.041</td></tr> <tr><td style="padding: 5px;">2"</td><td style="padding: 5px;">0.163</td></tr> <tr><td style="padding: 5px;">4"</td><td style="padding: 5px;">0.653</td></tr> <tr><td style="padding: 5px;">6"</td><td style="padding: 5px;">1.469</td></tr> <tr><td style="padding: 5px;">8"</td><td style="padding: 5px;">2.611</td></tr> </tbody> </table>		Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611																																																																						
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PARAMETERS		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="10" style="text-align: center; border-bottom: 1px solid black;">ACCUMULATED VOLUME PURGED (GALLONS)</th> </tr> <tr> <th style="width: 15%;"></th> <th style="width: 10%;">1.7</th> <th style="width: 10%;">4.0</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">pH</td><td style="padding: 5px;">6.60</td><td style="padding: 5px;">6.57</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td style="padding: 5px;">CONDUCTIVITY</td><td style="padding: 5px;">527</td><td style="padding: 5px;">567</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td style="padding: 5px;">TURBIDITY</td><td style="padding: 5px;">142.5</td><td style="padding: 5px;">756</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td style="padding: 5px;">TEMPERATURE</td><td style="padding: 5px;">10.2</td><td style="padding: 5px;">9.9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td style="padding: 5px;">Eh</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td style="padding: 5px;">TIME</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>								ACCUMULATED VOLUME PURGED (GALLONS)											1.7	4.0								pH	6.60	6.57								CONDUCTIVITY	527	567								TURBIDITY	142.5	756								TEMPERATURE	10.2	9.9								Eh										TIME									
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WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee				Site Number: 902014															
Sampler: Sadowski/King																			
Purge Date: 10/18/00		Start Purge:			End Purge:														
Sample Date: 10/19/00					Sample Time:														
Well Number: MW-101I 1. Total Casing and Screen Length (Ft): 61.94' 2. Casing Internal Diameter (in): 2" 3. Water Level Below Top of Casing (Ft.): 51.93' 4. Volume of Water in Casing (Gal.): 1.7 #1 - #3 X #2 (gal/ft) Volume of 3 Casings: 5.1 gal						<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Well ID</th> <th style="width: 50%;">Vol.(gal/ft)</th> </tr> </thead> <tbody> <tr><td>1"</td><td>0.041</td></tr> <tr><td>2"</td><td>0.163</td></tr> <tr><td>4"</td><td>0.653</td></tr> <tr><td>6"</td><td>1.469</td></tr> <tr><td>8"</td><td>2.611</td></tr> </tbody> </table>		Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611
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		1.7	4.0	—	—	—	—	—	—	—									
pH		6.60	6.57																
CONDUCTIVITY		527	567																
TURBIDITY		142.5	756																
TEMPERATURE		10.2	9.9																
Eh																			
TIME																			
COMMENTS: Dry after 4.5 gallons																			

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee				Site Number: 902014														
Sampler: Sadowski/King																		
Purge Date: 10/18/00		Start Purge:			End Purge:													
Sample Date: 10/19/00					Sample Time:													
Well Number: MW-101D 1. Total Casing and Screen Length (Ft): 84.76' 2. Casing Internal Diameter (in): 2" 3. Water Level Below Top of Casing (Ft.): 78.55' 4. Volume of Water in Casing (Gal.): 1.0 #1 - #3 X #2 (gal/ft) Volume of 3 Casings: 3.0 gal					<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; padding: 5px;">Well ID</th> <th style="text-align: left; padding: 5px;">Vol.(gal/ft)</th> </tr> <tr><td style="text-align: center; padding: 5px;">1"</td><td style="text-align: center; padding: 5px;">0.041</td></tr> <tr><td style="text-align: center; padding: 5px;">2"</td><td style="text-align: center; padding: 5px;">0.163</td></tr> <tr><td style="text-align: center; padding: 5px;">4"</td><td style="text-align: center; padding: 5px;">0.653</td></tr> <tr><td style="text-align: center; padding: 5px;">6"</td><td style="text-align: center; padding: 5px;">1.469</td></tr> <tr><td style="text-align: center; padding: 5px;">8"</td><td style="text-align: center; padding: 5px;">2.611</td></tr> </table>		Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611
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PARAMETERS		ACCUMULATED VOLUME PURGED (GALLONS)																
		1.0																
pH		6.55																
CONDUCTIVITY		1053																
TURBIDITY		282																
TEMPERATURE		9.8																
Eh																		
TIME																		
COMMENTS: Bailed dry at 1.5 gallons, water clear 																		

