Sterling Environmental Engineering, P.C.

ORANGE COUNTY LANDFILL
NYSDEC SITE NO. 336007
ROUTE 17M, GOSHEN, NEW YORK

2015 PERIODIC REVIEW REPORT
(January 1, 2015 - December 31, 2015)

Prepared for:

Orange County Department of Public Works
Division of Environmental Facilities and Services
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February 24, 2016

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CERTIFICATION

I, Mark P. Millspaugh, P.E., certify that I am a New York State registered professional engineer and that this Periodic Review Report (PRR) was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities will be performed in accordance with the DER-approved work plan and any DER-approved modifications.

Mark P. Millspaugh, P.E. — 02/24/2016 Date

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EXECUTIVE SUMMARY

The Orange County Landfill (Landfill), NYSDEC Site No. 336007 ("the Site"), is located in the Town of Goshen, Orange County, New York (refer to Figure 1) and is registered as a Class 2 Inactive Hazardous Waste Disposal Site, Registry No. 3-36-007 by the New York State Department of Environmental Conservation (NYSDEC).

The NYSDEC issued a Record of Decision (ROD) in January 28, 1994 for Operable Unit No. 2 that required construction of a final cover over the Landfill waste mass, which was completed in 1995. A second ROD addressing the site as a whole, including any contamination that may have migrated from the waste mass, was issued in March 26, 1998 for Operable Unit 01. The selected remedies for the Landfill include Institutional Control (IC) through a Declaration of Covenants and Restrictions that restricts disturbance of the Landfill cover and places restrictions on site uses, and Engineering Controls (EC) provided by the Landfill cover and leachate collection systems, air and water quality monitoring, regular inspections and maintenance activities. Post-closure water and air quality monitoring, leachate removal, inspections and maintenance at the Landfill have been provided by Orange County since 1996. A Site Management Plan (SMP) was approved by the NYSDEC on August 5, 2014, which incorporates the Institutional/Engineering Control (IC/EC) Plan, the Inspection and Monitoring Plan, and the Operation and Maintenance Plan to provide for the continual post-closure monitoring and maintenance of the Landfill.

An annual Periodic Review Report (PRR) is required to document site management activities outlined in the SMP. This PRR covers the period January 1, 2015 to December 31, 2015.

The remedial program implemented at the Landfill has been successful in meeting the remedial objectives set forth in the RODs. Leachate generation and contaminant migration through groundwater has been reduced, contaminated surface run-off and direct human/animal contact with waste is eliminated, and Landfill gas migration/buildup is prevented. Discolored groundwater seeps exhibiting some leachate characteristics have been observed along the banks of the Cheechunk Canal, downgradient of the Landfill. The County submitted a Supplemental Sediment Investigation Work Plan, Long Term Seep Elimination and Feasibility Study, and Remedial Action Work Plan to the NYSDEC addressing the observed seeps.

Based on the results of activities performed in 2015, no changes to the approved SMP are recommended. The requirements for discontinuing site management have not been met. As such, continued compliance with the approved SMP, including additional required submittals and actions addressing the seeps, is recommended.

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1.0 INTRODUCTION

The Orange County Landfill (Landfill), NYSDEC Site No. 336007 ("the Site"), is located in the Town of Goshen, Orange County, New York (refer to Figure 1) and is registered as a Class 2 Inactive Hazardous Waste Disposal Site, Registry No. 3-36-007 by the New York State Department of Environmental Conservation (NYSDEC).

An annual Periodic Review Report (PRR) is required to document site management activities outlined in the SMP. This PRR covers the period January 1, 2015 to December 31, 2015.

1.1 Summary of Site Contamination and Site History

The NYSDEC issued a Record of Decision (ROD) in January 28, 1994 for Operable Unit No. 2 that required construction of a final cover over the Landfill waste mass, which was completed in 1995. A second ROD addressing the site as a whole, including any contamination that may have migrated from the waste mass, was issued in March 26, 1998 for Operable Unit 01. The selected remedies for the Landfill include Institutional Control (IC) through a Declaration of Covenants and Restrictions that restricts disturbance of the Landfill cover and places restrictions on site uses, and Engineering Controls (EC) provided by the Landfill cover and leachate collection systems, air and water quality monitoring, regular inspections and maintenance activities. Post-closure water and air quality monitoring, leachate removal, inspections and maintenance at the Landfill have been provided by Orange County since 1996. A Site Management Plan (SMP) was approved by the NYSDEC on August 5, 2014, which incorporates the Institutional/Engineering Control (IC/EC) Plan, the Inspection and Monitoring Plan, and the Operation and Maintenance Plan to provide for the continual post-closure monitoring and maintenance of the Landfill.

1.2 Effectiveness of the Remedial Program and Compliance

The remedial program implemented at the Landfill has been successful in meeting the remedial objectives set forth in the RODs. Leachate generation and contaminant migration through groundwater has been reduced, contaminated surface run-off and direct human/animal contact with waste is eliminated, and Landfill gas migration/buildup is prevented. Discolored groundwater seeps exhibiting some leachate characteristics have been observed along the banks of the Cheechunk Canal, downgradient of the Landfill. The County submitted a Supplemental Sediment Investigation Work Plan, Long Term Seep Elimination and Feasibility Study, and Remedial Action Work Plan to the NYSDEC addressing the observed seeps.

1.3 Recommendations

Based on the results of activities performed in 2015, no changes to the approved SMP are recommended. The requirements for discontinuing site management have not been met. As such, continued compliance with the approved SMP, including additional required submittals and actions addressing the seeps, is recommended.

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2.0 SITE OVERVIEW

The Landfill consists of a 75-acre waste mass on a 300-acre rural parcel approximately three (3) miles west of the Village of Goshen on the south side of Route 17M in the Town of Goshen, Orange County, New York (see Figure 1).

The Landfill property is bounded by the Cheechunk Canal to the southeast and by the Old Channel of the Wallkill River to the northwest and southwest. To the northwest of the Landfill, a proposed Landfill expansion of an additional 75-acres was intended. The expansion project was never completed nor used for landfilling. To the northeast edge of the Landfill lies a landfill-to-gas energy system facility. The New Hampton Transfer Station is located on the northeast border of the 300-acre parcel.

The Orange County Department of Public Works operated the Landfill between 1974 and January 1992. Approximately 7,000,000 cubic yards of predominately municipal waste was disposed, however waste oil, septic sludge, industrial waste and hazardous waste are documented to have also reportedly been disposed at the Landfill.

The Landfill was classified as a "Class 2" inactive hazardous waste disposal site by the NYSDEC in March 1992, Site Number 336007. The NYSDEC issued two RODs, dated January 1994 and March 1998, respectively. The January 1994 ROD accelerated the capping of the Landfill and the March 1998 ROD addressed contamination which may have migrated from the waste mass.

The selected remedies for the Landfill include institutional and engineering control. Institutional control (IC) is provided in the form of a Declaration of Covenants and Restrictions that restricts disturbance of the Landfill cover and places restrictions on site uses. Engineering controls (EC) are provided by the Landfill cover and leachate collection systems, annual air and water quality monitoring, regular inspections and maintenance activities.

The ongoing post-closure activities are outlined by the approved Site Management Plan (SMP) and are based on the requirements of the Technical Guidance for Site Investigation and Remediation (DER-10), Section 6.2. The June 6, 2014 SMP (approved by the NYSDEC on August 5, 2014) incorporates the Institutional/Engineering Control (IC/EC) Plan, the Inspection and Monitoring Plan, and the Operation and Maintenance Plan, which provide for the continual post-closure monitoring and maintenance of the Landfill.

Since January 1996, Orange County has submitted Post-Closure Monitoring and Maintenance reports to the NYSDEC documenting the Landfill inspection, environmental monitoring, and leachate management activities. Since 2014, the NYSDEC has required annual documentation in the form of a Periodic Review Report (PRR).

This PRR covers inspection, monitoring, operating and maintenance activities and compliance for the 2015 period.

3.0 PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

The Landfill has been subject to a Post-Closure Monitoring and Maintenance Program (PCMMM) since January 1996. The PCMMM, revised in January 1999, December 2002 and June 2014, provides for

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regular site inspections, groundwater, surface water and leachate monitoring, leachate collection and management, mowing, and Landfill gas management. Monitoring locations are shown on Figure 2.

3.1 Groundwater Quality

Historical data obtained over two decades of monitoring indicates groundwater near the Landfill is characterized by concentrations of Total Dissolved Solids (TDS), iron, and manganese and occasional concentrations of ammonia, chloride, phenolics, arsenic, chromium, lead, magnesium, selenium, and sodium that exceed drinking water criteria. Data also indicate very little change in groundwater quality in recent years.

The 2015 field parameters and groundwater elevations for site groundwater are presented in Tables 1 and 2, respectively. A groundwater contour map for the overburden hydrogeologic unit is provided as Figure 3. Analytical results for monitoring well samples are compared with the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 (TOGS 1.1.1), Ambient Water Quality Standards and Guidance Values (June 1998). Recent (2015) downgradient groundwater results continue to demonstrate elevated concentrations of TDS, turbidity, iron, and manganese with an occasional TOGS 1.1.1 exceedance of ammonia (MW-3B only), arsenic (overburden wells MW-220, MW-245S, and MW-3B), magnesium (overburden wells MW-233S, MW-220 and PZ-4), and sodium (wells MW-233D, MW-245S, MW-245D, and MW-3B). No volatile organic compounds (VOCs) or hexavalent chromium were detected in any of the downgradient groundwater samples. There were also no reported exceedances for total chromium, lead, and selenium. Results indicate groundwater samples collected upgradient and downgradient of the Landfill waste mass indicate no significant differences in data trends where exceedances were historically observed.

A summary of current downgradient groundwater quality compared to recent results is presented below:

- MW-220 – TOGS 1.1.1 exceedances for color, TDS, turbidity, arsenic, iron, magnesium and manganese were reported. Values of these parameters are comparable to those from 2014.

- MW-233D - TOGS 1.1.1 exceedances for TDS and sodium were reported. This well was not sampled in 2014.

- MW-233S - TOGS 1.1.1 exceedances for TDS, turbidity, magnesium, and manganese were reported. This well was not sampled in 2014.

- MW-245D - TOGS 1.1.1 exceedances for color, TDS, turbidity, and sodium were reported. Water quality parameters such as TDS and turbidity consistently exceed their applicable standard. Sodium results are stable and within the published historical range.

- MW-245S - TOGS 1.1.1 exceedances for color, phenolics, TDS, turbidity, arsenic, iron, manganese, and sodium were reported. Water quality parameters TDS and turbidity were stable. Manganese and sodium results also appear to be stable and within the published historical range for each analyte. Arsenic and iron slightly decreased from 2014 levels.

- MW-3B - TOGS 1.1.1 exceedances for ammonia, color, TDS, turbidity, arsenic, iron, manganese, and sodium were reported. Water quality parameters TDS and turbidity slightly

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decreased from 2014 levels. Arsenic, iron, manganese, and sodium results were comparable to 2014 levels, and appear to be stable and within the published historical range for each analyte.

- PZ-4 - TOGS 1.1.1 exceedances for color, TDS, turbidity, iron, and magnesium were reported. Water quality parameters, such as TDS and turbidity, were stable and at the lower end of the published historical range while iron and magnesium were decreasing and at the lower end of the published historical range.

3.2 Surface Water Quality

The 2015 analytical data for site surface water are presented in Table 4. The surface water samples collected from surface water monitoring locations SW-5 (Wallkill River/Cheechunk Canal), SW-8 (Wallkill River/Cheechunk Canal), and SW-13 exceeded the 0.3 mg/L Class C surface water standard for total iron.

The downstream surface water samples collected from SW-5 (0.396 mg/L) and SW-8 (0.354 mg/L) were lower than the historic statistical average for iron (1 mg/L) at those locations.

Phenolics were detected above the Class C surface water standard at SW-5 and SW-13.

A comparison of upstream to downstream water quality indicates that the Landfill is not impacting surface water quality. In fact, downstream water quality appears to be slightly better than upstream sample results.

3.3 Leachate Quality

The 2015 analytical data for leachate are presented in Table 5. Leachate samples were collected from manholes MH-7 and MH-15, and analyzed for 6 NYCRR Part 360 Baseline Parameters. Leachate water quality is generally characterized by detectable to elevated concentrations of leachate indicator and inorganic parameters alkalinity, ammonia, COD, chloride, cyanide, hardness, nitrate, phenolics, sulfate, TDS, TKN, TOC, aluminum, antimony, arsenic, barium, boron, calcium, chromium, iron, magnesium, manganese, nickel, potassium, sodium, and zinc. Inorganic parameters that were either not detected or detected at trace levels include: beryllium, cadmium, hexavalent chromium, copper, lead, mercury, selenium, silver and thallium. The VOCs 1,4-dichlorobenzene, benzene, chlorobenzene, and ethylbenzene were detected at MH-7. Benzene and 1,4-dichlorobenzene were detected at MH-15.

Leachate sample results for 2015 are generally consistent with previous results.

3.4 Air Quality

In accordance with the SMP, Landfill gas monitoring consists of measuring explosive gas (Lower Explosive Limit, or LEL) and VOCs of the headspace of each monitoring well/piezometer and leachate manholes MH-7 and MH-15. VOCs are also analyzed in post-closure water samples.

As described in Section 4.2.3 below, during the 2015 sampling event MW-233D and MW-233S were sampled instead of MW-230D and MW-234S. One air monitoring location, MW-222, indicated the presence of VOCs with a PID reading of 0.3 parts per million (ppm) and an LEL of 42%. Additionally,

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MW-207SA had a LEL of 23%. All other air monitoring locations measured 0% LEL and had no PID readings.

3.5 Seeps

In accordance with the SMP, observation for leachate outbreaks is the focus of weekly inspections performed by Orange County personnel. Conditions indicative of leachate outbreaks, such as wet spots, dead vegetation, surface sloughing or discoloration were documented. Further, weekly inspection in the historical leachate seep area included photo-documentation and collection of hydrologic and hydrogeologic data.

Seep samples were not collected during the November 2015 PCM sampling event as the water level in the Canal covered the seeps. In support of the ongoing seep evaluation, the County has submitted a SSI Work Plan, FS, and Remedial Action Work Plan as required by the NYSDEC. The County is poised to complete the Seep Mitigation Work upon NYSDEC's approval of the remedial design and issuance of any required federal permit.

4.0 INSTITUTIONAL/ENGINEERING CONTROL PLAN COMPLIANCE

The multiple institutional and engineering controls for the Landfill implemented by the RODs and documented in the SMP continue to be in place and performing as designed. These controls were reviewed and evaluated through this PRR.

4.1 Institutional Controls

Institutional Controls (IC) include non-physical means of enforcing a restriction on the use of real property that limits human and environmental exposure, restricts the use of groundwater, provides notice to the potential owners, operators, or members of the public, or prevents actions that would interfere with the effectiveness of the remedial program or with the effectiveness and/or integrity of operation, maintenance or monitoring activities at or pertaining to the Landfill property.

4.1.1 Deed Restrictions

The IC for the Landfill is in the form of a Declaration of Covenants and Restrictions filed with the deed for the Landfill property. The Declaration of Covenants and Restrictions was executed on June 13, 2014, and continues to protect both human health and the integrity of the Landfill. No uses, disturbances or interferences have been allowed by Orange County. Any future use to the Landfill footprint must be approved by Orange County and NYSDEC. The underlying groundwater is not a source of drinking water for nearby residents.

4.2 Engineering Controls

Engineering Controls (EC) include physical barriers or methods employed to actively or passively contain, stabilize, or monitor contamination, restrict the movement of contamination to ensure the long-term effectiveness of the remedial program, or eliminate potential exposure pathways to contamination. The following sections describe the ECs and their goals as part of the remedy for the Landfill from the ROD dated March 1998.

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4.2.1 Part 360 Landfill Cover System

Installation of the standard Part 360 Landfill cover system (completed in November 1995) minimizes infiltration of precipitation to wastes and the resultant generation of leachate, and prevents the release of previously disposed wastes. The cover system is regularly inspected by Orange County to evaluate its performance. During the regular post-closure field inspections conducted throughout 2015, no damage to the Landfill cover system was observed. Completed inspection reports are included in Appendix A. Beyond the regular on-going post-closure care, no actions or special maintenance is required for the Part 360 Landfill cover system at this time.

4.2.2 Leachate Collection System

The leachate collection system is located along the perimeter of the waste mass. Leachate from the waste mass is collected by underground pipes which flow by gravity to sumps. From these sumps, leachate is pumped into aboveground storage tanks (ASTs) where it is regularly removed for offsite treatment (Appendix B). Modifications to the collection system were introduced with the March 1998 ROD where approximately 950 feet of additional leachate collection piping was installed to contain leachate outbreaks encountered during excavation of a new drainage ditch along the southeastern perimeter road.

The perimeter leachate collection system continues to function. The County removed 265,339 gallons from Leachate Tanks 1 - 4 and 222,920 gallons from Leachate Tanks 5 - 9 in 2015. The total leachate removed from the Landfill in 2015 was 488,259 gallons for treatment at an offsite permitted facility.

Records regarding leachate removal and treatment are provided in Appendix B.

4.2.3 Groundwater Monitoring Wells

Existing groundwater monitoring wells are located along the upgradient, crossgradient, and downgradient perimeter of the Landfill waste mass. The wells are used to monitor groundwater quality around the Landfill property. Monitoring wells are routinely checked for sediment buildup in the well using depth to bottom measurements and the integrity of the outer casing, lid and lock. These monitoring wells are sampled every fifth quarter for 6 NYCRR Part 360 Baseline Parameters for indication of contamination by the Landfill waste mass.

Monitoring wells MW-230D and the MW-235 well pair (MW-235S/MW-235D) were damaged by mowing activities. Accordingly, MW-233D and MW-233S were sampled as substitutes for the upgradient well pair location for the 2015 sampling event. The County will revise the SMP groundwater monitoring program to memorialize the change in upgradient well pair from MW-230S/MW-230D to MW-233S/MW-233D as documented in STERLING's 2015 Notification Letter to the NYSDEC Project Manager. Section 4.4.3 of the SMP will also be revised to remove MW-235S/MW-235D from the list of wells required to collect groundwater measurements given that they no longer exist (destroyed by mowing contractor) and groundwater flow patterns are well documented north of the closed Landfill.

Overall, the monitoring well network is functioning as designed and Orange County will continue the approved annual monitoring program.

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4.2.4 Surface Water Runoff Features

Surface water runoff features are located on and around the Landfill property. Terraces and riprap downchutes on the Landfill waste mass direct stormwater runoff to the Landfill perimeter drainage ditches successfully preventing the occurrence of standing water on the Landfill. The surface water runoff is directed into perimeter drainage ditches into drainage basins to reduce particulates and sediment before it ultimately enters into the Cheechunk Canal. These surface water runoff features are checked monthly for sediment buildup, overgrowth of vegetation, overflow of drainage ditches or basins, improper drainage of terraces and downchutes, and sloughing of the Landfill cover. Appendix A contains documentation of regular inspections of the surface water runoff features in 2015.

Based on the observed conditions, no corrective measures are needed for the surface water management features. Orange County will continue to perform regular inspections.

4.3 IC/EC Certification

As required by DER-10, Section 6.3(a), the completed and signed NYSDEC IE/EC Certification Form is provided as Appendix C.

5.0 MONITORING PLAN COMPLIANCE

The Landfill was granted a post-closure monitoring variance by the NYSDEC in December 2002 reducing the monitoring of the Landfill from quarterly monitoring to every fifth quarter. The NYSDEC approved further modifications to the monitoring plan on August 5, 2014. Monitoring includes collection of groundwater, surface water, and leachate samples for analysis of 6 NYCRR Part 360 Baseline parameters, as well as water level measurements from select monitoring wells, and air quality monitoring. Monitoring wells and sample locations are shown on Figure 2. The following sections describe the monitoring requirements for groundwater, surface water, leachate, and air quality.

5.1 Groundwater Monitoring

The recently updated groundwater monitoring program provides for annual collection of static water level measurements and water quality samples from one piezometer location (PZ-04) and six (6) monitoring wells spread out around the Landfill property. In addition, static water level measurements are to be taken from twenty-one (21) additional monitoring wells and piezometers. A groundwater contour map is provided in Figure 3.

In the 2015 sampling event, samples were obtained from seven (7) monitoring well locations using low flow methodology and analyzed for 6 NYCRR Part 360 Baseline parameters. Upgradient bedrock well MW-230D could not be sampled due to damage to the well casing. A sample was collected instead from MW-233S and MW-233D, located approximately 1,150 feet east of MW-230D. Water level measurements were collected at 30 locations.

As described in Section 3.1, results generally show groundwater samples collected upgradient and downgradient of the Landfill waste mass indicate no significant differences in data trends where exceedances were observed.

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Overall, the groundwater monitoring program meets the remedial objectives by providing suitable means to determine the effectiveness of the selected remedy. Orange County will continue groundwater monitoring according to the SMP with the modification described herein. Additional groundwater monitoring will be conducted in support of the ongoing seep evaluation.

5.2 Surface Water Monitoring

The approved surface water monitoring program consists of annual sampling of three (3) locations (SW-5, SW-8, and SW-13) along the Cheechunk Canal adjacent to the Landfill footprint. These locations are located upgradient, cross-gradient and downgradient of the Landfill (see Figure 2).

Surface water sampling for the 2015 event included sampling of the three (3) surface water monitoring locations in the Cheechunk Canal. These surface water samples were analyzed for 6 NYCRR Part 360 Baseline parameters.

The surface water monitoring program meets the remedial objectives for the site in that it provides direct means to determine the effectiveness of the selected remedy. Orange County will continue surface water monitoring according to the approved SMP.

5.3 Leachate Monitoring

Leachate monitoring consisted of sampling of two (2) manhole locations, labeled MH-7 and MH-15, located on the eastern edge of the Landfill footprint. During the 2015 monitoring event, leachate samples were collected from MH-7 and MH-15, which were analyzed for 6 NYCRR Part 360 Baseline parameters.

Section 4.2.1.1 of the approved SMP requires that if conditions indicative of leachate outbreaks such as wet spots, dead vegetation, surface sloughing or discoloration are observed near the Landfill, further investigation is warranted to evaluate the condition and determine the appropriate corrective action.

The leachate monitoring program meets the remedial objectives for the site. Orange County will continue leachate monitoring according to the approved SMP, and will continue implementation of a remedial plan for the seeps.

5.4 Air Quality Monitoring

Air quality monitoring includes field measurements of explosive gas and VOC levels in the headspaces of the manholes, piezometers, and monitoring wells sampled during each monitoring event. VOC analyses are also performed on collected groundwater, surface water and leachate samples. Results of the air quality monitoring are described in Section 3.4.

The air quality monitoring program meets the remedial objectives to evaluate the effectiveness of the selected remedy in that it provides a direct means to determine if Landfill gases are prevented from migration and buildup. Orange County will continue air quality monitoring according to the approved SMP.

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6.0 OPERATION AND MAINTENANCE PLAN COMPLIANCE

The Operation and Maintenance (O&M) Plan for the Landfill, outlined in the approved SMP, consists of the following components:

- Repair, if necessary, of the Landfill cover system in accordance with approved specification materials and methods;
- Annual mowing of the vegetated cover system;
- Annual or more frequent mowing of grass-lined ditches;
- Addition, if necessary, of soil amendments (fertilizer, lime) to the cover system;
- Annual or more frequent clearing of drainage swales, ditches and downchutes;
- Investigation of stressed vegetation and gas odors;
- Vector control;
- Snow plowing and upkeep of the perimeter access road;
- Collection, removal and disposal of leachate;
- Preventative maintenance of leachate pumps; and,
- Repair or replacement, if necessary, of monitoring wells and piezometers.

During 2015, the following O&M activities were performed:

- Regular inspections of the Landfill cap and cover materials, surface water drainage features, monitoring wells, leachate collection system and the Landfill property (Appendix A);
- Mowing of the Landfill cover system in June, August, and September 2015;
- Regular leachate removal from aboveground storage tanks for treatment at permitted facilities (Appendix B);
- Annual groundwater, surface water, leachate and air quality monitoring performed on November 16 and 17, 2015 (Field Forms provided in Appendix D); and,
- Regular inspection of seeps.

Operational issues were addressed by Landfill staff, including:

- Leachate Tank L-1 pump was cleaned and made operational in May 2015 after the leachate recovery pump was identified as non-operational in mid-April 2015;
- It was noted in the October, November and December 2015 inspections that the circuit board for L-1 was not operational. The circuit board was replaced in early January 2016;
- It was noted in the October and November 2015 inspections that the float in Leachate Tank L-5 was frozen resulting in the float switch not being raised high enough to activate the pump. The obstruction on the float ball was removed in December 2015 and the pump was made fully operational.

The components of the remedy subject to O&M requirements (Landfill cover, gas venting and leachate collection systems, surface water runoff features, and the monitoring well/piezometer network) are performing as designed, with the exception of the damaged monitoring well (MW-230D) and missing well pair MW-235S and MW-235D. Due to past damage at the MW-230 well pair (MW-230D), upgradient well pair MW-233 (MW-233S/MW-233D) was used as a replacement for the 2015 PCM sampling event. Regular inspections performed by Orange County personnel continue to show

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compliance with the March 1998 remedy determined for the Landfill, with the exception of the seeps. Operation and maintenance of the property continues to protect human health and the overall integrity of the Landfill.

There were no deficiencies in complying with the O&M Plan during the 2015 reporting period. Mitigation of the seeps is the subject of a remedial design submitted to the NYSDEC on November 10, 2015.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The Landfill continues to comply with the required activities set forth in the SMP for the 2015 reporting period. The ICs and ECs implemented at the Site continue to perform. The monitoring plan for the Landfill is on-going in accordance with the approved variance granted by the NYSDEC in August 2014. The County will continue to monitor the waste mass and surrounding property visually and analytically, and perform monthly inspections for the integrity of the Landfill and the protection of human health.

The County will revise the SMP groundwater monitoring program to memorialize the change in upgradient well pair from MW-230S/MW-230D to MW-233S/MW-233D as documented in STERLING's 2015 Notification Letter to the NYSDEC Project Manager. A petition to revise Section 4.4.3 of the SMP will also be made to remove MW-235S/MW-235D from the list of wells required to collect groundwater measurements given that they no longer exist (destroyed by mowing contractor) and groundwater flow patterns are well documented north of the closed Landfill.

In support of the ongoing seep evaluation, the County submitted a SSI Work Plan, FS, and Remedial Action Work Plan as requested by the NYSDEC. The County is poised to complete the Seep Mitigation Work upon NYSDEC's approval of the remedial design and issuance of any required federal permit.

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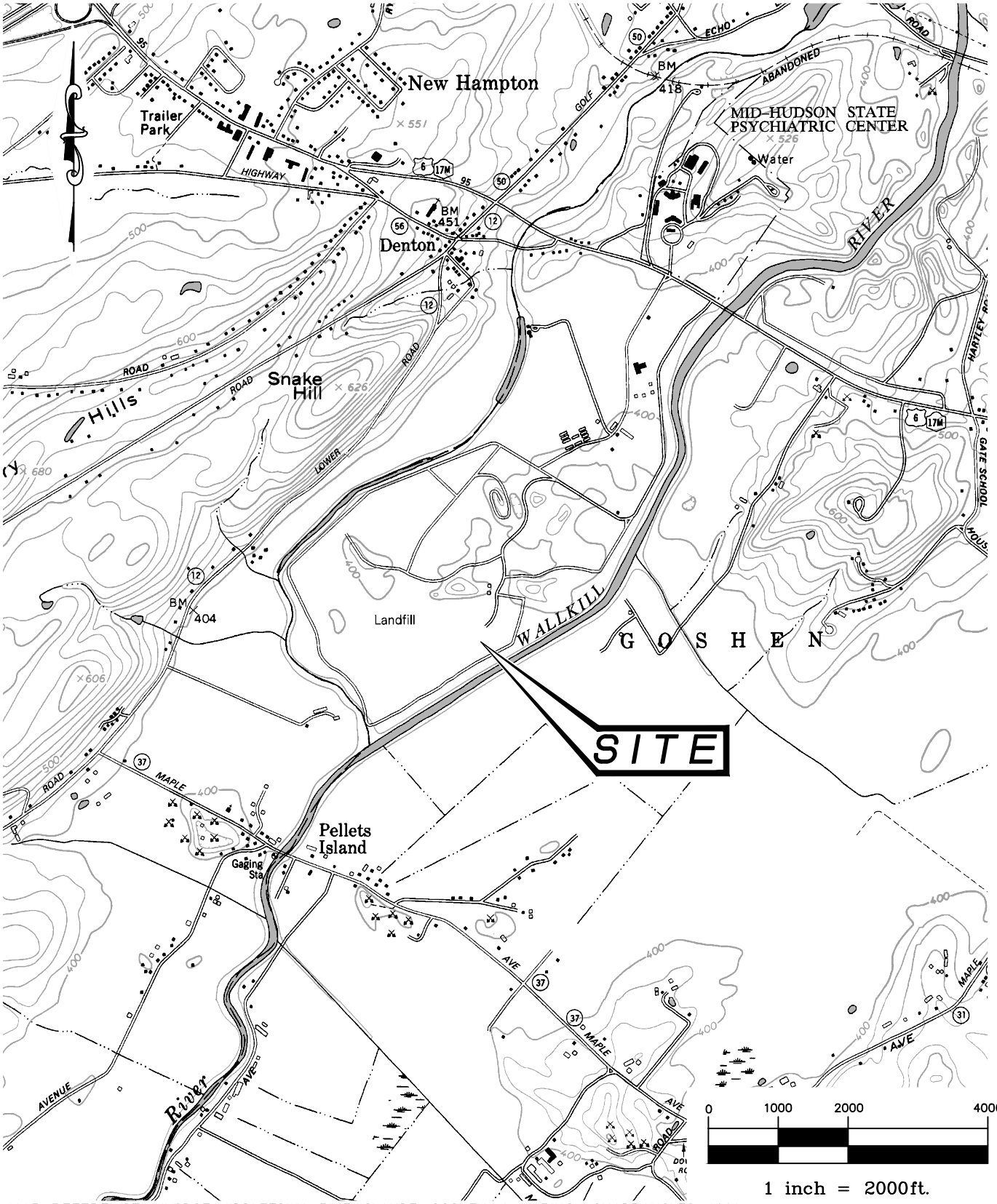
FIGURES



MAP REFERENCE: NYSDOT MIDDLETOWN, PINE ISLANDE, GOSHEN, & WARWICK QUADRANGLES, 1991.

S:\Drawings\2010-15 - Orange County\2010-15038.SiteLoc.dwg SWEETT 1/20/2016 9:38 AM

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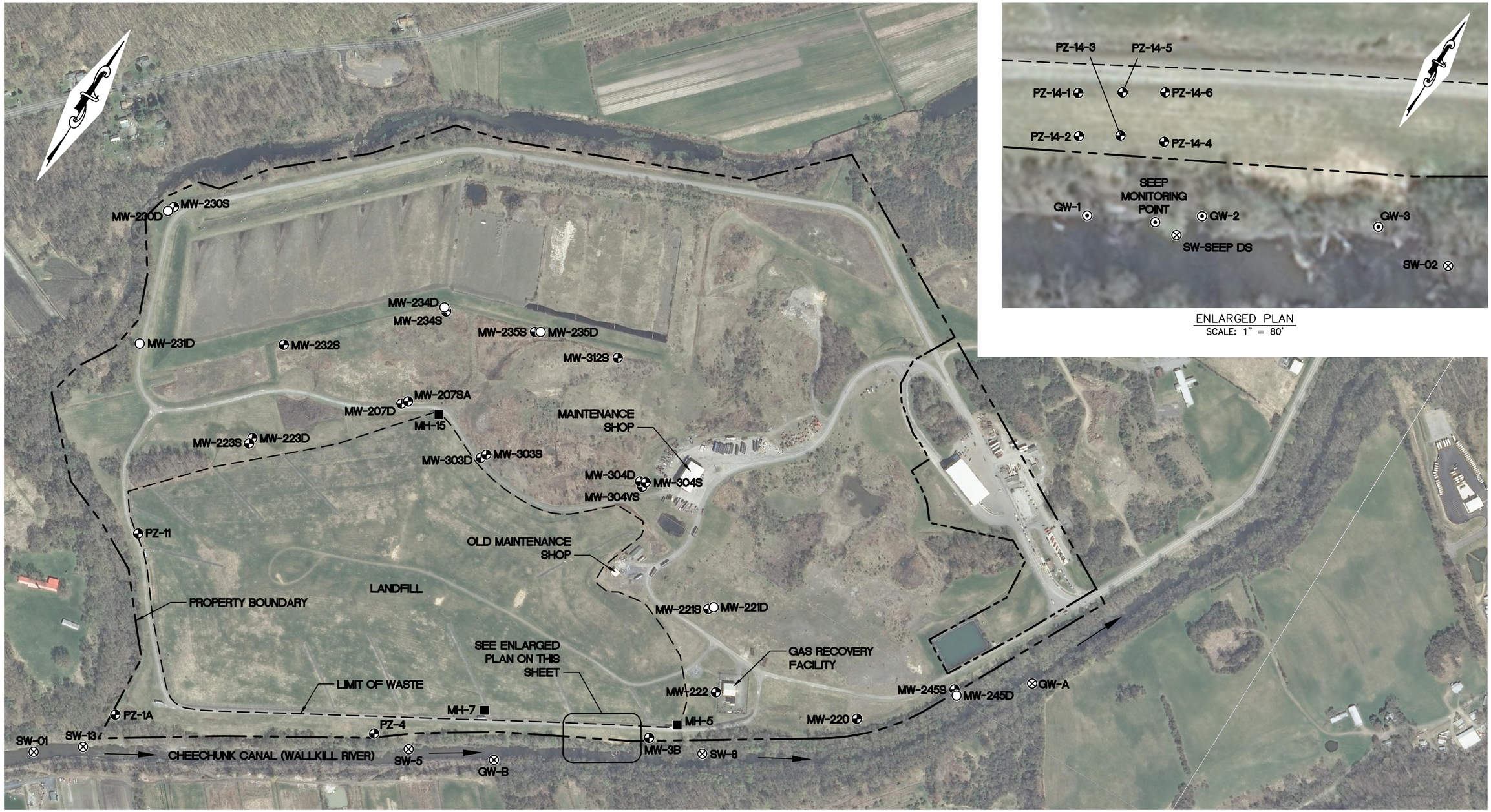
SITE LOCATION MAP

ORANGE CO. DEPT. OF PUBLIC WORKS

ORANGE COUNTY LANDFILL

TOWN OF GOSHEN ORANGE CO., N.Y.

PROJ. No.: 2013-29	DATE: 12/3/14	SCALE: 1" = 2000'	DWG. NO. 2010-15038	FIGURE 1



ENLARGED PLAN
SCALE: 1" = 80'

LEGEND:

MW-230S	OVERBURDEN MONITORING WELL AND PIEZOMETER LOCATIONS
MW-230D	BEDROCK MONITORING WELL LOCATIONS
MH-5	LEACHATE SAMPLING LOCATIONS
GW-1	SEEP MONITORING LOCATIONS
SW-5	SURFACE WATER SAMPLE LOCATIONS
— — — — —	LIMIT OF WASTE
—— - - ——	PROPERTY BOUNDARY

0 250 500 1000

(IN FEET)
1 inch = 500 ft.

MAP REFERENCES:
1. PROPERTY BOUNDARY AND LIMIT OF WASTE FROM DRAWINGS ENTITLED "OVERALL PLAN AND RESTRICTED PARCEL," BY THOMAS J. BARRY, DATED FEBRUARY 14, 2013.
2. AERIAL PHOTOGRAPHY FROM NEW YORK STATWIDE DIGITAL ORTHOIMAGERY PROGRAM, PHOTOGRAPHY CIRCA 2013.

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SAMPLE LOCATION MAP
ORANGE CO. DEPT. OF PUBLIC WORKS
ORANGE COUNTY LANDFILL
TOWN OF GOSHEN ORANGE CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2010-15	12/3/14	1"=500'	2010-15039	2

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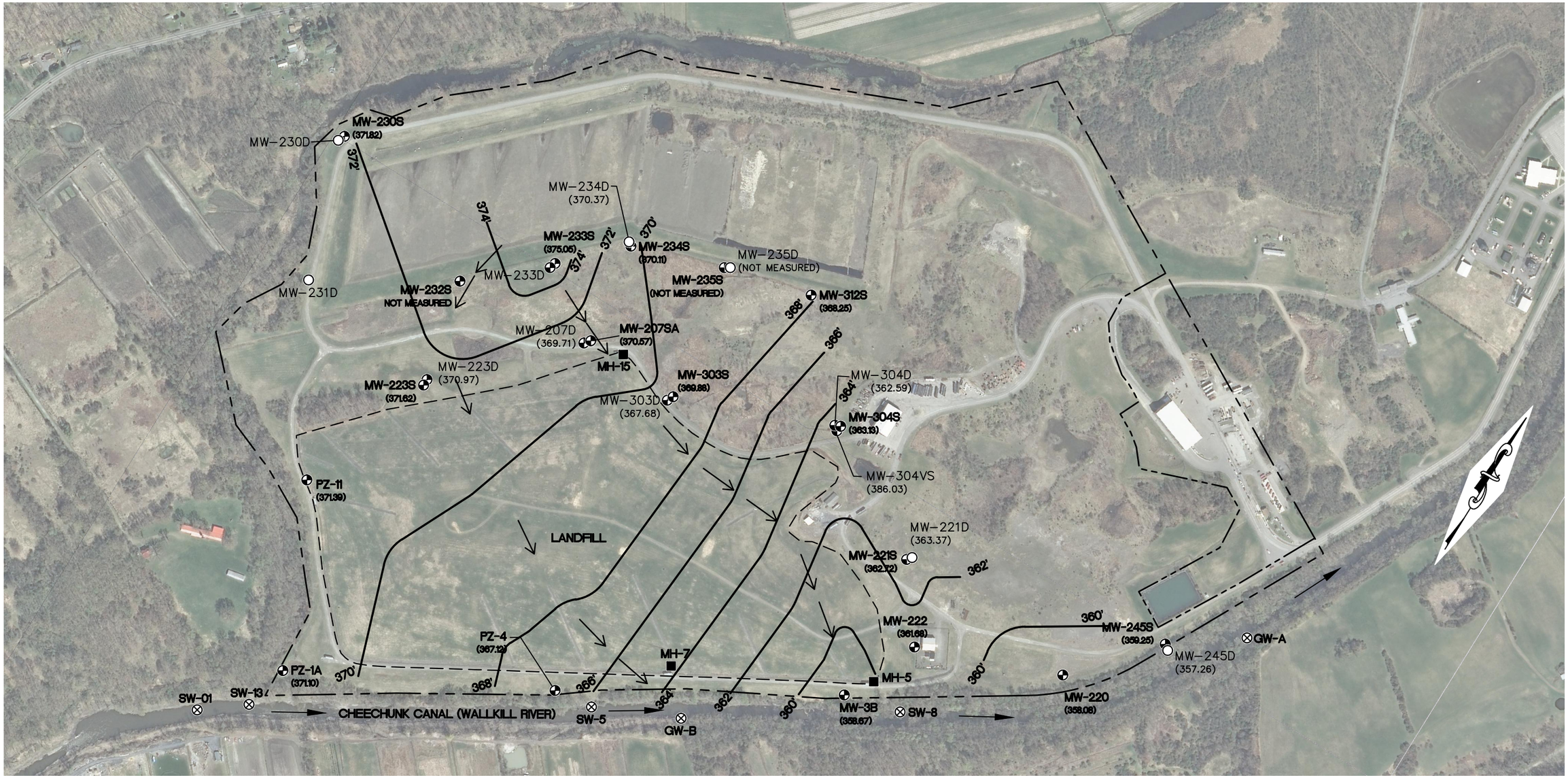

LEGEND:

358'	GROUNDWATER ELEVATION CONTOURS
→	INFERRED GROUNDWATER FLOW DIRECTION
MW-230S	OVERBURDEN MONITORING WELL AND PIEZOMETER LOCATIONS
MW-230D	BEDROCK MONITORING WELL LOCATIONS
MH-5	LEACHATE SAMPLING LOCATIONS
GW-1	SEEP MONITORING LOCATIONS
SW-5	SURFACE WATER SAMPLE LOCATIONS
— — — —	LIMIT OF WASTE
— — — —	PROPERTY BOUNDARY

0 250 500 1000

(IN FEET)
1 inch = 500 ft.

MAP REFERENCES:
1. PROPERTY BOUNDARY AND LIMIT OF WASTE FROM DRAWINGS ENTITLED "OVERALL PLAN AND RESTRICTED PARCEL," BY THOMAS J. BARRY, DATED FEBRUARY 14, 2013.
2. AERIAL PHOTOGRAPHY FROM NEW YORK STATWIDE DIGITAL ORTHOIMAGERY PROGRAM, PHOTOGRAPHY CIRCA 2013.

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GROUNDWATER CONTOUR MAP – OVERBURDEN HYDROGEOLOGIC UNIT
ORANGE CO. DEPT. OF PUBLIC WORKS
ORANGE COUNTY LANDFILL
TOWN OF GOSHEN ORANGE CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2010–15	01/13/2016	1"=500'	2010–15040A	3

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TABLES

TABLE 1

Summary of Field Parameter Measurements
November 16-17, 2015
Orange County Landfill, Goshen, New York

Parameter	Title 6 Part 703.3 Standards	Units	Groundwater Sample Locations							Surface Water Locations			Manhole Leachate		
			MW-233S	MW-233D	MW-220	MW-245D	MW-3B	MW-245S	PZ-4	SW-13	SW-5	SW-8	MH-5	MH-7	MH-15
Static Water Level [1]	---	feet	14.24	19.06	20.86	33.82	27.76	31.88	15.22	---	---	---	---	---	---
Specific Conductivity	---	mS/cm[c]	0.868	0.989	1.096	0.883	1.147	1.165	1.165	0.512	0.513	0.516	---	8.665	3.797
Temperature	---	degrees C	14.5	17.1	14.1	12.8	12.8	13.50	11.5	8.1	8.1	8.1	---	12.5	12.9
pH	6.5<pH< 8.5	pH Units	6.96	7.78	6.78	7.17	6.82	6.85	7.03	7.78	7.74	7.68	---	6.95	7.10
ORP	--	mV	218	199.6	41.3	-13.5	-37.8	66.1	117.8	119.5	188.5	143.6	---	4.4	676
Dissolved Oxygen [2]	> 6.0	mg/L	0.3	5.09	1.13	1.38	0.02	1.76	3.21	10.19	10.2	10.15	---	2.72	2.72

NOTES :
Values in **BOLD** indicate an exceedance of applicable water quality standard.
[1] Measured from the top of the PVC well to water surface.
[2] Dissolved Oxygen Standard applies to surface water samples only.
--- No standard or not measured.