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee					Site Number: 902014																
Sampler: Tuk/Hinton																					
Purge Date: 10/18/00			Start Purge: 1215				End Purge: 1235														
Sample Date: 10/19/00							Sample Time:														
Well Number: MW-102D 1. Total Casing and Screen Length (Ft): 68.60' 2. Casing Internal Diameter (in): 2" 3. Water Level Below Top of Casing (Ft.): 52.68' 4. Volume of Water in Casing (Gal.): 1.0 #1 - #3 X #2 (gal/ft) _____ Volume of 3 Casings: 3.0 gal							<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Well ID</th> <th style="text-align: left; padding: 5px;">Vol.(gal/ft)</th> </tr> </thead> <tbody> <tr><td style="text-align: center; padding: 5px;">1"</td><td style="text-align: center; padding: 5px;">0.041</td></tr> <tr><td style="text-align: center; padding: 5px;">2"</td><td style="text-align: center; padding: 5px;">0.163</td></tr> <tr><td style="text-align: center; padding: 5px;">4"</td><td style="text-align: center; padding: 5px;">0.653</td></tr> <tr><td style="text-align: center; padding: 5px;">6"</td><td style="text-align: center; padding: 5px;">1.469</td></tr> <tr><td style="text-align: center; padding: 5px;">8"</td><td style="text-align: center; padding: 5px;">2.611</td></tr> </tbody> </table>			Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611
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PARAMETERS		ACCUMULATED VOLUME PURGED (GALLONS)																			
pH																					
CONDUCTIVITY																					
TURBIDITY																					
TEMPERATURE																					
Eh																					
TIME																					
COMMENTS: No Parameters collected																					

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee				Site Number: 902014															
Sampler: King/Sadowski																			
Purge Date: 10/18/00		Start Purge: 1200			End Purge: 1255														
Sample Date: 10/19/00					Sample Time:														
Well Number: MW-103D 1. Total Casing and Screen Length (Ft): 70.00' 2. Casing Internal Diameter (in): 2" 3. Water Level Below Top of Casing (Ft.): 49.73' 4. Volume of Water in Casing (Gal.): 3.44 gal #1 - #3 X #2 (gal/ft) Volume of 3 Casings: 10.33 gal					<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Well ID</th> <th style="text-align: left; padding: 5px;">Vol.(gal/ft)</th> </tr> </thead> <tbody> <tr><td style="text-align: center; padding: 5px;">1"</td><td style="text-align: center; padding: 5px;">0.041</td></tr> <tr><td style="text-align: center; padding: 5px;">2"</td><td style="text-align: center; padding: 5px;">0.163</td></tr> <tr><td style="text-align: center; padding: 5px;">4"</td><td style="text-align: center; padding: 5px;">0.653</td></tr> <tr><td style="text-align: center; padding: 5px;">6"</td><td style="text-align: center; padding: 5px;">1.469</td></tr> <tr><td style="text-align: center; padding: 5px;">8"</td><td style="text-align: center; padding: 5px;">2.611</td></tr> </tbody> </table>			Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611
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4"	0.653																		
6"	1.469																		
8"	2.611																		
PARAMETERS		ACCUMULATED VOLUME PURGED (GALLONS)																	
		3.3	6.6	10.3	—														
pH	6.34	6.47	6.59																
CONDUCTIVITY	170	167	165																
TURBIDITY		230	324																
TEMPERATURE	8.3	8.9	8.6																
Eh																			
TIME																			
COMMENTS: No sheen visible on purge water.																			

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee				Site Number: 902014															
Sampler: Sadowski/King																			
Purge Date: 10/18/00		Start Purge: 1200			End Purge: 1305														
Sample Date: 10/19/00					Sample Time:														
Well Number: MW-103I 1. Total Casing and Screen Length (Ft): 28.40' 2. Casing Internal Diameter (in): 2" 3. Water Level Below Top of Casing (Ft.): 18.42' 4. Volume of Water in Casing (Gal.): 1.70 gal #1 - #3 X #2 (gal/ft) Volume of 3 Casings: 5.1 gal					<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Well ID</th> <th style="text-align: left; padding: 5px;">Vol.(gal/ft)</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">1"</td><td style="padding: 5px;">0.041</td></tr> <tr><td style="padding: 5px;">2"</td><td style="padding: 5px;">0.163</td></tr> <tr><td style="padding: 5px;">4"</td><td style="padding: 5px;">0.653</td></tr> <tr><td style="padding: 5px;">6"</td><td style="padding: 5px;">1.469</td></tr> <tr><td style="padding: 5px;">8"</td><td style="padding: 5px;">2.611</td></tr> </tbody> </table>			Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611
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PARAMETERS		ACCUMULATED VOLUME PURGED (GALLONS)																	
		1.7	3.4	5.1															
pH		6.5	6.4	6.9															
CONDUCTIVITY		158	165	163															
TURBIDITY		687	354	218															
TEMPERATURE		9.4	8.9	9.5															
Eh																			
TIME																			
COMMENTS: soft bottom																			

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee					Site Number: 902014																
Sampler: Tuk/Hinton																					
Purge Date: 10/18/00			Start Purge: 1118				End Purge: 1124														
Sample Date: 10/19/00							Sample Time:														
Well Number: MW-104I 1. Total Casing and Screen Length (Ft): 29.88' 2. Casing Internal Diameter (in): 2" 3. Water Level Below Top of Casing (Ft.): 23.55' 4. Volume of Water in Casing (Gal.): 1.02 gal #1 - #3 X #2 (gal/ft) Volume of 3 Casings: 3.06 gal						<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Well ID</th> <th style="text-align: left; padding: 5px;">Vol.(gal/ft)</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">1"</td><td style="padding: 5px;">0.041</td></tr> <tr><td style="padding: 5px;">2"</td><td style="padding: 5px;">0.163</td></tr> <tr><td style="padding: 5px;">4"</td><td style="padding: 5px;">0.653</td></tr> <tr><td style="padding: 5px;">6"</td><td style="padding: 5px;">1.469</td></tr> <tr><td style="padding: 5px;">8"</td><td style="padding: 5px;">2.611</td></tr> </tbody> </table>				Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611
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pH																					
CONDUCTIVITY																					
TURBIDITY																					
TEMPERATURE																					
Eh																					
TIME																					
COMMENTS: No Parameters collected																					

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee				Site Number: 902014															
Sampler: Tuk/Hinton																			
Purge Date: 10/18/00		Start Purge: 1136			End Purge: 1154														
Sample Date: 11/19/00					Sample Time:														
Well Number: MW-104D 1. Total Casing and Screen Length (Ft): 71.8' 2. Casing Internal Diameter (in): 2" 3. Water Level Below Top of Casing (Ft.): 68.1' 4. Volume of Water in Casing (Gal.): 0.6 #1 - #3 X #2 (gal/ft) _____ Volume of 3 Casings: 1.8					<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Well ID</th> <th style="text-align: left; padding: 5px;">Vol.(gal/ft)</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">1"</td><td style="padding: 5px;">0.041</td></tr> <tr><td style="padding: 5px;">2"</td><td style="padding: 5px;">0.163</td></tr> <tr><td style="padding: 5px;">4"</td><td style="padding: 5px;">0.653</td></tr> <tr><td style="padding: 5px;">6"</td><td style="padding: 5px;">1.469</td></tr> <tr><td style="padding: 5px;">8"</td><td style="padding: 5px;">2.611</td></tr> </tbody> </table>			Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611
Well ID	Vol.(gal/ft)																		
1"	0.041																		
2"	0.163																		
4"	0.653																		
6"	1.469																		
8"	2.611																		
PARAMETERS		ACCUMULATED VOLUME PURGED (GALLONS)																	
pH																			
CONDUCTIVITY																			
TURBIDITY																			
TEMPERATURE																			
Eh																			
TIME																			
COMMENTS: No parameters collected Well purged dry at 0.75 gallons water very turbid, grey																			