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Table 2
Summary of Water Elevation Measurements
November 16-17, 2015
Orange County Landfill, Goshen NY

Well I.D.	Measuring Point Elevation (ft)	Static Water Level (ft)	Groundwater Elevation (ft)
MW-207D	390.02	20.31	369.71
MW-207SA	389.74	19.17	370.57
MW-220	378.94	20.86	358.08
MW-221S	381.44	18.72	362.72
MW-221D	381.21	17.84	363.37
MW-222	382.49	20.81	361.68
MW-223S	389.25	17.63	371.62
MW-223D	389.36	18.39	370.97
MW-230S	385.6	13.78	371.82
MW-230D	385.35	Well Damaged	
MW-231D	387.67*	--	--
MW-232S	388.64	--	--
MW-233S	389.29	14.24	375.05
MW233D	---	19.06	--
MW-234S	390.63	20.52	370.11
MW-234D	390.1	19.73	370.37
MW-235S	388.04	--	--
MW-235D	393.74	--	--
MW-245S	391.13	31.88	359.25
MW-245D	391.08	33.82	357.26
MW-303S	389.85	19.97	369.88
MW-303D	389.83	22.15	367.68
MW-304VS	390.72	4.69	386.03
MW-304S	390.92	27.79	363.13
MW-304D	390.08	27.49	362.59
MW-312S	387.87*	19.62	368.25
MW-3B	386.43	27.76	358.67
PZ-11	390.41	19.02	371.39
PZ-14-1[ǂ]	390.27	28.99	361.28
PZ-14-2[ǂ]	381.94	21.24	360.7
PZ-14-3[ǂ]	381.83	21.19	360.64
PZ-14-4[ǂ]	381.77	21.08	360.69
PZ-14-5[ǂ]	392.22	30.96	361.26
PZ-14-6[ǂ]	391.11	29.82	361.29
PZ-1A	385.28	14.18	371.1
PZ-4	382.34	15.22	367.12

Notes:
NE = Not encountered
--- = Not measured or no available data
[ǂ] = Measuring point elevation surveyed by Sterling Environmental Engineering, P.C. on September 6, 2014.
* = Measuring point elevation obtained from Table 3-2 of the Remedial Investigation Report for the Orange County Landfill - DRAFT, prepared by Stearns & Wheler, dated March 1995.
All other Measuring Point Elevations were obtain from Table 1 of the 2013 Monitoring Event for the Orange County Landfill, prepared by Cornerstone Environmental Group, LLC., dated September 2013.

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Table 3
Summary of Groundwater Analytical Results
November 16-17, 2015
Orange County Landfill, Goshen, New York

Analyte	Units	Groundwater Standard[A]	MW-233S 11/16/2015	MW-233D 11/16/2015	MW-220 11/16/2015	MW-245S 11/16/2015	MW-245D 11/16/2015	PZ-4 11/17/2015	MW-3B 11/17/2015
Water Quality Parameters									
Alkalinity, Total	mg/L	---	334	193	478	364	271	460	520
Ammonia	mg/L	2.0	0.024 J	0.075 U	0.052 J	0.161	1.91	0.462	**5.2**
Biochemical Oxygen Demand	mg/L	---	2 U	2 U	2 U	2 U	5.9	2 U	2 U
Chemical Oxygen Demand	mg/L	---	10 U	10 U	5.5 J	12	19	12	19
Chloride	mg/L	250	1.41	120	24.5	90.9	38.2	36.9	63.6
Color	Color Units	15[B]	5 U	9	**220**	**46**	**16**	**17**	**32**
Cyanide, Total	mg/L	0.2	0.001 J	0.003 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Hardness	mg/L	---	450	200	550	480	310	570	470
Nitrate as N	mg/L	10	0.27	0.086 J	0.11	0.086 J	2.7	0.3	0.1 U
Phenolics, Total Recoverable	mg/L	0.001[C]	0.03 U	0.03 U	0.03 U	**0.009** J	0.03 U	0.03 U	0.03 U
Sulfate	mg/L	250	183	140	154	176	141	143	40
Total Dissolved Solids	mg/L	500	**550**	**550**	**690**	**740**	**500**	**670**	**650**
Total Kjeldahl Nitrogen	mg/L	---	0.271 J	0.322	0.378	0.335	1.37	0.357	4.58
Total Organic Carbon	mg/L	---	3.89	2.26	3.95	2.62	1.9	1.85	4.04
Turbidity	NTU	5.0[B]	**10.1**	0.1	**142.9**	**119.3**	**73.5**	**25.8**	**7.8**
Volatile Organic Compounds									
1,1,1-Trichloroethane	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,1,2-Tetrachloroethane	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	µg/L	1.0	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	µg/L	5.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	µg/L	3.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	µg/L	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	5.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	µg/L	3.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	µg/L	3.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Chloroethyl vinyl ether	µg/L	---	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	1.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	µg/L	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	µg/L	50	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon tetrachloride	µg/L	5.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	µg/L	7.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	µg/L	5.0	---	---	---	---	---	---	---
cis-1,3-Dichloropropene	µg/L	---	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	µg/L	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	µg/L	5.0	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methylene Chloride	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
m-Xylene & p-Xylene	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
o-Xylene	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethene	µg/L	5.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
trans-1,2-Dichloroethene	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
trans-1,3-Dichloropropene	µg/L	---	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	5.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	µg/L	5.0	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl chloride	µg/L	2.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	µg/L	---	---	---	---	---	---	---	---
Total Recoverable Metals									
Aluminum	mg/L	---	0.006 J	0.022	0.264	0.482	0.022	0.059	0.019
Antimony	mg/L	0.003[C]	0.002 U	0.0021	0.002 U	0.002 U	0.001 J	0.0007 J	0.0002 J
Arsenic	mg/L	0.025	0.0006	0.0008	**0.0261**	**0.0392**	0.0029	0.0111	**0.0447**
Barium	mg/L	1.0	0.0537	0.0418	0.0658	0.0885	0.0852	0.036	0.3146
Beryllium	mg/L	0.003	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Boron	mg/L	1.0	0.0197 J	0.0895	0.0368	0.0248 J	0.049	0.101	0.206
Cadmium	mg/L	0.005	0.0002 J	0.0002 U	0.0002 U	0.0002 U	0.0009	0.0002 U	0.0002 U
Calcium	mg/L	---	127	51.4	161	147	85.1	160	130
Chromium	mg/L	0.05	0.0114	0.0027	0.0029	0.0022	0.0018 J	0.0047	0.0024 J
Chromium, hexavalent	mg/L	0.05	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Copper	mg/L	2.0	0.0014	0.0024	0.001	0.0015	0.0011	0.0012	0.0004 J
Iron[D]	mg/L	0.3	0.085	0.125	**4.24**	**2.06**	0.291	**0.584**	**1.55**
Lead	mg/L	0.025	0.001 U	0.0022	0.0036	0.0024	0.0027	0.0016	0.0017
Magnesium	mg/L	35	**41.8**	19	**41.2**	33.5	26.7	**40**	32
Manganese[D]	mg/L	0.3	**1.085**	0.0614	**1.006**	**1.801**	0.1974	0.1398	**0.94**
Mercury	mg/L	0.0007	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	0.1	0.0105	0.0025	0.0039	0.0027	0.0041	0.0039	0.0072
Potassium	mg/L	---	2.76	2	3.3	2.08	4.1	2.7	4.57
Selenium	mg/L	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Silver	mg/L	0.05	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U	0.0004 U
Sodium	mg/L	20	1.59	**109**	13.3	**48.2**	**54.6**	17.5	**54.9**
Thallium	mg/L	0.0005[C]	0.0005 U	0.0001 J	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U
Zinc	mg/L	2.0	0.0053 J	0.0364	0.0093 J	0.0072 J	0.0813	0.0059 J	0.0199

Notes:

Values in **BOLD** indicate an exceedance of applicable water quality standard.
U = Sample concentration was not detected at or above the reporting limit.
J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
^ = Instrument related QC exceeds the control limits.
[A] = NY TOGs 1.1.1: Water Quality Stds & Guidance Values: GA Water Class for Standard and Guidance Values; Eff. June 1998
[B] = Standards based on EPA Part 5, Subpart 5-1 Public Water Systems - Tables 1 and 5.
[C] = The sample specific reporting limit does not support the applicable groundwater standard.
[D] = The sum of iron and manganese concentrations must not exceed 0.5 mg/L.
--- No standard or not measured.

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Table 4
Summary of Surface Water Analytical Results
November 16-17, 2015
Orange County Landfill, Goshen, New York

Analyte	Units	Surface Water Standard[A]	SW-13	SW-5	SW-8
Water Quality Parameters					
Alkalinity, Total	mg/L	---	97.3	98.4	97.6
Ammonia	mg/L	[B]	0.043 J	0.056 J	0.034 J
Biochemical Oxygen Demand	mg/L	---	2 U	2 U	2 U
Chemical Oxygen Demand	mg/L	---	24	19	35
Chloride	mg/L	---	75.8	75.1	75
Color	Color Units	---	48	54	54
Cyanide, Total	mg/L	0.0052	0.005 U	0.001 J	0.005 U
Hardness as calcium carbonate	mg/L	---	150	150	140
Nitrate as N	mg/L	---	0.58	0.58	0.57
Phenolics, Total Recoverable	mg/L	0.001[C]	**0.008** J	**0.005** J	0.03 U
Sulfate	mg/L	---	31.4	31.2	32
Total Dissolved Solids	mg/L	---	250	250	250
Total Kjeldahl Nitrogen	mg/L	---	0.755	0.666	0.715
Total Organic Carbon	mg/L	---	7.62	7.58	7.61
Turbidity	NTU	---	6.7	5.6	7.2
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	---	2.5 U	2.5 U	2.5 U
1,1,1,2-Tetrachloroethane	µg/L	---	2.5 U	2.5 U	2.5 U
1,1,2-Trichloroethane	µg/L	---	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	µg/L	---	2.5 U	2.5 U	2.5 U
1,1-Dichloroethene	µg/L	---	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	µg/L	5 [D]	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	µg/L	---	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	---	1 U	1 U	1 U
1,3-Dichlorobenzene	µg/L	5 [D]	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	µg/L	5 [D]	2.5 U	2.5 U	2.5 U
2-Chloroethyl vinyl ether	µg/L	---	10 U	10 U	10 U
Benzene	µg/L	10	0.5 U	0.5 U	0.5 U
Bromodichloromethane	µg/L	---	0.5 U	0.5 U	0.5 U
Bromoform	µg/L	---	2 U	2 U	2 U
Bromomethane	µg/L	---	2.5 U	2.5 U	2.5 U
Carbon tetrachloride	µg/L	---	0.5 U	0.5 U	0.5 U
Chlorobenzene	µg/L	5	2.5 U	2.5 U	2.5 U
Chloroethane	µg/L	---	2.5 U	2.5 U	2.5 U
Chloroform	µg/L	---	2.5 U	2.5 U	2.5 U
Chloromethane	µg/L	---	2.5 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	µg/L	---	---	---	---
cis-1,3-Dichloropropene	µg/L	---	0.5 U	0.5 U	0.5 U
Dibromochloromethane	µg/L	---	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	µg/L	---	5 U	5 U	5 U
Ethylbenzene	µg/L	17	2.5 U	2.5 U	2.5 U
Methylene Chloride	µg/L	200	2.5 U	2.5 U	2.5 U
m-Xylene & p-Xylene	µg/L	65 [D]	2.5 U	2.5 U	2.5 U
o-Xylene	µg/L	65 [D]	2.5 U	2.5 U	2.5 U
Tetrachloroethene	µg/L	1.0	0.5 U	0.5 U	0.5 U
Toluene	µg/L	6,000	2.5 U	2.5 U	2.5 U
trans-1,2-Dichloroethene	µg/L	---	2.5 U	2.5 U	2.5 U
trans-1,3-Dichloropropene	µg/L	---	0.5 U	0.5 U	0.5 U
Trichloroethene	µg/L	40	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	µg/L	---	2.5 U	2.5 U	2.5 U
Vinyl chloride	µg/L	---	1 U	1 U	1 U
Xylenes, Total	µg/L	65	---	---	---
Metals, Total Recoverable					
Aluminum	mg/L	0.1	0.085	0.087	0.073
Antimony	mg/L	---	0.0001 J	0.0002 J	0.0002 J
Arsenic	mg/L	0.15[E]	0.0008	0.0009	0.0008
Barium	mg/L	---	0.0175	0.0184	0.0189
Beryllium	mg/L	[F]	0.0005 U	0.0005 U	0.0005 U
Boron	mg/L	10	0.0206 J	0.0223 J	0.0197 J
Cadmium	mg/L	[F]	0.0002 U	0.0002 U	0.0002 U
Calcium	mg/L	---	39	39	37
Chromium	mg/L	[F]	0.0056	0.0074	0.0064
Chromium, hexavalent	mg/L	0.011[E]	0.01 U	0.01 U	0.01 U
Copper	mg/L	[F]	0.0015	0.0016	0.0016
Iron	mg/L	0.3	**0.407**	**0.396**	**0.354**
Lead	mg/L	[F]	0.0003 J	0.0003 J	0.0003 J
Magnesium	mg/L	---	12	12	12
Manganese	mg/L	---	0.0747	0.0771	0.0758
Mercury	mg/L	0.7	0.0002 U	0.0002 U	0.0002 U
Nickel	mg/L	[F]	0.0044	0.006	0.0043
Potassium	mg/L	---	2.17	2.24	2.19
Selenium	mg/L	---	0.005 U	0.005 U	0.005 U
Silver	mg/L	---	0.0004 U	0.0004 U	0.0004 U
Sodium	mg/L	---	41.1	40.3	38.8
Thallium	mg/L	0.008[C]	0.0005 U	0.0005 U	0.0005 U
Zinc	mg/L	[F]	0.0072 J	0.01	0.0069 J

Notes:

Values in **BOLD** indicate an exceedance of applicable water quality standard.

U = Compound is not detected at or above laboratory method detection limit.

J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

^ = Instrument related QC exceeds the control limits.

[A] = T.O.G.S. 1.1.1 Ambient Water Quality Standards for Class C Surface Water

[B] = Surface water standard for ammonia (mg/L) is interpolated using the temperatures and pH of the individual samples. SW-13 = 2.18; SW-5 = 2.19; and SW-8 = 2.10

[C] = Laboratory Method Detection Limit is greater than or equal to the applicable water quality standard.

[D] = Applies to the sum of 1,2-1,3-1,4-Dichlorobenzene, or Applies to each individual isomer, or applies to the sum of m-, o-, and p-xylenes, or applies to the sum of cis-trans 1,3-Dichloropropene.

[E] = Standard applies to the dissolved form, not total recoverable.

[F] = Surface Water Standard for Berylium, Cadmium, Chromium, Copper, Lead, Nickel, and Zinc are based on the individual sample's hardness.

Berylium (mg/L): SW-13 = 1.1; SW-5 = 1.1; and SW-8 = 1.1

Cadmium (mg/L): SW-13 = 0.01; SW-5 = 0.01; and SW-8 = 0.01

Chromium: (mg/L): SW-13 = 1.17; SW-5 = 1.13; and SW-8 = 1.7

Copper (mg/L): SW-13 = 0.03; SW-5 = 0.03; and SW-8 = 0.03

Lead (mg/L): SW-13 = 0.25; SW-5 = 0.24; and SW-8 = 0.25

Nickel (mg/L): SW-13 = 0.98; SW-5 = 0.95; and SW-8 = 0.98

Zinc (mg/L): SW-13 = 0.25; SW-5 = 0.24; and SW-8 = 0.25

--- No standard or not measured.

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Table 5
Summary of Leachate Analytical Results
November 16-17, 2015
Orange County Landfill, Goshen, New York

Analyte	Units	MH-5 Not Sampled	MH-7 11/17/2015	MH-15 11/17/2015
Water Quality Parameters				
Alkalinity, Total	mg/L	---	2720	1320
Ammonia	mg/L	---	400	98
Biochemical Oxygen Demand	mg/L	---	20 U	10 U
Chemical Oxygen Demand	mg/L	---	540	330
Chloride	mg/L	---	1350	461
Color	Color Units	---	330	260
Cyanide, Total	mg/L	---	0.003 J	0.001 J
Hardness as calcium carbonate	mg/L	---	630	720
Nitrate as N	mg/L	---	0.027 J	1.6
Phenolics, Total Recoverable	mg/L	---	0.015 J	0.009 J
Sulfate	mg/L	---	41.7	21.6
Total Dissolved Solids	mg/L	---	3400	1700
Total Kjeldahl Nitrogen	mg/L	---	384	95.4
Total Organic Carbon	mg/L	---	200	106
Turbidity	NTU	---	82.6	86.3
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	---	2.5 U	2.5 U
1,1,1,2-Tetrachloroethane	µg/L	---	2.5 U	2.5 U
1,1,2-Trichloroethane	µg/L	---	1.5 U	1.5 U
1,1-Dichloroethane	µg/L	---	2.5 U	2.5 U
1,1-Dichloroethene	µg/L	---	0.5 U	0.5 U
1,2-Dichlorobenzene	µg/L	---	2.5 U	2.5 U
1,2-Dichloroethane	µg/L	---	0.5 U	0.5 U
1,2-Dichloropropane	µg/L	---	1 U	1 U
1,3-Dichlorobenzene	µg/L	---	2.5 U	2.5 U
1,4-Dichlorobenzene	µg/L	---	**3.9**	**1.3** J
2-Chloroethyl vinyl ether	µg/L	---	10 U	10 U
Benzene	µg/L	---	**14**	**0.39** J
Bromodichloromethane	µg/L	---	0.5 U	0.5 U
Bromoform	µg/L	---	2 U	2 U
Bromomethane	µg/L	---	2.5 U	2.5 U
Carbon tetrachloride	µg/L	---	0.5 U	0.5 U
Chlorobenzene	µg/L	---	**22**	2.5 U
Chloroethane	µg/L	---	1.8 J	2.5 U
Chloroform	µg/L	---	2.5 U	2.5 U
Chloromethane	µg/L	---	2.5 U	2.5 U
cis-1,2-Dichloroethene	µg/L	---	---	---
cis-1,3-Dichloropropene	µg/L	---	0.5 U	0.5 U
Dibromochloromethane	µg/L	---	0.5 U	0.5 U
Dichlorodifluoromethane	µg/L	---	5 U	5 U
Ethylbenzene	µg/L	---	**15**	2.5 U
Methylene Chloride	µg/L	---	2.5 U	2.5 U
m-Xylene & p-Xylene	µg/L	---	0.72 J	2.5 U
o-Xylene	µg/L	---	2.5 U	2.5 U
Tetrachloroethene	µg/L	---	0.5 U	0.5 U
Toluene	µg/L	---	2.5 U	2.5 U
trans-1,2-Dichloroethene	µg/L	---	2.5 U	2.5 U
trans-1,3-Dichloropropene	µg/L	---	0.5 U	0.5 U
Trichloroethene	µg/L	---	0.5 U	0.5 U
Trichlorofluoromethane	µg/L	---	2.5 U	2.5 U
Vinyl chloride	µg/L	---	1 U	1 U
Xylenes, Total	µg/L	---	---	---
Metals, Total Recoverable				
Aluminum	mg/L	---	0.422	0.009 J
Antimony	mg/L	---	0.0032	0.0005 J
Arsenic	mg/L	---	0.0166	0.0062
Barium	mg/L	---	0.1397	0.2791
Beryllium	mg/L	---	0.0005 U	0.0005 U
Boron	mg/L	---	3.21	1.45
Cadmium	mg/L	---	0.0002 U	0.0002 U
Calcium	mg/L	---	140	190
Chromium	mg/L	---	0.0146	0.0078
Chromium, hexavalent	mg/L	---	0.01 U	0.008 J
Copper	mg/L	---	0.0017	0.0007 J
Iron	mg/L	---	12.5	7.26
Lead	mg/L	---	0.0026	0.0001 J
Magnesium	mg/L	---	71	62
Manganese	mg/L	---	0.3844	2.089
Mercury	mg/L	---	0.0002 U	0.0002 U
Nickel	mg/L	---	0.0707	0.0351
Potassium	mg/L	---	192	79.2
Selenium	mg/L	---	0.005 U	0.005 U
Silver	mg/L	---	0.0004 U	0.0004 U
Sodium	mg/L	---	640	416
Thallium	mg/L	---	0.0005 U	0.0005 U
Zinc	mg/L	---	0.0096 J	0.0028 J

Notes:

U = Sample concentration was not detected at or above the reporting limit.
J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
--- No standard or not measured.