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee					Site Number: 902014					
Sampler: Sadowski/King										
Purge Date: 11/18/00			Start Purge:				End Purge:			
Sample Date: 11/12/99							Sample Time: 1400			
Well Number: MW-107IR							Well ID		Vol.(gal/ft)	
1. Total Casing and Screen Length (Ft): 73.53'							1"		0.041	
2. Casing Internal Diameter (in): 2"							2"		0.163	
3. Water Level Below Top of Casing (Ft.): 69.51'							4"		0.653	
4. Volume of Water in Casing (Gal.): 0.68 gal							6"		1.469	
#1 - #3 X #2 (gal/ft)							8"		2.611	
Volume of 3 Casings: 2.05 gal										
PARAMETERS		ACCUMULATED VOLUME PURGED (GALLONS)								
pH										
CONDUCTIVITY										
TURBIDITY										
TEMPERATURE										
Eh										
TIME										
COMMENTS:										
No Parameters collected										
Hard solid bottom										
Bailed dry at 1.5 gallons										
Highly turbid - grey/green color										
Heavy silt in purge bucket										

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee					Site Number: 902014																
Sampler: Sadowski/King																					
Purge Date: 10/18/00			Start Purge:				End Purge:														
Sample Date: 11/12/99							Sample Time: 1350														
Well Number: MW-107SR 1. Total Casing and Screen Length (Ft): 30.80' 2. Casing Internal Diameter (in): 2" 3. Water Level Below Top of Casing (Ft.): 24.15' 4. Volume of Water in Casing (Gal.): 1.13 gal #1 - #3 X #2 (gal/ft) Volume of 3 Casings: 3.39 gal						<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Well ID</th> <th style="text-align: left; padding: 5px;">Vol.(gal/ft)</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">1"</td><td style="padding: 5px;">0.041</td></tr> <tr><td style="padding: 5px;">2"</td><td style="padding: 5px;">0.163</td></tr> <tr><td style="padding: 5px;">4"</td><td style="padding: 5px;">0.653</td></tr> <tr><td style="padding: 5px;">6"</td><td style="padding: 5px;">1.469</td></tr> <tr><td style="padding: 5px;">8"</td><td style="padding: 5px;">2.611</td></tr> </tbody> </table>				Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611
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1"	0.041																				
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8"	2.611																				
PARAMETERS		ACCUMULATED VOLUME PURGED (GALLONS)																			
pH																					
CONDUCTIVITY																					
TURBIDITY																					
TEMPERATURE																					
Eh																					
TIME																					
COMMENTS: No Parameters collected Bailed Dry at 2.5 gallons Highly turbid, medium brown																					

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee				Site Number: 902014															
Sampler: Szymanski/Hinton																			
Purge Date: 10/18/00		Start Purge: 1230			End Purge: 1300														
Sample Date: 10/19/00					Sample Time:														
Well Number: MW-108D 1. Total Casing and Screen Length (Ft): 78.03' 2. Casing Internal Diameter (in): 2" 3. Water Level Below Top of Casing (Ft.): 49.8' 4. Volume of Water in Casing (Gal.): 4.8 gal #1 - #3 X #2 (gal/ft) Volume of 3 Casings: 15 gal					<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Well ID</th> <th style="text-align: left; padding: 5px;">Vol.(gal/ft)</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">1"</td><td style="padding: 5px;">0.041</td></tr> <tr><td style="padding: 5px;">2"</td><td style="padding: 5px;">0.163</td></tr> <tr><td style="padding: 5px;">4"</td><td style="padding: 5px;">0.653</td></tr> <tr><td style="padding: 5px;">6"</td><td style="padding: 5px;">1.469</td></tr> <tr><td style="padding: 5px;">8"</td><td style="padding: 5px;">2.611</td></tr> </tbody> </table>			Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611
Well ID	Vol.(gal/ft)																		
1"	0.041																		
2"	0.163																		
4"	0.653																		
6"	1.469																		
8"	2.611																		
PARAMETERS		ACCUMULATED VOLUME PURGED (GALLONS)																	
		5	10	15															
pH		7.7	7.5	7.5															
CONDUCTIVITY																			
TURBIDITY		46	34	34															
TEMPERATURE																			
Eh		200	200	200															
TIME																			
COMMENTS: Start of purge - Black silty, cleared up by completion of purge Temperature probe failed																			

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee				Site Number: 902014															
Sampler: Szymanski/Hinton																			
Purge Date: 10/18/00		Start Purge: 1130			End Purge: 1200														
Sample Date: 10/19/00					Sample Time:														
Well Number: MW-108I 1. Total Casing and Screen Length (Ft): 56.95' 2. Casing Internal Diameter (in): 2" 3. Water Level Below Top of Casing (Ft.): 48.33' 4. Volume of Water in Casing (Gal.): 1.4 gal #1 - #3 X #2 (gal/ft) Volume of 3 Casings: 4.5 gal					<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Well ID</th> <th style="text-align: left; padding: 5px;">Vol.(gal/ft)</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">1"</td><td style="padding: 5px;">0.041</td></tr> <tr><td style="padding: 5px;">2"</td><td style="padding: 5px;">0.163</td></tr> <tr><td style="padding: 5px;">4"</td><td style="padding: 5px;">0.653</td></tr> <tr><td style="padding: 5px;">6"</td><td style="padding: 5px;">1.469</td></tr> <tr><td style="padding: 5px;">8"</td><td style="padding: 5px;">2.611</td></tr> </tbody> </table>			Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611
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1"	0.041																		
2"	0.163																		
4"	0.653																		
6"	1.469																		
8"	2.611																		
PARAMETERS		ACCUMULATED VOLUME PURGED (GALLONS)																	
		1.5	3.0	4.5															
pH		7.2	7.3	7.4															
CONDUCTIVITY																			
TURBIDITY		101	52	75															
TEMPERATURE																			
Eh		150	150	225															
TIME																			
COMMENTS: Well dry at 4.5 gallons Temperature probe failed																			

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee				Site Number: 902014			
Sampler: Szymanski							
Purge Date: 10/18/00		Start Purge: 1030			End Purge: 1100		
Sample Date: 10/19/00					Sample Time:		

Well Number: MW-109				<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; padding: 5px;">Well ID</th> <th style="text-align: left; padding: 5px;">Vol.(gal/ft)</th> </tr> <tr> <td style="padding: 5px;">1"</td> <td style="padding: 5px;">0.041</td> </tr> <tr> <td style="padding: 5px;">2"</td> <td style="padding: 5px;">0.163</td> </tr> <tr> <td style="padding: 5px;">4"</td> <td style="padding: 5px;">0.653</td> </tr> <tr> <td style="padding: 5px;">6"</td> <td style="padding: 5px;">1.469</td> </tr> <tr> <td style="padding: 5px;">8"</td> <td style="padding: 5px;">2.611</td> </tr> </table>		Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611
Well ID	Vol.(gal/ft)																
1"	0.041																
2"	0.163																
4"	0.653																
6"	1.469																
8"	2.611																
1. Total Casing and Screen Length (Ft):	102.98'																
2. Casing Internal Diameter (in):	2"																
3. Water Level Below Top of Casing (Ft.):	555.83'																
4. Volume of Water in Casing (Gal.):	8 gal																
#1 - #3 X #2 (gal/ft)																	
Volume of 3 Casings:	24 gal																

PARAMETERS	ACCUMULATED VOLUME PURGED (GALLONS)									
	8.5	17								
pH	6.6	6.8								
CONDUCTIVITY	425	275								
TURBIDITY	35									
TEMPERATURE		53								
Eh										
TIME										

COMMENTS:

Well purged with Grunfus submersible pump.

Well dry at 23 gallons

WELL PURGING & SAMPLING LOG

Site Name: Pattons Busy Bee					Site Number: 902014																
Sampler: May/Tuk																					
Purge Date: 10/18/00			Start Purge: 1030				End Purge: 1230														
Sample Date: 10/19/00							Sample Time:														
Well Number: MW-113 1. Total Casing and Screen Length (Ft): 52.48 2. Casing Internal Diameter (in): 2" 3. Water Level Below Top of Casing (Ft.): 41.6' 4. Volume of Water in Casing (Gal.): 2.8 gal #1 - #3 X #2 (gal/ft) _____ Volume of 3 Casings: 8.4 gal							<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Well ID</th> <th style="text-align: left; padding: 5px;">Vol.(gal/ft)</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">1"</td><td style="padding: 5px;">0.041</td></tr> <tr><td style="padding: 5px;">2"</td><td style="padding: 5px;">0.163</td></tr> <tr><td style="padding: 5px;">4"</td><td style="padding: 5px;">0.653</td></tr> <tr><td style="padding: 5px;">6"</td><td style="padding: 5px;">1.469</td></tr> <tr><td style="padding: 5px;">8"</td><td style="padding: 5px;">2.611</td></tr> </tbody> </table>			Well ID	Vol.(gal/ft)	1"	0.041	2"	0.163	4"	0.653	6"	1.469	8"	2.611
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4"	0.653																				
6"	1.469																				
8"	2.611																				
PARAMETERS		ACCUMULATED VOLUME PURGED (GALLONS)																			
pH																					
CONDUCTIVITY																					
TURBIDITY																					
TEMPERATURE																					
Eh																					
TIME																					
COMMENTS: No Parameters Meters not available No NAPL observed Purged 9 gallons																					