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APPENDIX A

ORANGE COUNTY LANDFILL POST-CLOSURE FIELD INSPECTION DOCUMENTS

ANNUAL MONITORING AND MAINTENANCE OPERATIONS CHECKLIST
ORANGE COUNTY LANDFILL
YEAR 2015

TASK DESCRIPTION	TASK FREQUENCY	MONTH TASK WAS COMPLETED [2]											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Mowing	Bi-annually						X		X	X			
Monthly Inspections (Internal)	Monthly	KS	KS	KS	KS	KS	KS	KS	KS	KS	KS	KS	KS
Annual Post-Closure Monitoring Report Submitted to NYSDEC[1]	Every Fifth Quarter												
Periodic Review Report Submitted to NYSDEC	Annually												

[1] Annual Monitoring includes groundwater monitoring, surface water monitoring, leachate monitoring, and explosive gas monitoring.

[2] Upon completeion of the task, the appropriate space should be initial and dated by the person that completed the task.

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 1/15/15 Performed By: Ken Sherwood

1.	Access road condition	☑ Good	☐ Fair	☐ Poor *	
2.	Access Control (Monitoring of Access road & entrance into landfill property)	☑ Has been maintained properly	☐ Has not been maintained properly		
3.	Roadside ditches, culverts & other site drainage ways	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
4.	Catch Basins	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
5.	Detention Basin	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
6.	Terraces	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
7.	Terraces downchutes	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
8.	Terraces headwall	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
9.	Grass condition	☑ Good	☐ Poor	☐ Dead	
10.	Other Plants Present	☐ Burdock	☐ Thistle	☐ Other	
11.	Woody Plants	☑ Not on cap	☐ Present*	Date Removed:_____	
12.	Capped Gas Wells	☑ Good Condition	☐ Damaged*		
13.	Surface erosion	☑ None	☐ Minor	☐ Needs repair *	
14.	Landfill Stability (Sloughing)	☑ No soil movement	☐ Soil movement present*		
15.	Cracks (Within landfill cover)	☑ No Cracks Visible	☐ Landfill cover crack(s) are visible* (Note Measurement, Location & Description)		
16.	Geomembrane liner exposed	☑ No	☐ Yes		
17.	Settlement	☑ No Settlement visible	☐ Settlement is visible* (Note Measurement, Location & Description)		
18.	Most recent mowing date: 9/23/14				
19.	Stressed vegetation	☑ No	☐ Yes*		
20.	Damage to leachate cleanouts	☑ No	☐ Yes		
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*		
22.	Litter present	☑ No	☐ Yes	Est. removal date:_____	
23.	Evidence of ponded water	☑ None	☐ Observed*	☐ Suspected *	
24.	Fallen trees	☑ None	☐ Present on cap *	Est. removal date:_____	
25.	Evidence of trespass	☐ Yes*	☑ No		
26.	Evidence of motor vehicle trespass	☑ No	☐ Auto/Truck	☐ Motorcycle	☐ ATV
27.	Woodchuck/rodent holes in cap	☑ No	☐ Yes	Date Backfilled:_____	
28.	Evidence of lightning strike	☑ No	☐ Yes *		

29. Unauthorized materials present	☑ No	☐ Yes *		
30. Dead Animals present	☑ No	☐ Yes *		
31. Oil slick on adjacent waters	☑ No	☐ Yes *		
32. Damaged leachate manholes	☑ No	☐ Yes *		
33. Leachate seeps	☑ No	☐ Yes	Stain Color:_____	
			Length: _____	
34. Leachate fluid	☐ Puddle *	☐ Stream *	☑ None	
35. Gulls/scavenger birds present	☑ No	☐ Yes *		
36. Other animal foraging evidence	☑ No	☐ Yes *		
37. No smoking warnings	☑ Present	☐ Missing/Damaged		
38. Survey Monuments	☑ Undisturbed	☐ Disturbed		

39. Leachate Collection tanks and piping

L - 1	☑ OK	☐ Problem *
L - 2	☑ OK	☐ Problem *
L - 3	☑ OK	☐ Problem *
L - 4	☑ OK	☐ Problem *
L - 5	☑ OK	☐ Problem *
L - 7	☑ OK	☐ Problem *

35. Condensate Tanks

C - 1	☑ OK	☐ Problem *
C – 2	☑ OK	☐ Problem *
C - 3	☑ OK	☐ Problem *
C – 4 (Maintenance Shop)	☑ OK	☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

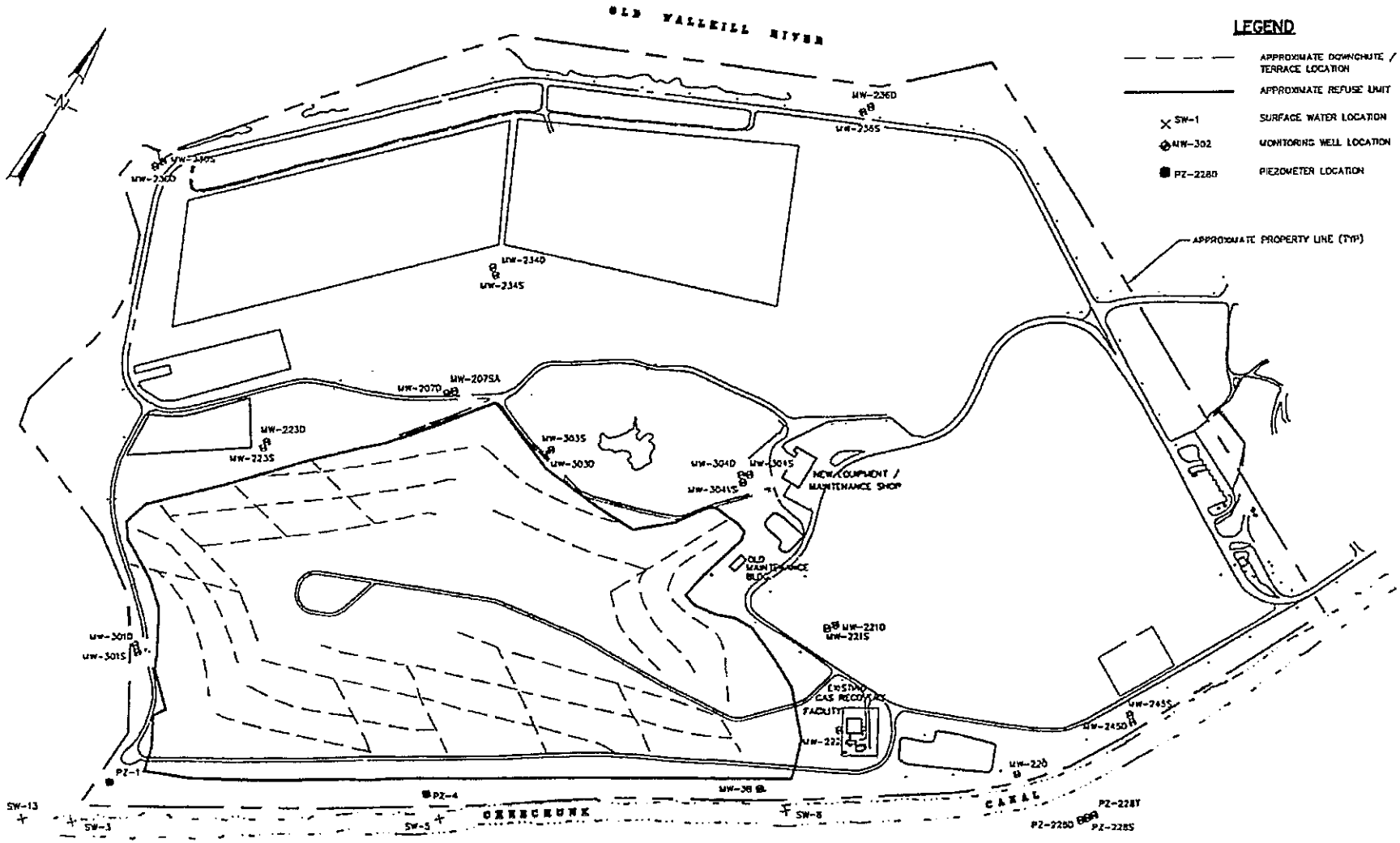
COMMENTS: N/A

CORRECTIVE ACTION TAKEN:

BY:

DATE:

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



SCALE: 1" = 600'

Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 2/16/15 Performed By: Ken Sherwood

1.	Access road condition	☑ Good	☐ Fair	☐ Poor *	
2.	Access Control (Monitoring of Access road & entrance into landfill property)	☑ Has been maintained properly	☐ Has not been maintained properly		
3.	Roadside ditches, culverts & other site drainage ways	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
4.	Catch Basins	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
5.	Detention Basin	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
6.	Terraces	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
7.	Terraces downchutes	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
8.	Terraces headwall	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
9.	Grass condition	☑ Good	☐ Poor	☐ Dead	
10.	Other Plants Present	☐ Burdock	☐ Thistle	☐ Other	
11.	Woody Plants	☑ Not on cap	☐ Present*	Date Removed:_____	
12.	Capped Gas Wells	☑ Good Condition	☐ Damaged*		
13.	Surface erosion	☑ None	☐ Minor	☐ Needs repair *	
14.	Landfill Stability (Sloughing)	☑ No soil movement	☐ Soil movement present*		
15.	Cracks (Within landfill cover)	☑ No Cracks Visible	☐ Landfill cover crack(s) are visible* (Note Measurement, Location & Description)		
16.	Geomembrane liner exposed	☑ No	☐ Yes		
17.	Settlement	☑ No Settlement visible	☐ Settlement is visible* (Note Measurement, Location & Description)		
18.	Most recent mowing date: 9/23/14				
19.	Stressed vegetation	☑ No	☐ Yes*		
20.	Damage to leachate cleanouts	☑ No	☐ Yes		
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*		
22.	Litter present	☑ No	☐ Yes	Est. removal date:_____	
23.	Evidence of ponded water	☑ None	☐ Observed*	☐ Suspected *	
24.	Fallen trees	☑ None	☐ Present on cap *	Est. removal date:_____	
25.	Evidence of trespass	☐ Yes*	☑ No		
26.	Evidence of motor vehicle trespass	☑ No	☐ Auto/Truck	☐ Motorcycle	☐ ATV
27.	Woodchuck/rodent holes in cap	☑ No	☐ Yes	Date Backfilled:_____	
28.	Evidence of lightning strike	☑ No	☐ Yes *		

29. Unauthorized materials present ☑ No ☐ Yes *

30. Dead Animals present ☑ No ☐ Yes *

31. Oil slick on adjacent waters ☑ No ☐ Yes *

32. Damaged leachate manholes ☑ No ☐ Yes *

33. Leachate seeps ☑ No ☐ Yes Stain Color:_____

Length: _____

34. Leachate fluid ☐ Puddle * ☐ Stream * ☐ None

35. Gulls/scavenger birds present ☑ No ☐ Yes *

36. Other animal foraging evidence ☑ No ☐ Yes *

37. No smoking warnings ☑ Present ☐ Missing/Damaged

38. Survey Monuments ☑ Undisturbed ☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☑ OK ☐ Problem *

L - 2 ☑ OK ☐ Problem *

L - 3 ☑ OK ☐ Problem *

L - 4 ☑ OK ☐ Problem *

L - 5 ☑ OK ☐ Problem *

L - 7 ☑ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☑ OK ☐ Problem *

C – 2 ☑ OK ☐ Problem *

C - 3 ☑ OK ☐ Problem *

C – 4 (Maintenance Shop)

☑ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

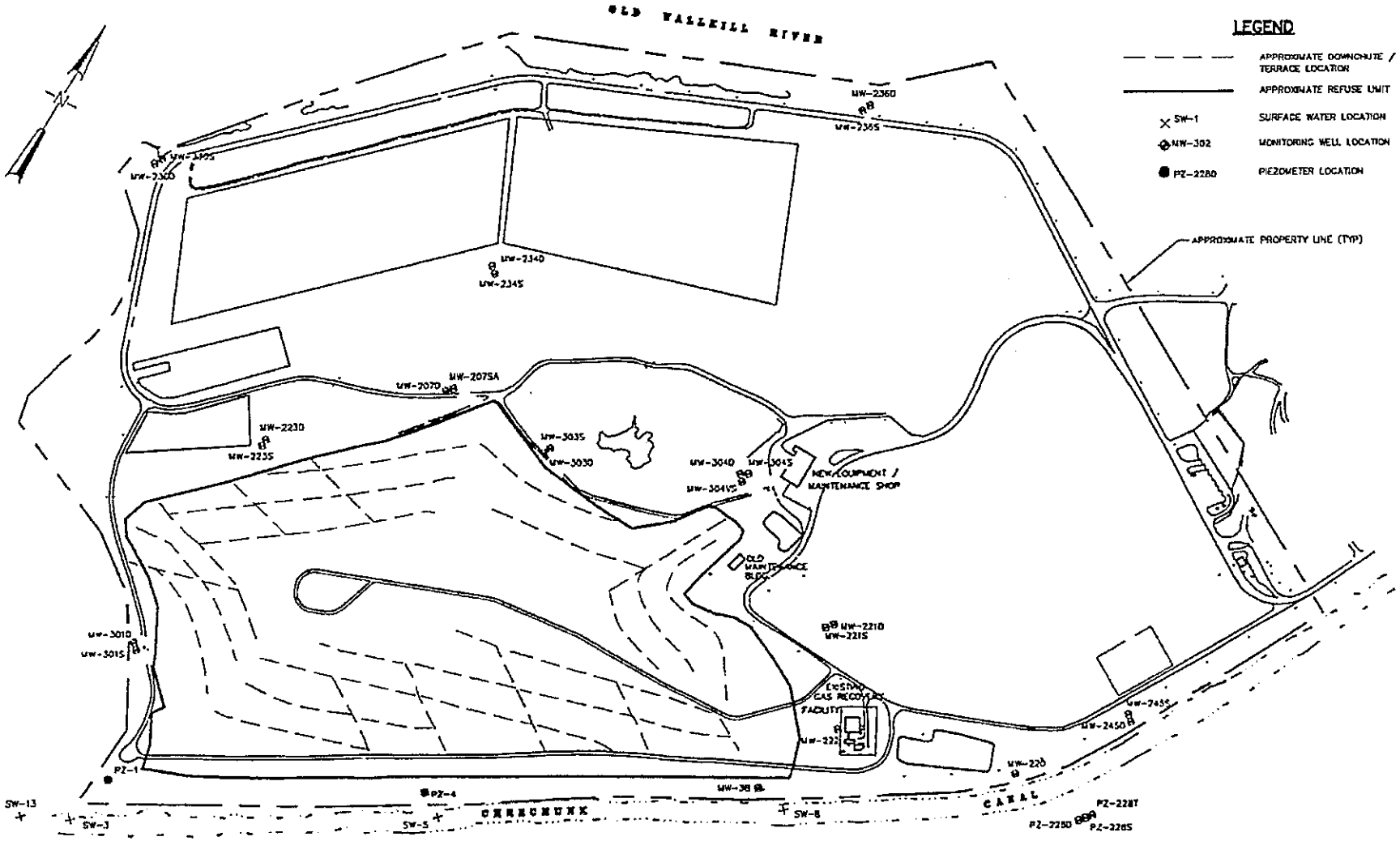
COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



SCALE: 1" = 600'

Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 3/16/15 Performed By: Ken Sherwood

1.	Access road condition	☑ Good	☐ Fair	☐ Poor *
2.	Access Control (Monitoring of Access road & entrance into landfill property)	☑ Has been maintained properly	☐ Has not been maintained properly	
3.	Roadside ditches, culverts & other site drainage ways	☑ Unobstructed	☐ Obstructed *	☐ Sediments
4.	Catch Basins	☑ Unobstructed	☐ Obstructed *	☐ Sediments
5.	Detention Basin	☑ Unobstructed	☐ Obstructed *	☐ Sediments
6.	Terraces	☑ Unobstructed	☐ Obstructed *	☐ Sediments
7.	Terraces downchutes	☑ Unobstructed	☐ Obstructed *	☐ Sediments
8.	Terraces headwall	☑ Unobstructed	☐ Obstructed *	☐ Sediments
9.	Grass condition	☑ Good	☐ Poor	☐ Dead
10.	Other Plants Present	☐ Burdock	☐ Thistle	☐ Other
11.	Woody Plants	☑ Not on cap	☐ Present*	Date Removed:_____
12.	Capped Gas Wells	☑ Good Condition	☐ Damaged*	
13.	Surface erosion	☑ None	☐ Minor	☐ Needs repair *
14.	Landfill Stability (Sloughing)	☑ No soil movement	☐ Soil movement present*	
15.	Cracks (Within landfill cover)	☑ No Cracks Visible	☐ Landfill cover crack(s) are visible* (Note Measurement, Location & Description)	
16.	Geomembrane liner exposed	☑ No	☐ Yes	
17.	Settlement	☑ No Settlement visible	☐ Settlement is visible* (Note Measurement, Location & Description)	
18.	Most recent mowing date: 9/23/14			
19.	Stressed vegetation	☑ No	☐ Yes*	
20.	Damage to leachate cleanouts	☑ No	☐ Yes	
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*	
22.	Litter present	☑ No	☐ Yes	Est. removal date:_____
23.	Evidence of ponded water	☑ None	☐ Observed*	☐ Suspected *
24.	Fallen trees	☑ None	☐ Present on cap *	Est. removal date: _____
25.	Evidence of trespass	☐ Yes*	☑ No	
.	Evidence of motor vehicle trespass	☑ No	☐ Auto/Truck ☐ Motorcycle	☐ ATV
27.	Woodchuck/rodent holes in cap	☑ No	☐ Yes	Date Backfilled: _____
28.	Evidence of lightning strike	☑ No	☐ Yes *	

29. Unauthorized materials present ☑ No ☐ Yes *

30. Dead Animals present ☑ No ☐ Yes *

31. Oil slick on adjacent waters ☑ No ☐ Yes *

32. Damaged leachate manholes ☑ No ☐ Yes *

33. Leachate seeps ☑ No ☐ Yes Stain Color: _____

Length: _____

34. Leachate fluid ☐ Puddle * ☐ Stream * ☐ None

35. Gulls/scavenger birds present ☑ No ☐ Yes *

36. Other animal foraging evidence ☑ No ☐ Yes *

37. No smoking warnings ☑ Present ☐ Missing/Damaged

38. Survey Monuments ☑ Undisturbed ☐ Disturbed

39. Leachate Collection tanks and piping

L - 1	☑ OK	☐ Problem *
L - 2	☑ OK	☐ Problem *
L - 3	☑ OK	☐ Problem *
L - 4	☑ OK	☐ Problem *
L - 5	☑ OK	☐ Problem *
L - 7	☑ OK	☐ Problem *

35. Condensate Tanks

C - 1	☑ OK	☐ Problem *
C – 2	☑ OK	☐ Problem *
C - 3	☑ OK	☐ Problem *
C – 4 (Maintenance Shop)	☑ OK	☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

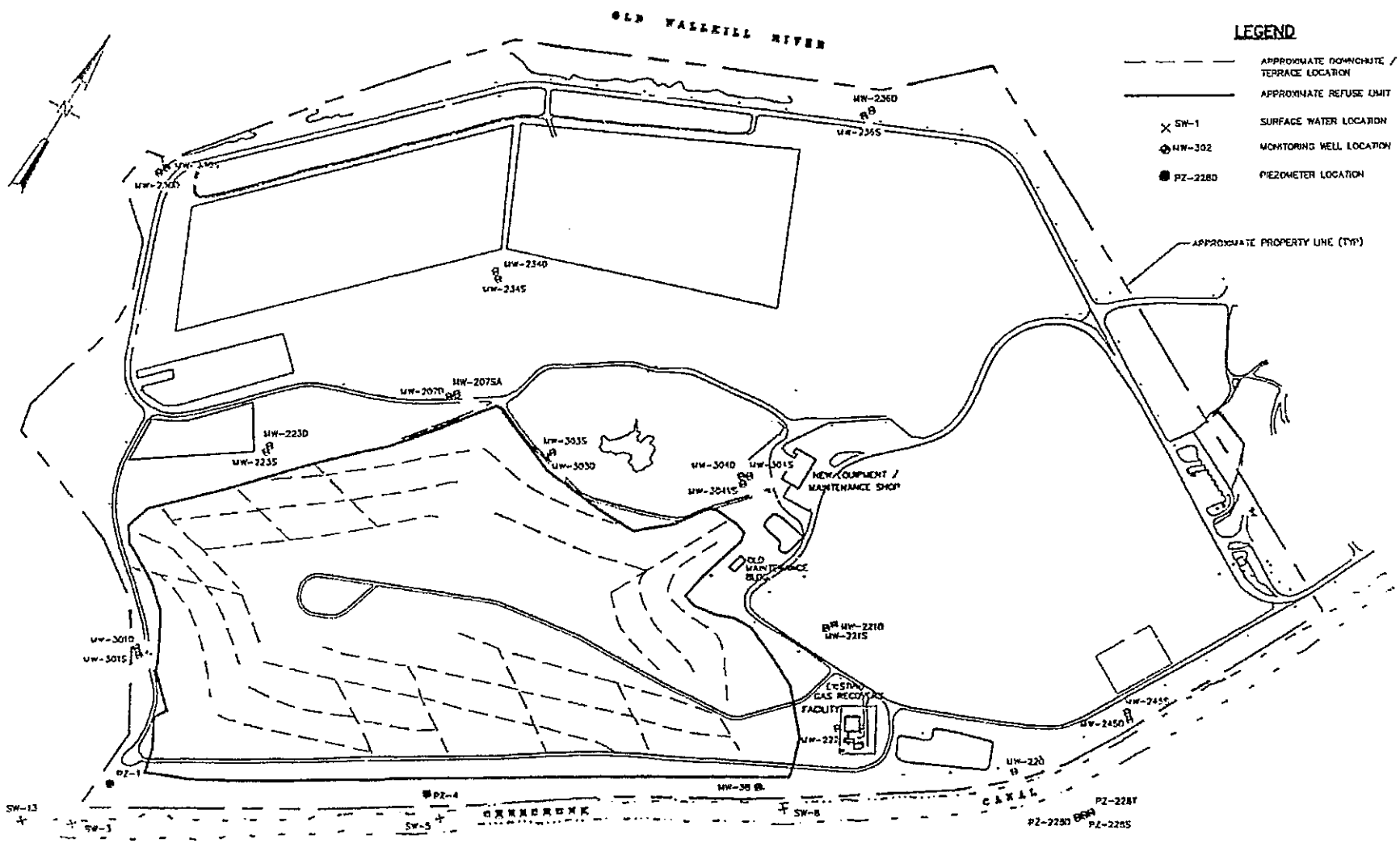
COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



SCALE: 1" = 600'

Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 4/15/15 Performed By: Ken Sherwood

1.	Access road condition	☑ Good	☐ Fair	☐ Poor *
2.	Access Control (Monitoring of Access road & entrance into landfill property)	☑ Has been maintained properly	☐ Has not been maintained properly	
3.	Roadside ditches, culverts & other site drainage ways	☑ Unobstructed	☐ Obstructed *	☐ Sediments
4.	Catch Basins	☑ Unobstructed	☐ Obstructed *	☐ Sediments
5.	Detention Basin	☑ Unobstructed	☐ Obstructed *	☐ Sediments
6.	Terraces	☑ Unobstructed	☐ Obstructed *	☐ Sediments
7.	Terraces downchutes	☑ Unobstructed	☐ Obstructed *	☐ Sediments
8.	Terraces headwall	☑ Unobstructed	☐ Obstructed *	☐ Sediments
9.	Grass condition	☑ Good	☐ Poor	☐ Dead
10.	Other Plants Present	☐ Burdock	☐ Thistle	☐ Other
11.	Woody Plants	☑ Not on cap	☐ Present*	Date Removed:_____
12.	Capped Gas Wells	☑ Good Condition	☐ Damaged*	
13.	Surface erosion	☑ None	☐ Minor	☐ Needs repair *
14.	Landfill Stability (Sloughing)	☑ No soil movement	☐ Soil movement present*	
15.	Cracks (Within landfill cover)	☑ No Cracks Visible	☐ Landfill cover crack(s) are visible* (Note Measurement, Location & Description)	
16.	Geomembrane liner exposed	☑ No	☐ Yes	
17.	Settlement	☑ No Settlement visible	☐ Settlement is visible* (Note Measurement, Location & Description)	
18.	Most recent mowing date: 9/23/14			
19.	Stressed vegetation	☑ No	☐ Yes*	
20.	Damage to leachate cleanouts	☑ No	☐ Yes	
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*	
22.	Litter present	☑ No	☐ Yes	Est. removal date:_____
23.	Evidence of ponded water	☑ None	☐ Observed*	☐ Suspected *
24.	Fallen trees	☑ None	☐ Present on cap *	Est. removal date: _____
25.	Evidence of trespass	☐ Yes*	☑ No	
.	Evidence of motor vehicle trespass	☑ No	☐ Auto/Truck	☐ Motorcycle ☐ ATV
27.	Woodchuck/rodent holes in cap	☑ No	☐ Yes	Date Backfilled: _____
28.	Evidence of lightning strike	☑ No	☐ Yes *	

29. Unauthorized materials present ☑ No ☐ Yes *

30. Dead Animals present ☑ No ☐ Yes *

31. Oil slick on adjacent waters ☑ No ☐ Yes *

32. Damaged leachate manholes ☑ No ☐ Yes *

33. Leachate seeps ☑ No ☐ Yes Stain Color: _____

Length: _____

34. Leachate fluid ☐ Puddle * ☐ Stream * ☐ None

35. Gulls/scavenger birds present ☑ No ☐ Yes *

36. Other animal foraging evidence ☑ No ☐ Yes *

37. No smoking warnings ☑ Present ☐ Missing/Damaged

38. Survey Monuments ☑ Undisturbed ☐ Disturbed

39. Leachate Collection tanks and piping

L - 1	☐ OK	☑ Problem *
L - 2	☑ OK	☐ Problem *
L - 3	☑ OK	☐ Problem *
L - 4	☑ OK	☐ Problem *
L - 5	☑ OK	☐ Problem *
L - 7	☑ OK	☐ Problem *

35. Condensate Tanks

C - 1	☑ OK	☐ Problem *
C – 2	☑ OK	☐ Problem *
C - 3	☑ OK	☐ Problem *
C – 4 (Maintenance Shop)	☑ OK	☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

COMMENTS: Leachate tank #1 has a problem and is not pumping now. Cook has been notified and problem will be fixed.

CORRECTIVE ACTION TAKEN:

BY:

DATE:

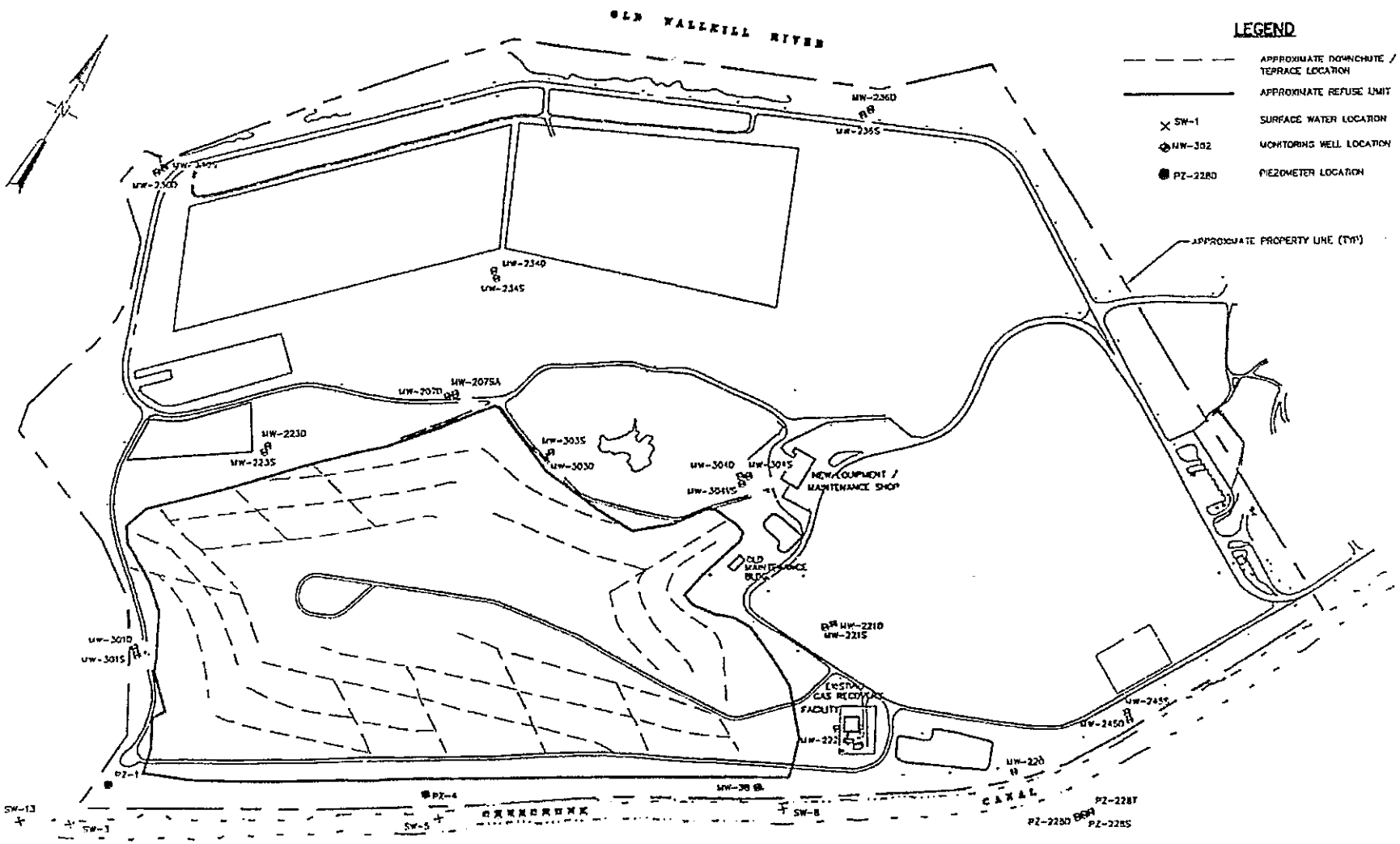
COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

SCALE: 1" = 600'

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 5/15/15 Performed By: Ken Sherwood

1.	Access road condition	☑ Good	☐ Fair	☐ Poor *
2.	Access Control (Monitoring of Access road & entrance into landfill property)	☑ Has been maintained properly	☐ Has not been maintained properly	
3.	Roadside ditches, culverts & other site drainage ways	☑ Unobstructed	☐ Obstructed *	☐ Sediments
4.	Catch Basins	☑ Unobstructed	☐ Obstructed *	☐ Sediments
5.	Detention Basin	☑ Unobstructed	☐ Obstructed *	☐ Sediments
6.	Terraces	☑ Unobstructed	☐ Obstructed *	☐ Sediments
7.	Terraces downchutes	☑ Unobstructed	☐ Obstructed *	☐ Sediments
8.	Terraces headwall	☑ Unobstructed	☐ Obstructed *	☐ Sediments
9.	Grass condition	☑ Good	☐ Poor	☐ Dead
10.	Other Plants Present	☐ Burdock	☐ Thistle	☐ Other
11.	Woody Plants	☑ Not on cap	☐ Present*	Date Removed:_____
12.	Capped Gas Wells	☑ Good Condition	☐ Damaged*	
13.	Surface erosion	☑ None	☐ Minor	☐ Needs repair *
14.	Landfill Stability (Sloughing)	☑ No soil movement	☐ Soil movement present*	
15.	Cracks (Within landfill cover)	☑ No Cracks Visible	☐ Landfill cover crack(s) are visible* (Note Measurement, Location & Description)	
16.	Geomembrane liner exposed	☑ No	☐ Yes	
17.	Settlement	☑ No Settlement visible	☐ Settlement is visible* (Note Measurement, Location & Description)	
18.	Most recent mowing date: 9/23/14			
19.	Stressed vegetation	☑ No	☐ Yes*	
20.	Damage to leachate cleanouts	☑ No	☐ Yes	
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*	
22.	Litter present	☑ No	☐ Yes	Est. removal date:_____
23.	Evidence of ponded water	☑ None	☐ Observed*	☐ Suspected *
24.	Fallen trees	☑ None	☐ Present on cap *	Est. removal date: _____
25.	Evidence of trespass	☐ Yes*	☑ No	
.	Evidence of motor vehicle trespass	☑ No	☐ Auto/Truck	☐ Motorcycle ☐ ATV
27.	Woodchuck/rodent holes in cap	☑ No	☐ Yes	Date Backfilled: _____
28.	Evidence of lightning strike	☑ No	☐ Yes *	

29. Unauthorized materials present ☑ No ☐ Yes *

30. Dead Animals present ☑ No ☐ Yes *

31. Oil slick on adjacent waters ☑ No ☐ Yes *

32. Damaged leachate manholes ☑ No ☐ Yes *

33. Leachate seeps ☑ No ☐ Yes Stain Color: _____

Length: _____

34. Leachate fluid ☐ Puddle * ☐ Stream * ☐ None

35. Gulls/scavenger birds present ☑ No ☐ Yes *

36. Other animal foraging evidence ☑ No ☐ Yes *

37. No smoking warnings ☑ Present ☐ Missing/Damaged

38. Survey Monuments ☑ Undisturbed ☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☑ OK ☐ Problem *

L - 2 ☑ OK ☐ Problem *

L - 3 ☑ OK ☐ Problem *

L - 4 ☑ OK ☐ Problem *

L - 5 ☑ OK ☐ Problem *

L - 7 ☑ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☑ OK ☐ Problem *

C – 2 ☑ OK ☐ Problem *

C - 3 ☑ OK ☐ Problem *

C – 4 (Maintenance Shop)

☑ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

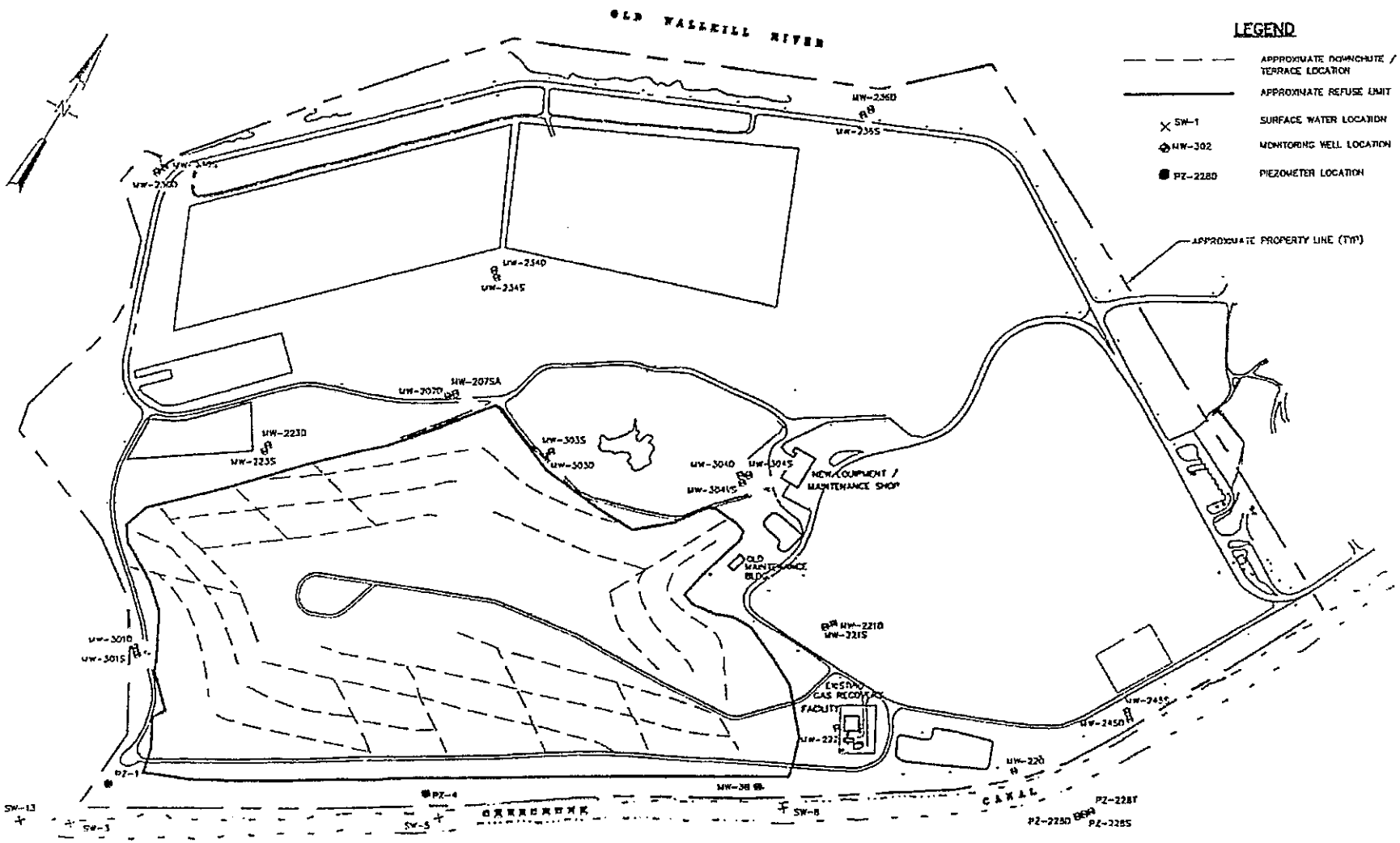
COMMENTS:

CORRECTIVE ACTION TAKEN: Leachate Tank #1 has been fixed and is working correctly.

BY:

DATE:

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



SCALE: 1" = 600'

Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 6/15/15 Performed By: Ken Sherwood

1.	Access road condition	☑ Good	☐ Fair	☐ Poor *
2.	Access Control (Monitoring of Access road & entrance into landfill property)	☑ Has been maintained properly	☐ Has not been maintained properly	
3.	Roadside ditches, culverts & other site drainage ways	☑ Unobstructed	☐ Obstructed *	☐ Sediments
4.	Catch Basins	☑ Unobstructed	☐ Obstructed *	☐ Sediments
5.	Detention Basin	☑ Unobstructed	☐ Obstructed *	☐ Sediments
6.	Terraces	☑ Unobstructed	☐ Obstructed *	☐ Sediments
7.	Terraces downchutes	☑ Unobstructed	☐ Obstructed *	☐ Sediments
8.	Terraces headwall	☑ Unobstructed	☐ Obstructed *	☐ Sediments
9.	Grass condition	☑ Good	☐ Poor	☐ Dead
10.	Other Plants Present	☐ Burdock	☐ Thistle	☐ Other
11.	Woody Plants	☑ Not on cap	☐ Present*	Date Removed:_____
12.	Capped Gas Wells	☑ Good Condition	☐ Damaged*	
13.	Surface erosion	☑ None	☐ Minor	☐ Needs repair *
14.	Landfill Stability (Sloughing)	☑ No soil movement	☐ Soil movement present*	
15.	Cracks (Within landfill cover)	☑ No Cracks Visible	☐ Landfill cover crack(s) are visible* (Note Measurement, Location & Description)	
16.	Geomembrane liner exposed	☑ No	☐ Yes	
17.	Settlement	☑ No Settlement visible	☐ Settlement is visible* (Note Measurement, Location & Description)	
18.	Most recent mowing date: 6/10/15			
19.	Stressed vegetation	☑ No	☐ Yes*	
20.	Damage to leachate cleanouts	☑ No	☐ Yes	
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*	
22.	Litter present	☑ No	☐ Yes	Est. removal date:_____
23.	Evidence of ponded water	☑ None	☐ Observed*	☐ Suspected *
24.	Fallen trees	☑ None	☐ Present on cap *	Est. removal date: _____
25.	Evidence of trespass	☐ Yes*	☑ No	
.	Evidence of motor vehicle trespass	☑ No	☐ Auto/Truck	☐ Motorcycle ☐ ATV
27.	Woodchuck/rodent holes in cap	☑ No	☐ Yes	Date Backfilled: _____
28.	Evidence of lightning strike	☑ No	☐ Yes *	

29. Unauthorized materials present ☑ No ☐ Yes *

30. Dead Animals present ☑ No ☐ Yes *

31. Oil slick on adjacent waters ☑ No ☐ Yes *

32. Damaged leachate manholes ☑ No ☐ Yes *

33. Leachate seeps ☑ No ☐ Yes Stain Color: _____

Length: _____

34. Leachate fluid ☐ Puddle * ☐ Stream * ☐ None

35. Gulls/scavenger birds present ☑ No ☐ Yes *

36. Other animal foraging evidence ☑ No ☐ Yes *

37. No smoking warnings ☑ Present ☐ Missing/Damaged

38. Survey Monuments ☑ Undisturbed ☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☑ OK ☐ Problem *

L - 2 ☑ OK ☐ Problem *

L - 3 ☑ OK ☐ Problem *

L - 4 ☑ OK ☐ Problem *

L - 5 ☑ OK ☐ Problem *

L - 7 ☑ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☑ OK ☐ Problem *

C – 2 ☑ OK ☐ Problem *

C - 3 ☑ OK ☐ Problem *

C – 4 (Maintenance Shop)