Appendix E

Leachate Collection Tank Monitoring and Leachate Removal Log

Patton's Busy Bee Disposal Site

Site No. 9-02-014

Leachate Tank Monitoring

Tank #BB-T1-North

North Tank: Estimated Capacity: 15,000 gallons
Distance from Top of Standpipe to Bottom of Tank: 12.4'
Tank Diameter: 10' (est)
Tank Length: 25' (est)

BB-T1-North

Leachate Tank Measurement							
Date	Depth	Date	Depth	Date	Depth	Date	Depth
9/11/97	8.05'	9/30/98	0.6'	10/15/99	9.8'	7/5/00	0.7'
9/17/97	8.05'	12/29/98	~8'	11/10/99	6.1'	8/3/00	12.0'
10/21/97	0.6'	4/1/99	pumping	12/2/99	9.9'	8/21/00	12.0'
11/12/97	0.63'	4/9/99	12.1'	12/10/99	9.5'	9/6/00	12.0'
11/25/97	6.20'	4/19/99	11.3'	12/30/99	5.6'	9/18/00	12.0'
12/10/97	9.83'	5/7/99	2.3'	1/11/00	0.5'	10/19/00	8.25'
1/14/98	0.5'	5/25/99	9.4'	2/8/00	0.5'	12/26/00	6.30'
3/6/98	0.33'	7/12/99	9.5'	3/20/00	0.08'		
4/24/98	0.5'	7/29/99	9.0'	4/10/00	full		
5/15/98	8.3'	8/23/99	8.2'	5/2/00	12.3'		
5/21/98	6.4'	9/10/99	6.9'	5/19/00	9.2'		
5/27/98	3.6'	10/1/99	0.5'	6/15/00	12.2'		

Note: Depth measured from top of riser to leachate level
Arrange for removal when leachate is within 4.9' of top of riser

Patton's Busy Bee Disposal Site

Site No. 9-02-014

Leachate Tank Monitoring

Tank #BB-T1-South

South Tank: Estimated Capacity: 18,000 gallons
Distance from Top of Standpipe to Bottom of Tank: 12.8'
Tank Diameter: 10.7' (est)
Tank Length: 28' (est)

BB-T1-South

Leachate Tank Measurement							
Date	Depth	Date	Depth	Date	Depth	Date	Depth
9/11/97	6.25'	9/30/98	1.0'	10/15/99	6.0'	7/5/00	1.9'
9/17/97	6.10'	12/29/98	~8'	11/10/99	3.8'	8/3/00	10.0'
10/21/97	1.83'	4/1/99	being pumped	12/2/99	10.9'	8/21/00	8.0'
11/12/97	1.84'	4/9/99	11.3'	12/10/99	9.0'	9/6/00	7.0'
11/25/97	4.53'	4/19/99	3.6'	12/30/99	3.6'	9/18/00	6.3'
12/10/97	8.58'	5/7/99	3.6'	1/11/00	1.8'	10/19/00	3.6'
1/14/98	1.75'	5/25/99	6.5'	2/8/00	1.8'	12/26/00	3.7'
3/6/98	1.62'	7/12/99	4.0'	3/20/00	1.5'		
4/24/98	1.0'	7/29/99	3.6'	4/10/00	full		
5/15/98	3.6'	8/23/99	3.6'	5/2/00	8.0'		
5/21/98	3.6'	9/10/99	3.6'	5/19/00	3.6'		
5/27/98	3.5'	10/1/99	1.7'	6/15/00	6.4'		

Note: Depth measured from top of riser to leachate level

Arrange for removal when leachate is within 4.8' of top of riser

Patton's Busy Bee Disposal Site Site No. 9-02-014

Leachate Tank Monitoring

Tank #BB-T2-North

North Tank: Estimated Capacity: 2000 gallons
Distance from Top of Standpipe to Bottom of Tank: 7.5' (est)
Tank Diameter: 5' (est)
Tank Length: unknown