☑ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

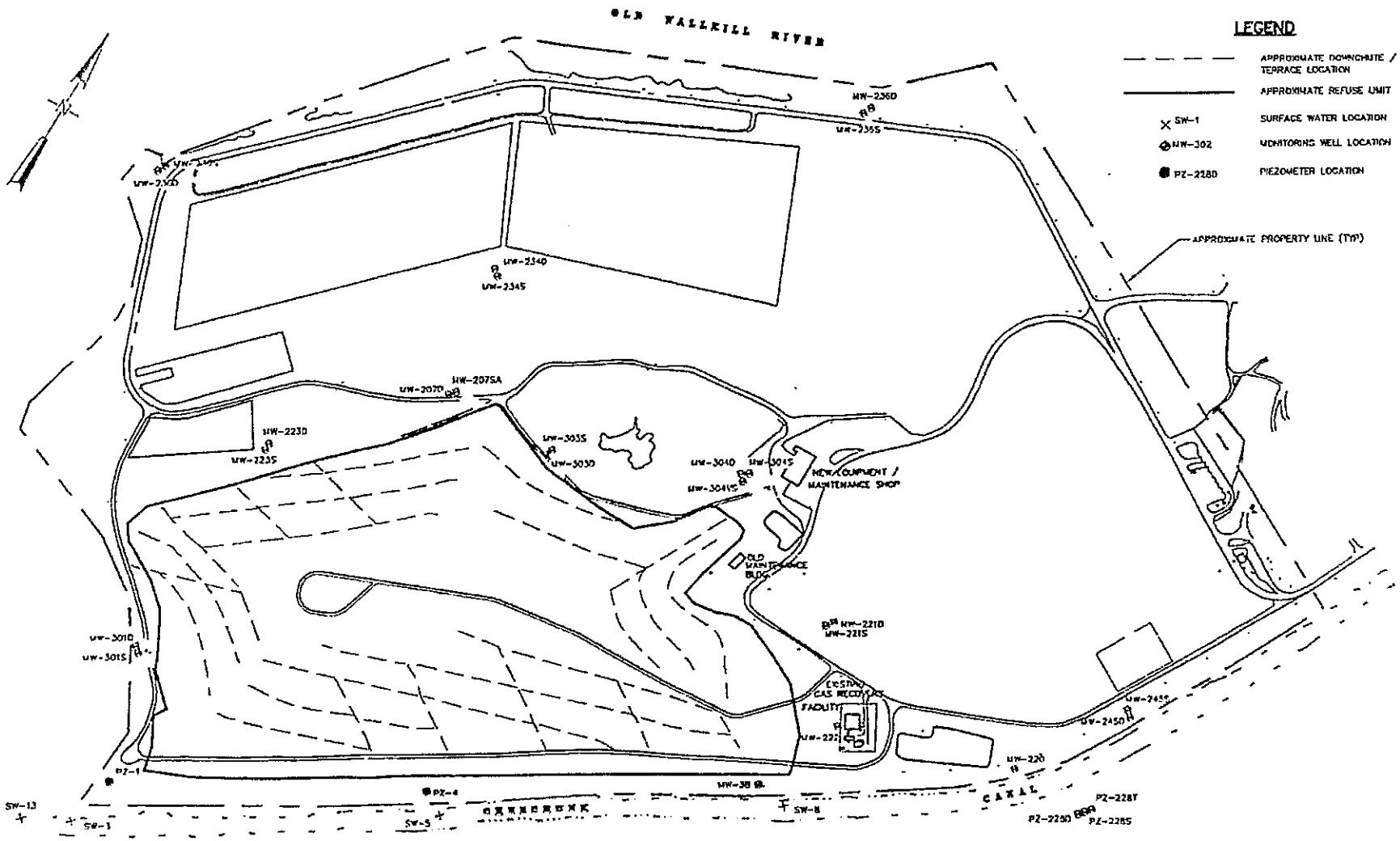
COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



SCALE: 1" = 600'

Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 7/15/15 Performed By: Ken Sherwood

1.	Access road condition	☑ Good	☐ Fair	☐ Poor *
2.	Access Control (Monitoring of Access road & entrance into landfill property)	☑ Has been maintained properly	☐ Has not been maintained properly	
3.	Roadside ditches, culverts & other site drainage ways	☑ Unobstructed	☐ Obstructed *	☐ Sediments
4.	Catch Basins	☑ Unobstructed	☐ Obstructed *	☐ Sediments
5.	Detention Basin	☑ Unobstructed	☐ Obstructed *	☐ Sediments
6.	Terraces	☑ Unobstructed	☐ Obstructed *	☐ Sediments
7.	Terraces downchutes	☑ Unobstructed	☐ Obstructed *	☐ Sediments
8.	Terraces headwall	☑ Unobstructed	☐ Obstructed *	☐ Sediments
9.	Grass condition	☑ Good	☐ Poor	☐ Dead
10.	Other Plants Present	☐ Burdock	☐ Thistle	☐ Other
11.	Woody Plants	☑ Not on cap	☐ Present*	Date Removed:_____
12.	Capped Gas Wells	☑ Good Condition	☐ Damaged*	
13.	Surface erosion	☑ None	☐ Minor	☐ Needs repair *
14.	Landfill Stability (Sloughing)	☑ No soil movement	☐ Soil movement present*	
15.	Cracks (Within landfill cover)	☑ No Cracks Visible	☐ Landfill cover crack(s) are visible* (Note Measurement, Location & Description)	
16.	Geomembrane liner exposed	☑ No	☐ Yes	
17.	Settlement	☑ No Settlement visible	☐ Settlement is visible* (Note Measurement, Location & Description)	
18.	Most recent mowing date: 6/24/15			
19.	Stressed vegetation	☑ No	☐ Yes*	
20.	Damage to leachate cleanouts	☑ No	☐ Yes	
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*	
22.	Litter present	☑ No	☐ Yes	Est. removal date:_____
23.	Evidence of ponded water	☑ None	☐ Observed*	☐ Suspected *
24.	Fallen trees	☑ None	☐ Present on cap *	Est. removal date: _____
25.	Evidence of trespass	☐ Yes*	☑ No	
.	Evidence of motor vehicle trespass	☑ No	☐ Auto/Truck ☐ Motorcycle	☐ ATV
27.	Woodchuck/rodent holes in cap	☑ No	☐ Yes	Date Backfilled: _____
28.	Evidence of lightning strike	☑ No	☐ Yes *	

29. Unauthorized materials present ☑ No ☐ Yes *

30. Dead Animals present ☑ No ☐ Yes *

31. Oil slick on adjacent waters ☑ No ☐ Yes *

32. Damaged leachate manholes ☑ No ☐ Yes *

33. Leachate seeps ☑ No ☐ Yes Stain Color: _____

Length: _____

34. Leachate fluid ☐ Puddle * ☐ Stream * ☐ None

35. Gulls/scavenger birds present ☑ No ☐ Yes *

36. Other animal foraging evidence ☑ No ☐ Yes *

37. No smoking warnings ☑ Present ☐ Missing/Damaged

38. Survey Monuments ☑ Undisturbed ☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☑ OK ☐ Problem *

L - 2 ☑ OK ☐ Problem *

L - 3 ☑ OK ☐ Problem *

L - 4 ☑ OK ☐ Problem *

L - 5 ☑ OK ☐ Problem *

L - 7 ☑ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☑ OK ☐ Problem *

C – 2 ☑ OK ☐ Problem *

C - 3 ☑ OK ☐ Problem *

C – 4 (Maintenance Shop)

☑ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

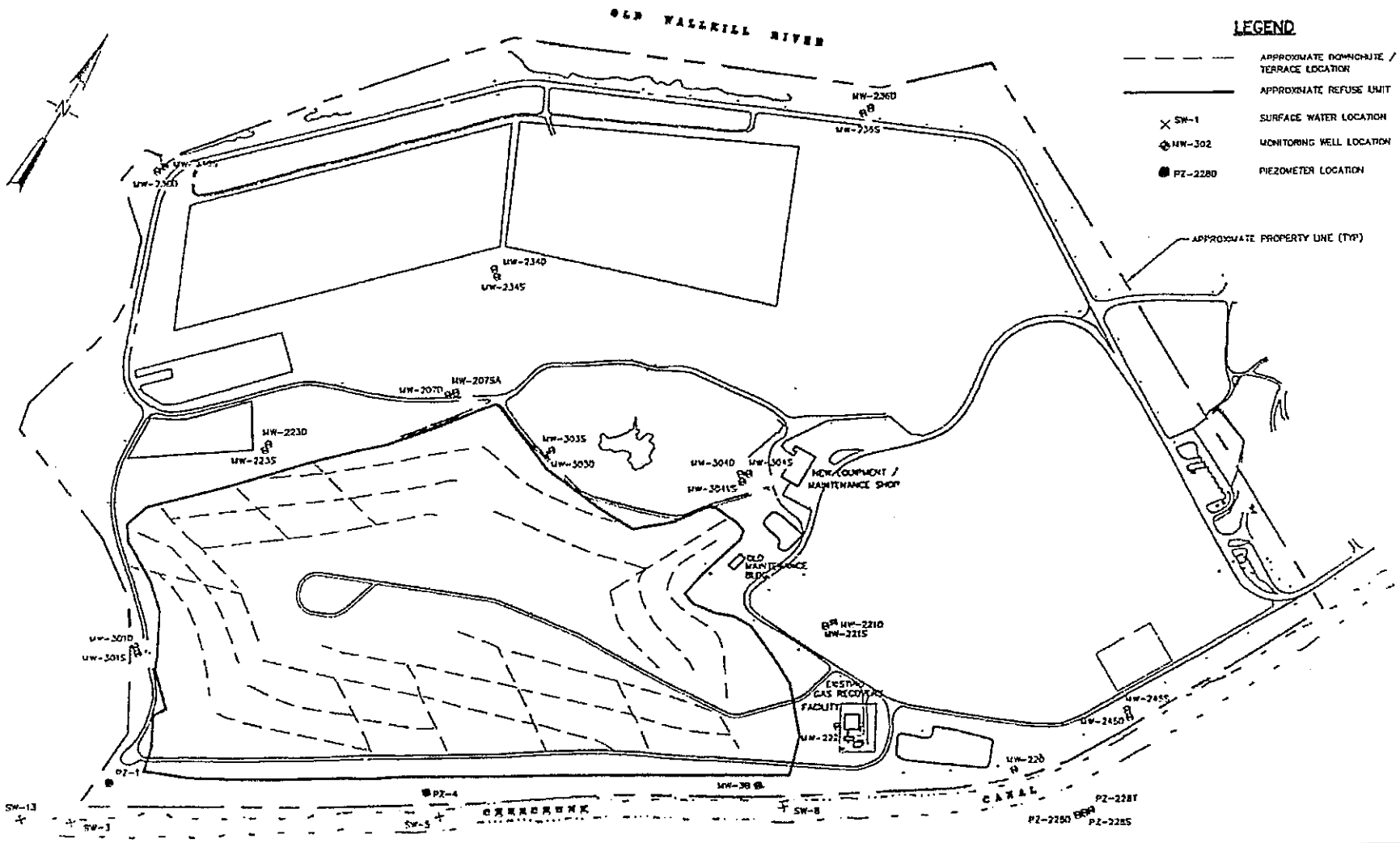
COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

SCALE: 1" = 600'

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 8/12/15 Performed By: Ken Sherwood

1.	Access road condition	☑ Good	☐ Fair	☐ Poor *
2.	Access Control (Monitoring of Access road & entrance into landfill property)	☑ Has been maintained properly	☐ Has not been maintained properly	
3.	Roadside ditches, culverts & other site drainage ways	☑ Unobstructed	☐ Obstructed *	☐ Sediments
4.	Catch Basins	☑ Unobstructed	☐ Obstructed *	☐ Sediments
5.	Detention Basin	☑ Unobstructed	☐ Obstructed *	☐ Sediments
6.	Terraces	☑ Unobstructed	☐ Obstructed *	☐ Sediments
7.	Terraces downchutes	☑ Unobstructed	☐ Obstructed *	☐ Sediments
8.	Terraces headwall	☑ Unobstructed	☐ Obstructed *	☐ Sediments
9.	Grass condition	☑ Good	☐ Poor	☐ Dead
10.	Other Plants Present	☐ Burdock	☐ Thistle	☐ Other
11.	Woody Plants	☑ Not on cap	☐ Present*	Date Removed:_____
12.	Capped Gas Wells	☑ Good Condition	☐ Damaged*	
13.	Surface erosion	☑ None	☐ Minor	☐ Needs repair *
14.	Landfill Stability (Sloughing)	☑ No soil movement	☐ Soil movement present*	
15.	Cracks (Within landfill cover)	☑ No Cracks Visible	☐ Landfill cover crack(s) are visible* (Note Measurement, Location & Description)	
16.	Geomembrane liner exposed	☑ No	☐ Yes	
17.	Settlement	☑ No Settlement visible	☐ Settlement is visible* (Note Measurement, Location & Description)	
18.	Most recent mowing date: 8/5/15			
19.	Stressed vegetation	☑ No	☐ Yes*	
20.	Damage to leachate cleanouts	☑ No	☐ Yes	
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*	
22.	Litter present	☑ No	☐ Yes	Est. removal date:_____
23.	Evidence of ponded water	☑ None	☐ Observed*	☐ Suspected *
24.	Fallen trees	☑ None	☐ Present on cap *	Est. removal date: _____
25.	Evidence of trespass	☐ Yes*	☑ No	
.	Evidence of motor vehicle trespass	☑ No	☐ Auto/Truck ☐ Motorcycle	☐ ATV
27.	Woodchuck/rodent holes in cap	☑ No	☐ Yes	Date Back filled: _____
28.	Evidence of lightning strike	☑ No	☐ Yes *	

29. Unauthorized materials present ☑ No ☐ Yes *

30. Dead Animals present ☑ No ☐ Yes *

31. Oil slick on adjacent waters ☑ No ☐ Yes *

32. Damaged leachate manholes ☑ No ☐ Yes *

33. Leachate seeps ☑ No ☐ Yes Stain Color: _____

Length: _____

34. Leachate fluid ☐ Puddle * ☐ Stream * ☐ None

35. Gulls/scavenger birds present ☑ No ☐ Yes *

36. Other animal foraging evidence ☑ No ☐ Yes *

37. No smoking warnings ☑ Present ☐ Missing/Damaged

38. Survey Monuments ☑ Undisturbed ☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☑ OK ☐ Problem *

L - 2 ☑ OK ☐ Problem *

L - 3 ☑ OK ☐ Problem *

L - 4 ☑ OK ☐ Problem *

L - 5 ☑ OK ☐ Problem *

L - 7 ☑ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☑ OK ☐ Problem *

C – 2 ☑ OK ☐ Problem *

C - 3 ☑ OK ☐ Problem *

C – 4 (Maintenance Shop)

☑ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

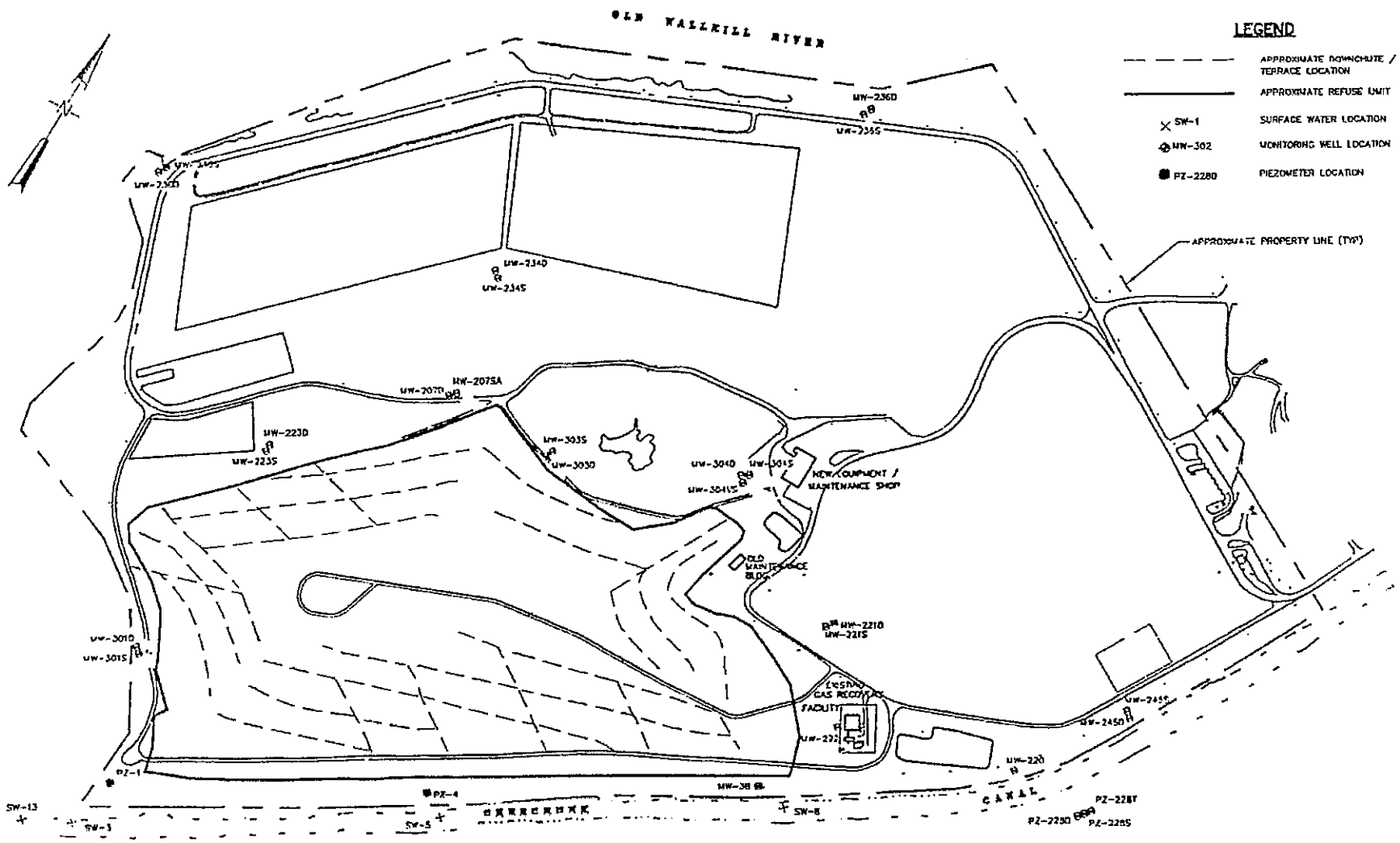
COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



SCALE: 1" = 600'

Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 9/15/15 Performed By: Ken Sherwood

1.	Access road condition	☑ Good	☐ Fair	☐ Poor *
2.	Access Control (Monitoring of Access road & entrance into landfill property)	☑ Has been maintained properly	☐ Has not been maintained properly	
3.	Roadside ditches, culverts & other site drainage ways	☑ Unobstructed	☐ Obstructed *	☐ Sediments
4.	Catch Basins	☑ Unobstructed	☐ Obstructed *	☐ Sediments
5.	Detention Basin	☑ Unobstructed	☐ Obstructed *	☐ Sediments
6.	Terraces	☑ Unobstructed	☐ Obstructed *	☐ Sediments
7.	Terraces downchutes	☑ Unobstructed	☐ Obstructed *	☐ Sediments
8.	Terraces headwall	☑ Unobstructed	☐ Obstructed *	☐ Sediments
9.	Grass condition	☑ Good	☐ Poor	☐ Dead
10.	Other Plants Present	☐ Burdock	☐ Thistle	☐ Other
11.	Woody Plants	☑ Not on cap	☐ Present*	Date Removed:_____
12.	Capped Gas Wells	☑ Good Condition	☐ Damaged*	
13.	Surface erosion	☑ None	☐ Minor	☐ Needs repair *
14.	Landfill Stability (Sloughing)	☑ No soil movement	☐ Soil movement present*	
15.	Cracks (Within landfill cover)	☑ No Cracks Visible	☐ Landfill cover crack(s) are visible* (Note Measurement, Location & Description)	
16.	Geomembrane liner exposed	☑ No	☐ Yes	
17.	Settlement	☑ No Settlement visible	☐ Settlement is visible* (Note Measurement, Location & Description)	
18.	Most recent mowing date: 8/5/15			
19.	Stressed vegetation	☑ No	☐ Yes*	
20.	Damage to leachate cleanouts	☑ No	☐ Yes	
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*	
22.	Litter present	☑ No	☐ Yes	Est. removal date:_____
23.	Evidence of ponded water	☑ None	☐ Observed*	☐ Suspected *
24.	Fallen trees	☑ None	☐ Present on cap *	Est. removal date: _____
25.	Evidence of trespass	☐ Yes*	☑ No	
.	Evidence of motor vehicle trespass	☑ No	☐ Auto/Truck ☐ Motorcycle	☐ ATV
27.	Woodchuck/rodent holes in cap	☑ No	☐ Yes	Date Backfilled: _____
28.	Evidence of lightning strike	☑ No	☐ Yes *	

29. Unauthorized materials present ☑ No ☐ Yes *

30. Dead Animals present ☑ No ☐ Yes *

31. Oil slick on adjacent waters ☑ No ☐ Yes *

32. Damaged leachate manholes ☑ No ☐ Yes *

33. Leachate seeps ☑ No ☐ Yes Stain Color: _____

Length: _____

34. Leachate fluid ☐ Puddle * ☐ Stream * ☐ None

35. Gulls/scavenger birds present ☑ No ☐ Yes *

36. Other animal foraging evidence ☑ No ☐ Yes *

37. No smoking warnings ☑ Present ☐ Missing/Damaged

38. Survey Monuments ☑ Undisturbed ☐ Disturbed

39. Leachate Collection tanks and piping

L - 1 ☑ OK ☐ Problem *

L - 2 ☑ OK ☐ Problem *

L - 3 ☑ OK ☐ Problem *

L - 4 ☑ OK ☐ Problem *

L - 5 ☑ OK ☐ Problem *

L - 7 ☑ OK ☐ Problem *

35. Condensate Tanks

C - 1 ☑ OK ☐ Problem *

C – 2 ☑ OK ☐ Problem *

C - 3 ☑ OK ☐ Problem *

C – 4 (Maintenance Shop)

☑ OK ☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

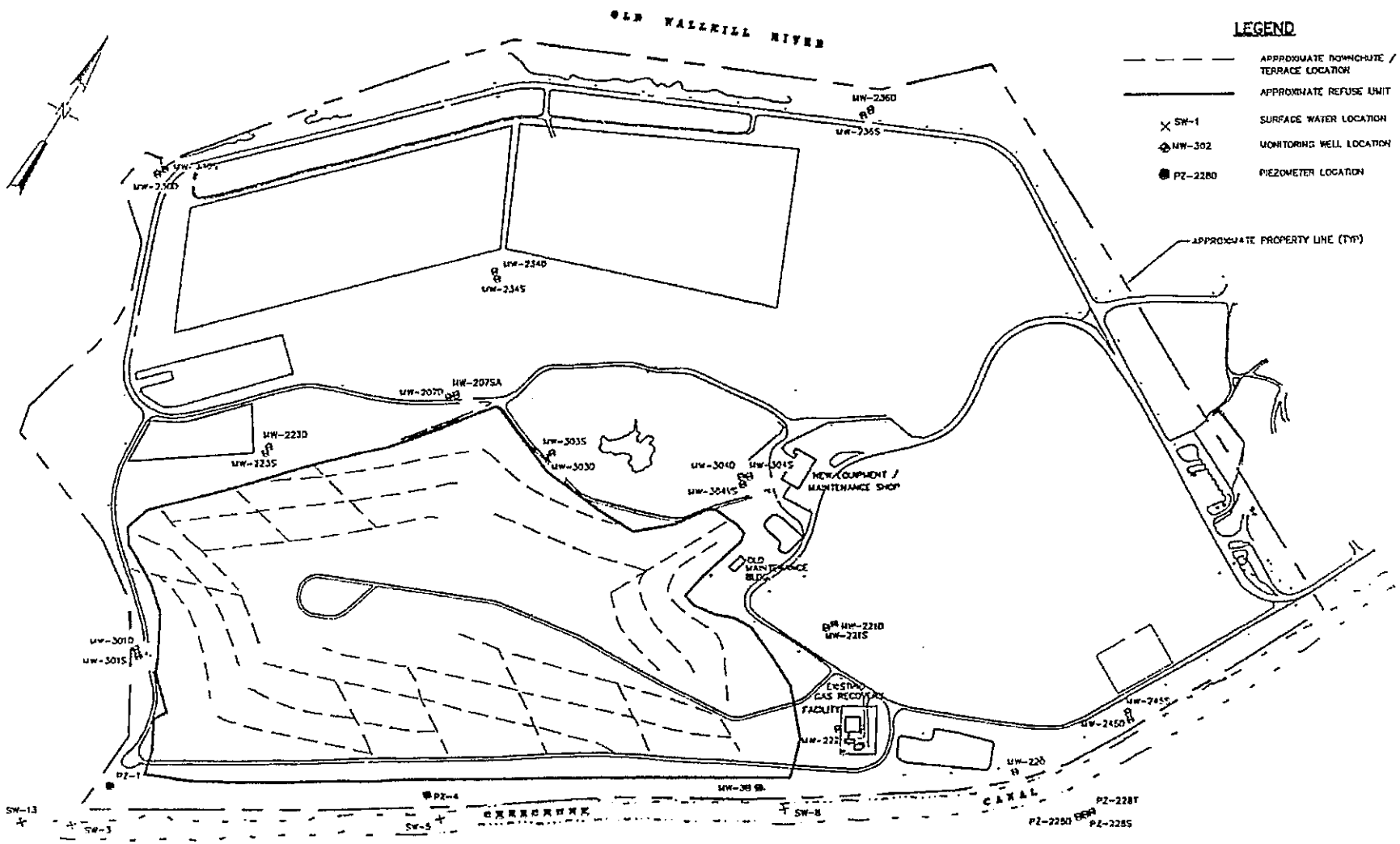
COMMENTS:

CORRECTIVE ACTION TAKEN:

BY:

DATE:

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



SCALE: 1" = 600'

Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 10/14/15 Performed By: Ken Sherwood

1.	Access road condition	☑ Good	☐ Fair	☐ Poor *	
2.	Access Control (Monitoring of Access road & entrance into landfill property)	☑ Has been maintained properly	☐ Has not been maintained properly		
3.	Roadside ditches, culverts & other site drainage ways	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
4.	Catch Basins	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
5.	Detention Basin	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
6.	Terraces	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
7.	Terraces downchutes	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
8.	Terraces headwall	☑ Unobstructed	☐ Obstructed *	☐ Sediments	
9.	Grass condition	☑ Good	☐ Poor	☐ Dead	
10.	Other Plants Present	☐ Burdock	☐ Thistle	☐ Other	
11.	Woody Plants	☑ Not on cap	☐ Present*	Date Removed:_____	
12.	Capped Gas Wells	☑ Good Condition	☐ Damaged*		
13.	Surface erosion	☑ None	☐ Minor	☐ Needs repair *	
14.	Landfill Stability (Sloughing)	☑ No soil movement	☐ Soil movement present*		
15.	Cracks (Within landfill cover)	☑ No Cracks Visible	☐ Landfill cover crack(s) are visible* (Note Measurement, Location & Description)		
16.	Geomembrane liner exposed	☑ No	☐ Yes		
17.	Settlement	☑ No Settlement visible	☐ Settlement is visible* (Note Measurement, Location & Description)		
18.	Most recent mowing date: 9/23/15				
19.	Stressed vegetation	☑ No	☐ Yes*		
20.	Damage to leachate cleanouts	☑ No	☐ Yes		
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*		
22.	Litter present	☑ No	☐ Yes	Est. removal date:_____	
23.	Evidence of ponded water	☑ None	☐ Observed*	☐ Suspected *	
24.	Fallen trees	☑ None	☐ Present on cap *	Est. removal date: _____	
25.	Evidence of trespass	☐ Yes*	☑ No		
.	Evidence of motor vehicle trespass	☑ No	☐ Auto/Truck	☐ Motorcycle	☐ ATV
27.	Woodchuck/rodent holes in cap	☑ No	☐ Yes	Date Back filled: _____	
28.	Evidence of lightning strike	☑ No	☐ Yes *		

29. Unauthorized materials present ☑ No ☐ Yes *

30. Dead Animals present ☑ No ☐ Yes *

31. Oil slick on adjacent waters ☑ No ☐ Yes *

32. Damaged leachate manholes ☑ No ☐ Yes *

33. Leachate seeps ☑ No ☐ Yes Stain Color: _____

Length: _____

34. Leachate fluid ☐ Puddle * ☐ Stream * ☐ None

35. Gulls/scavenger birds present ☑ No ☐ Yes *

36. Other animal foraging evidence ☑ No ☐ Yes *

37. No smoking warnings ☑ Present ☐ Missing/Damaged

38. Survey Monuments ☑ Undisturbed ☐ Disturbed

39. Leachate Collection tanks and piping

L - 1	☐ OK	☑ Problem *
L - 2	☑ OK	☐ Problem *
L - 3	☑ OK	☐ Problem *
L - 4	☑ OK	☐ Problem *
L - 5	☐ OK	☑ Problem *
L - 7	☑ OK	☐ Problem *

35. Condensate Tanks

C - 1	☑ OK	☐ Problem *
C – 2	☑ OK	☐ Problem *
C - 3	☑ OK	☐ Problem *
C – 4 (Maintenance Shop)	☑ OK	☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

COMMENTS: L-5 has a problem with float not working properly where it is causing pump not to start.

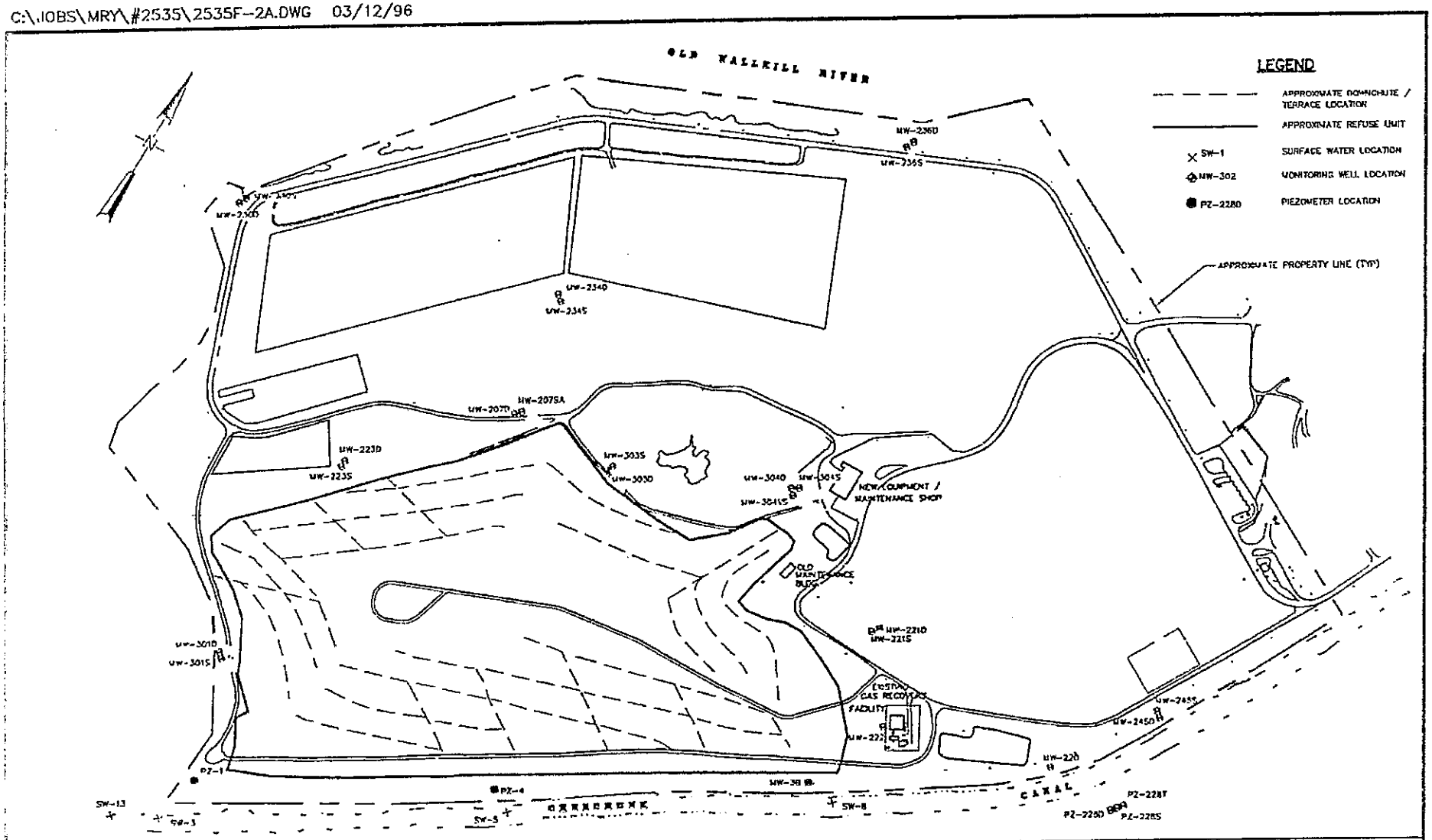
L-1 has problem with circuit board not working at all.

CORRECTIVE ACTION TAKEN: Called Cook to report problem and email has been sent.

BY: Ken Shannel

DATE: 10/14/15

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

SCALE: 1" = 600'

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 11/12/15 Performed By: Ken Sherwood

1.	Access road condition	☑ Good	☐ Fair	☐ Poor *
2.	Access Control (Monitoring of Access road & entrance into landfill property)	☑ Has been maintained properly	☐ Has not been maintained properly	
3.	Roadside ditches, culverts & other site drainage ways	☑ Unobstructed	☐ Obstructed *	☐ Sediments
4.	Catch Basins	☑ Unobstructed	☐ Obstructed *	☐ Sediments
5.	Detention Basin	☑ Unobstructed	☐ Obstructed *	☐ Sediments
6.	Terraces	☑ Unobstructed	☐ Obstructed *	☐ Sediments
7.	Terraces downchutes	☑ Unobstructed	☐ Obstructed *	☐ Sediments
8.	Terraces headwall	☑ Unobstructed	☐ Obstructed *	☐ Sediments
9.	Grass condition	☑ Good	☐ Poor	☐ Dead
10.	Other Plants Present	☐ Burdock	☐ Thistle	☐ Other
11.	Woody Plants	☑ Not on cap	☐ Present*	Date Removed:_____
12.	Capped Gas Wells	☑ Good Condition	☐ Damaged*	
13.	Surface erosion	☑ None	☐ Minor	☐ Needs repair *
14.	Landfill Stability (Sloughing)	☑ No soil movement	☐ Soil movement present*	
15.	Cracks (Within landfill cover)	☑ No Cracks Visible	☐ Landfill cover crack(s) are visible* (Note Measurement, Location & Description)	
16.	Geomembrane liner exposed	☑ No	☐ Yes	
17.	Settlement	☑ No Settlement visible	☐ Settlement is visible* (Note Measurement, Location & Description)	
18.	Most recent mowing date: 9/23/15			
19.	Stressed vegetation	☑ No	☐ Yes*	
20.	Damage to leachate cleanouts	☑ No	☐ Yes	
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*	
22.	Litter present	☑ No	☐ Yes	Est. removal date:_____
23.	Evidence of ponded water	☑ None	☐ Observed*	☐ Suspected *
24.	Fallen trees	☑ None	☐ Present on cap *	Est. removal date: _____
25.	Evidence of trespass	☐ Yes*	☑ No	
.	Evidence of motor vehicle trespass	☑ No	☐ Auto/Truck	☐ Motorcycle ☐ ATV
27.	Woodchuck/rodent holes in cap	☑ No	☐ Yes	Date Back filled: _____
28.	Evidence of lightning strike	☑ No	☐ Yes *	

29. Unauthorized materials present ☑ No ☐ Yes *

30. Dead Animals present ☑ No ☐ Yes *

31. Oil slick on adjacent waters ☑ No ☐ Yes *

32. Damaged leachate manholes ☑ No ☐ Yes *

33. Leachate seeps ☑ No ☐ Yes Stain Color: _____

Length: _____

34. Leachate fluid ☐ Puddle * ☐ Stream * ☐ None

35. Gulls/scavenger birds present ☑ No ☐ Yes *

36. Other animal foraging evidence ☑ No ☐ Yes *

37. No smoking warnings ☑ Present ☐ Missing/Damaged

38. Survey Monuments ☑ Undisturbed ☐ Disturbed

39. Leachate Collection tanks and piping

L - 1	☐ OK	☑ Problem *
L - 2	☑ OK	☐ Problem *
L - 3	☑ OK	☐ Problem *
L - 4	☑ OK	☐ Problem *
L - 5	☐ OK	☑ Problem *
L - 7	☑ OK	☐ Problem *

35. Condensate Tanks

C - 1	☑ OK	☐ Problem *
C – 2	☑ OK	☐ Problem *
C - 3	☑ OK	☐ Problem *
C – 4 (Maintenance Shop)	☑ OK	☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

COMMENTS: Reported float problem to cook and Superintendent Yungmann for repairs. Float will not work properly causing pump not to start

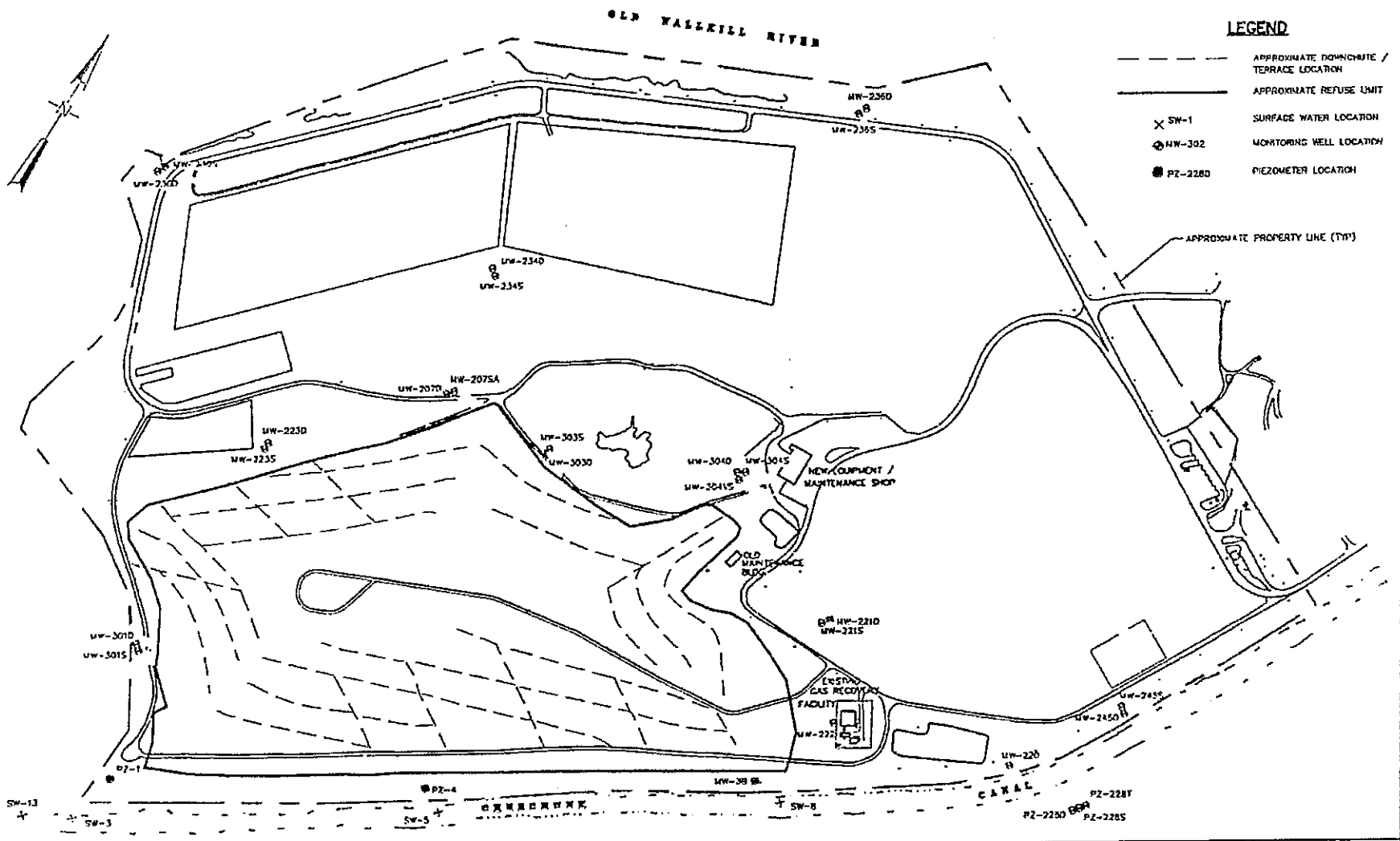
L-1 problem with circuit board not working.

CORRECTIVE ACTION TAKEN: Called Cook and email has been Sent.