BB-T2-North

Leachate Tank Measurement							
Date	Depth	Date	Depth	Date	Depth	Date	Depth
9/11/97	7.1	9/30/98	1.0'	10/15/99	7.0'	7/5/00	2.1'
9/17/97	7.05'	12/29/98	~5'	11/10/99	7.1'	8/3/00	7.3'
10/21/97	5.0'	4/1/99	~7'	12/2/99	7.5'	8/21/00	7.3'
11/12/97	3.91'	4/9/99	7.25'	12/10/99	7.3'	9/6/00	7.2'
11/25/97	3.90'	4/19/99	7.25'	12/30/99	6.5'	9/18/00	7.2'
12/10/97	7.37'	5/7/99	6.25'	1/11/00	1.5'	10/19/00	NR
1/14/98	1.21'	5/25/99	6.25'	2/8/00	1.3'	12/26/00	6.5'
3/6/98	4.58'	7/12/99	6.25'	3/20/00	0.3'		
4/24/98	1.0'	7/29/99	6.2'	4/10/00	full		
5/15/98	2.6'	8/23/99	6.2'	5/2/00	0.5'		
5/21/98	2.2'	9/10/99	6.2'	5/19/00	full		
5/27/98	1.7'	10/1/99	2.7'	6/15/00	5.8'		

Note: Depth measured from top of riser to leachate level

Arrange for removal when leachate is within 3.5' of top of riser

Patton's Busy Bee Disposal Site

Site No. 9-02-014

Leachate Tank Monitoring

Tank #BB-T2-South

South Tank: Estimated Capacity: 4000 gallons
Distance from Top of Standpipe to Bottom of Tank: 6.3'
Tank Diameter: 5.1' (est)
Tank Length: 24' (est)

BB-T2-South

Leachate Tank Measurement							
Date	Depth	Date	Depth	Date	Depth	Date	Depth
9/11/97	3.05'	9/30/98	1.5'	10/15/99	3.8'	7/5/00	1.6'
9/17/97	3.0'	12/29/98	~4'	11/10/99	1.9'	8/3/00	3.5'
10/21/97	1.6'	4/1/99	~6'	12/2/99	5.0'	8/21/00	3.0
11/12/97	1.73'	4/9/99	5.25'	12/10/99	3.8'	9/6/00	2.6'
11/25/97	1.65'	4/19/99	2.2'	12/30/99	1.6'	9/18/00	2.3'
12/10/97	3.83'	5/7/99	1.7'	1/11/00	1.3'	10/19/00	1.6'
1/14/98	0.98'	5/25/99	1.7'	2/8/00	1.3'	12/26/00	1.5'
3/6/98	1.62'	7/12/99	1.8'	3/20/00	full		
4/24/98	1.5'	7/29/99	1.8'	4/10/00	full		
5/15/98	1.6'	8/23/99	1.8'	5/2/00	0.2'		
5/21/98	1.6'	9/10/99	1.8'	5/19/00	full		
5/27/98	1.5'	10/1/99	1.6'	6/15/00	1.6'		

Note: Depth measured from top of riser to leachate level

Arrange for removal when leachate is within 2.3' of top of riser

Leachate Removal Log

Date	Estimated Storage Volume	Estimated Volume Removed	Date	Estimated Storage Volume	Estimated Volume Removed
10/27/97	38,000	15,200	11/2/00	32,500	31,000
10/29/97	22,800	canceled			
11/21/97	38,000	10,000			
12/3/97	No Estimate	20,000			
12/4/97	No Estimate	5,500			
12/5/97	No Estimate	6,800			
1/22/98	38,000	17,800			
3/31/98	38,000	40,000			
5/5/98	38,000	35,600			
6/2/98	38,000	23,100			
10/30/98	38,000	31,000			
12/23/98	No Estimate	7,700			
4/1/99	38,000	34,700			
4/8/99	No Estimate	21,500			
5/18/99	No Estimate	16,500			
10/4/99	38,000	34,500			
4/26/00	38,000	35,000			
5/31/00	38,000	37,500			
7/13/00	38,000	36,200			

Appendix F

Site Photo's 10/19/00



10/19/00 Access Road



10/19/00 Gate



10/19/00 Typical Warning Sign



10/19/00 Power Lines



10/19/00 North Side



10/19/00 North Slope



10/19/00 West Side



10/19/00 West Slope



10/19/00 South Slope



10/19/00 South Side



10/19/00 East Slope



10/19/00 East Side