BY: Ken Sherman

DATE: 11/12/15

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



SCALE: 1" = 600'

Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

ORANGE COUNTY LANDFILL
SITE MANAGEMENT PLAN

MONTHLY POST-CLOSURE FIELD INSPECTION REPORT
ORANGE COUNTY

Date: 12/16/15 Performed By: Ken Sherwood

1.	Access road condition	☑ Good	☐ Fair	☐ Poor *
2.	Access Control (Monitoring of Access road & entrance into landfill property)	☑ Has been maintained properly	☐ Has not been maintained properly	
3.	Roadside ditches, culverts & other site drainage ways	☑ Unobstructed	☐ Obstructed *	☐ Sediments
4.	Catch Basins	☑ Unobstructed	☐ Obstructed *	☐ Sediments
5.	Detention Basin	☑ Unobstructed	☐ Obstructed *	☐ Sediments
6.	Terraces	☑ Unobstructed	☐ Obstructed *	☐ Sediments
7.	Terraces downchutes	☑ Unobstructed	☐ Obstructed *	☐ Sediments
8.	Terraces headwall	☑ Unobstructed	☐ Obstructed *	☐ Sediments
9.	Grass condition	☑ Good	☐ Poor	☐ Dead
10.	Other Plants Present	☐ Burdock	☐ Thistle	☐ Other
11.	Woody Plants	☑ Not on cap	☐ Present*	Date Removed:_____
12.	Capped Gas Wells	☑ Good Condition	☐ Damaged*	
13.	Surface erosion	☑ None	☐ Minor	☐ Needs repair *
14.	Landfill Stability (Sloughing)	☑ No soil movement	☐ Soil movement present*	
15.	Cracks (Within landfill cover)	☑ No Cracks Visible	☐ Landfill cover crack(s) are visible* (Note Measurement, Location & Description)	
16.	Geomembrane liner exposed	☑ No	☐ Yes	
17.	Settlement	☑ No Settlement visible	☐ Settlement is visible* (Note Measurement, Location & Description)	
18.	Most recent mowing date: 9/23/15			
19.	Stressed vegetation	☑ No	☐ Yes*	
20.	Damage to leachate cleanouts	☑ No	☐ Yes	
21.	Monitoring Wells	☑ Secure with locks	☐ Damaged*	
22.	Litter present	☑ No	☐ Yes	Est. removal date:_____
23.	Evidence of ponded water	☑ None	☐ Observed*	☐ Suspected *
24.	Fallen trees	☑ None	☐ Present on cap *	Est. removal date: _____
25.	Evidence of trespass	☐ Yes*	☑ No	
.	Evidence of motor vehicle trespass	☑ No	☐ Auto/Truck	☐ Motorcycle ☐ ATV
27.	Woodchuck/rodent holes in cap	☑ No	☐ Yes	Date Backfilled: _____
28.	Evidence of lightning strike	☑ No	☐ Yes *	

29. Unauthorized materials present ☑ No ☐ Yes *

30. Dead Animals present ☑ No ☐ Yes *

31. Oil slick on adjacent waters ☑ No ☐ Yes *

32. Damaged leachate manholes ☑ No ☐ Yes *

33. Leachate seeps ☑ No ☐ Yes Stain Color: _____

Length: _____

34. Leachate fluid ☐ Puddle * ☐ Stream * ☐ None

35. Gulls/scavenger birds present ☑ No ☐ Yes *

36. Other animal foraging evidence ☑ No ☐ Yes *

37. No smoking warnings ☑ Present ☐ Missing/Damaged

38. Survey Monuments ☑ Undisturbed ☐ Disturbed

39. Leachate Collection tanks and piping

L - 1	☐ OK	☑ Problem *
L - 2	☐ OK	☐ Problem *
L - 3	☐ OK	☐ Problem *
L - 4	☐ OK	☐ Problem *
L - 5	☐ OK	☐ Problem *
L - 7	☐ OK	☐ Problem *

35. Condensate Tanks

C - 1	☐ OK	☐ Problem *
C – 2	☐ OK	☐ Problem *
C - 3	☐ OK	☐ Problem *
C – 4 (Maintenance Shop)	☐ OK	☐ Problem *

* = Enter comment on next page and mark location on map with an "X" and item number

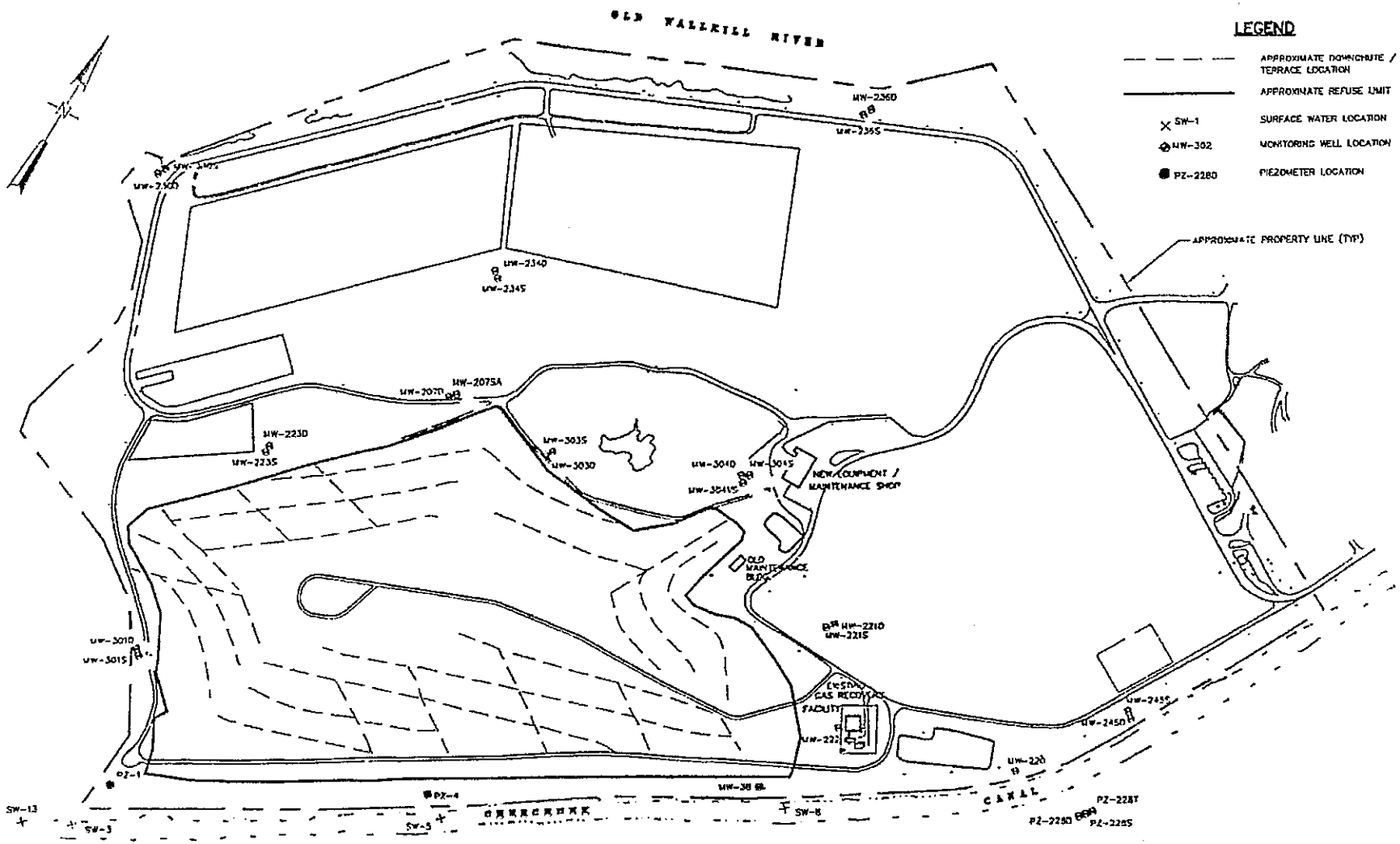
COMMENTS: Circuit board for L-1 is blown. We have been in touch with Chris Cook regarding this and he assures us that it will be repaired. STILL nothing has been done.

CORRECTIVE ACTION TAKEN: N/A

BY: Len Sherwood

DATE: 12/16/15

C:\JOBS\MRY\#2535\2535F-2A.DWG 03/12/96



Stearns&Wheler
ENVIRONMENTAL ENGINEERS & SCIENTISTS

SCALE: 1" = 600'

DATE: 03/96 JOB No.: 2535

ORANGE COUNTY LANDFILL
TOWN OF GOSHEN, NEW YORK

FIGURE 2A
FIELD INSPECTION SITE MAP

APPENDIX B

ORANGE COUNTY LEACHATE VOLUME COLLECTED FROM LEACHATE COLLECTION SYSTEM

Material Usage ALL SITES

From Date: 1/1/2015 to 12/31/2015
From Material: 047 to 049
From Customer: to zzzzzzzzzzzzzzz
Direction: ALL

Print Date: 2/5/2016
Print Time: 10:59AM

Truck ID	Ticket Date	Ticket Number	Unit	Net	Material	Tax	Other	Total
			Outgoing					
Material:	**047**	Fred A. Cook Jr. Inc						
Customer:	**140**	LEACH. - CONDENSATE TANKS						
1717	3/3/15	2105695	1100.000 Gal	4.510 tn			$0.00	$0.00
Fred A. Cook Jr. Inc Totals			1100.000 Gal	4.510 tn			$0.00	$0.00
Tickets: 1								
Customer:	**772**	LEACH. - CONDENSATE TANKS						
OC2141	1/5/15	5076362	2314.634 Gal	9.490 tn			$0.00	$0.00
TAM Enterprises, Inc. Totals			2314.634 Gal	9.490 tn			$0.00	$0.00
Tickets: 1								
LEACH. - CONDENSATE TANKS Totals			3414.634 Gal	14.000 tn			$0.00	$0.00
Tickets: 2								
Material:	**048**	Fred A. Cook Jr. Inc	NOTE = 048: Refers to Leachate Tanks 1-4					
Customer:	**140**	LEACH. - MANHOLES						
1715	1/6/15	2100961	6860.976 Gal	28.130 tn			$0.00	$0.00
1715	2/20/15	2104727	6195.122 Gal	25.400 tn			$0.00	$0.00
1715	2/26/15	2105263	2968.293 Gal	12.170 tn			$0.00	$0.00
1716	3/5/15	2105802	3063.415 Gal	12.560 tn			$0.00	$0.00
1716	3/5/15	2105818	2919.512 Gal	11.970 tn			$0.00	$0.00
1717	3/9/15	2106080	2612.195 Gal	10.710 tn			$0.00	$0.00
1717	3/23/15	2107851	409.756 Gal	1.680 tn			$0.00	$0.00
1715	3/23/15	2107852	6890.244 Gal	28.250 tn			$0.00	$0.00
1717	3/26/15	2108245	797.561 Gal	3.270 tn			$0.00	$0.00
1717	4/15/15	2111195	6965.854 Gal	28.560 tn			$0.00	$0.00
1715	4/15/15	2111196	6929.268 Gal	28.410 tn			$0.00	$0.00
1715	4/16/15	2111317	6895.122 Gal	28.270 tn			$0.00	$0.00
1717	4/16/15	2111382	2580.488 Gal	10.580 tn			$0.00	$0.00
1715	4/16/15	2111390	4321.951 Gal	17.720 tn			$0.00	$0.00
1715	4/20/15	2111926	6848.780 Gal	28.080 tn			$0.00	$0.00
1717	4/20/15	2111993	6751.220 Gal	27.680 tn			$0.00	$0.00
1715	4/22/15	2112292	6987.805 Gal	28.650 tn			$0.00	$0.00
1716	4/22/15	2112325	4070.732 Gal	16.690 tn			$0.00	$0.00
1717	4/27/15	2113196	2780.488 Gal	11.400 tn			$0.00	$0.00
1717	4/27/15	2113209	368.293 Gal	1.510 tn			$0.00	$0.00
1715	4/28/15	2113374	6821.951 Gal	27.970 tn			$0.00	$0.00
1715	4/29/15	2113574	3070.732 Gal	12.590 tn			$0.00	$0.00
1716	4/29/15	2113576	6704.878 Gal	27.490 tn			$0.00	$0.00
1715	4/29/15	2113579	3770.732 Gal	15.460 tn			$0.00	$0.00
1717	4/29/15	2113669	6195.122 Gal	25.400 tn			$0.00	$0.00
1715	4/29/15	2113676	6841.463 Gal	28.050 tn			$0.00	$0.00
1717	5/27/15	2118345	3312.195 Gal	13.580 tn			$0.00	$0.00
1717	5/27/15	2118403	3253.659 Gal	13.340 tn			$0.00	$0.00

Material Usage ALL SITES

From Date: 1/1/2015 to 12/31/2015
From Material: 047 to 049
From Customer: to zzzzzzzzzzzzzzz
Direction: ALL

Print Date: 2/5/2016
Print Time: 10:59AM

Truck ID	Ticket Date	Ticket Number	Unit		Net		Material	Tax	Other	Total
1715	6/5/15	2120008	4941.463	Gal	20.260	tn			$0.00	$0.00
1715	6/8/15	2120402	5224.390	Gal	21.420	tn			$0.00	$0.00
1717	6/15/15	2121446	5136.585	Gal	21.060	tn			$0.00	$0.00
1717	6/15/15	2121523	2909.756	Gal	11.930	tn			$0.00	$0.00
1717	6/26/15	2123326	1553.659	Gal	6.370	tn			$0.00	$0.00
1717	6/26/15	2123390	3502.439	Gal	14.360	tn			$0.00	$0.00
1717	6/29/15	2123783	1765.854	Gal	7.240	tn			$0.00	$0.00
1717	6/29/15	2123851	4592.683	Gal	18.830	tn			$0.00	$0.00
1717	7/7/15	2125112	4848.780	Gal	19.880	tn			$0.00	$0.00
1717	7/20/15	2127172	3200.000	Gal	13.120	tn			$0.00	$0.00
1717	7/22/15	2127424	2841.463	Gal	11.650	tn			$0.00	$0.00
1715	8/7/15	2130048	6924.390	Gal	28.390	tn			$0.00	$0.00
1717	8/13/15	2131048	1880.488	Gal	7.710	tn			$0.00	$0.00
1717	8/13/15	2131101	3226.829	Gal	13.230	tn			$0.00	$0.00
1717	8/24/15	2132694	2856.098	Gal	11.710	tn			$0.00	$0.00
1717	8/24/15	2132758	5029.268	Gal	20.620	tn			$0.00	$0.00
1717	9/15/15	2136145	1441.463	Gal	5.910	tn			$0.00	$0.00
1717	9/24/15	2137434	2497.561	Gal	10.240	tn			$0.00	$0.00
1717	9/24/15	2137466	4619.512	Gal	18.940	tn			$0.00	$0.00
1717	9/24/15	2137543	5000.000	Gal	20.500	tn			$0.00	$0.00
1717	10/16/15	2140672	2036.585	Gal	8.350	tn			$0.00	$0.00
1717	10/16/15	2140745	3353.659	Gal	13.750	tn			$0.00	$0.00
1715	10/22/15	2141511	4817.073	Gal	19.750	tn			$0.00	$0.00
1717	10/22/15	2141581	4426.829	Gal	18.150	tn			$0.00	$0.00
1717	10/23/15	2141758	4912.195	Gal	20.140	tn			$0.00	$0.00
1717	10/26/15	2142149	4995.122	Gal	20.480	tn			$0.00	$0.00
1715	11/6/15	2143852	3939.024	Gal	16.150	tn			$0.00	$0.00
1717	11/20/15	2146040	2014.634	Gal	8.260	tn			$0.00	$0.00
1717	12/2/15	2147662	1246.341	Gal	5.110	tn			$0.00	$0.00
1717	12/2/15	2147701	4948.780	Gal	20.290	tn			$0.00	$0.00
1715	12/8/15	2148406	6643.902	Gal	27.240	tn			$0.00	$0.00
1715	12/8/15	2148440	6731.707	Gal	27.600	tn			$0.00	$0.00
1717	12/9/15	2148652	668.293	Gal	2.740	tn			$0.00	$0.00
1717	12/9/15	2148697	5143.902	Gal	21.090	tn			$0.00	$0.00
1717	12/21/15	2150285	4929.268	Gal	20.210	tn			$0.00	$0.00
1717	12/23/15	2150629	2351.220	Gal	9.640	tn			$0.00	$0.00
Fred A. Cook Jr. Inc Totals			265339.022	Gal	1087.890	tn			$0.00	$0.00
Tickets: 64										

Customer: 602 LEACH. - MANHOLES

OC2141	3/3/15	5080114	1297.561	Gal	5.320	tn			$0.00	$0.00
OC Newburgh Transfer Station Totals			1297.561	Gal	5.320	tn			$0.00	$0.00
Tickets: 1										

Material Usage ALL SITES

From Date: 1/1/2015 to 12/31/2015
From Material: 047 to 049
From Customer: to zzzzzzzzzzzzzzz
Direction: ALL

Print Date: 2/5/2016
Print Time: 10:59AM

Truck ID	Ticket Date	Ticket Number	Unit	Net	Material	Tax	Other	Total
LEACH. - MANHOLES Totals			266636.583 Gal	1,093.210 tn			$0.00	$0.00
Tickets: 65								
Material: 049		Fred A. Cook Jr. Inc		NOTE = 049: Refers to Leachate Tanks 5-7				
Customer: 140		NEW CONST.-DITCH/POND						
1717	1/6/15	2100947	2556.098 Gal	10.480 tn			$0.00	$0.00
1717	1/6/15	2100952	1019.512 Gal	4.180 tn			$0.00	$0.00
1717	1/7/15	2101069	3297.561 Gal	13.520 tn			$0.00	$0.00
1717	1/7/15	2101107	3275.610 Gal	13.430 tn			$0.00	$0.00
1717	1/23/15	2102637	2800.000 Gal	11.480 tn			$0.00	$0.00
1717	1/23/15	2102645	568.293 Gal	2.330 tn			$0.00	$0.00
1717	1/23/15	2102679	3548.780 Gal	14.550 tn			$0.00	$0.00
1717	1/26/15	2102817	385.366 Gal	1.580 tn			$0.00	$0.00
1717	1/26/15	2102823	3251.220 Gal	13.330 tn			$0.00	$0.00
1717	2/6/15	2103600	692.683 Gal	2.840 tn			$0.00	$0.00
1717	2/6/15	2103606	2495.122 Gal	10.230 tn			$0.00	$0.00
1715	2/20/15	2104669	326.829 Gal	1.340 tn			$0.00	$0.00
1715	2/20/15	2104680	5831.707 Gal	23.910 tn			$0.00	$0.00
1715	2/26/15	2105282	3902.439 Gal	16.000 tn			$0.00	$0.00
1717	3/3/15	2105708	1936.585 Gal	7.940 tn			$0.00	$0.00
1717	3/5/15	2105804	3190.244 Gal	13.080 tn			$0.00	$0.00
1717	3/5/15	2105816	3324.390 Gal	13.630 tn			$0.00	$0.00
1717	3/19/15	2107354	2890.244 Gal	11.850 tn			$0.00	$0.00
1717	3/19/15	2107362	634.146 Gal	2.600 tn			$0.00	$0.00
1717	3/23/15	2107843	2748.780 Gal	11.270 tn			$0.00	$0.00
1717	3/24/15	2107990	3124.390 Gal	12.810 tn			$0.00	$0.00
1717	3/25/15	2108146	3178.049 Gal	13.030 tn			$0.00	$0.00
1717	3/26/15	2108250	2360.976 Gal	9.680 tn			$0.00	$0.00
1717	3/26/15	2108290	3207.317 Gal	13.150 tn			$0.00	$0.00
1715	4/15/15	2111114	2821.951 Gal	11.570 tn			$0.00	$0.00
1715	4/15/15	2111118	4134.146 Gal	16.950 tn			$0.00	$0.00
1716	4/15/15	2111121	6926.829 Gal	28.400 tn			$0.00	$0.00
1716	4/22/15	2112315	2858.537 Gal	11.720 tn			$0.00	$0.00
1715	4/28/15	2113326	6882.927 Gal	28.220 tn			$0.00	$0.00
1717	5/21/15	2117465	2790.244 Gal	11.440 tn			$0.00	$0.00
1717	5/21/15	2117484	670.732 Gal	2.750 tn			$0.00	$0.00
1717	5/21/15	2117542	3185.366 Gal	13.060 tn			$0.00	$0.00
1717	5/27/15	2118279	465.854 Gal	1.910 tn			$0.00	$0.00
1717	5/27/15	2118287	1370.732 Gal	5.620 tn			$0.00	$0.00
1715	6/4/15	2119834	2856.098 Gal	11.710 tn			$0.00	$0.00
1715	6/4/15	2119843	2156.098 Gal	8.840 tn			$0.00	$0.00
1715	6/5/15	2119925	5073.171 Gal	20.800 tn			$0.00	$0.00
1715	6/8/15	2120310	2324.390 Gal	9.530 tn			$0.00	$0.00
1715	6/8/15	2120323	2743.902 Gal	11.250 tn			$0.00	$0.00
1717	6/15/15	2121508	2143.902 Gal	8.790 tn			$0.00	$0.00

Material Usage ALL SITES

From Date: 1/1/2015 to 12/31/2015
From Material: 047 to 049
From Customer: to zzzzzzzzzzzzzzz
Direction: ALL

Print Date: 2/5/2016
Print Time: 10:59AM

Truck ID	Ticket Date	Ticket Number	Unit	Net	Material	Tax	Other	Total
1717	6/22/15	2122734	2787.805 Gal	11.430 tn			$0.00	$0.00
1717	6/26/15	2123319	1663.415 Gal	6.820 tn			$0.00	$0.00
1717	6/29/15	2123777	2512.195 Gal	10.300 tn			$0.00	$0.00
1717	7/7/15	2125060	2809.756 Gal	11.520 tn			$0.00	$0.00
1717	7/7/15	2125067	1970.732 Gal	8.080 tn			$0.00	$0.00
1717	7/13/15	2126060	1263.415 Gal	5.180 tn			$0.00	$0.00
1717	7/20/15	2127161	1814.634 Gal	7.440 tn			$0.00	$0.00
1717	7/30/15	2128818	1431.707 Gal	5.870 tn			$0.00	$0.00
1717	7/30/15	2128826	3390.244 Gal	13.900 tn			$0.00	$0.00
1717	8/5/15	2129779	634.146 Gal	2.600 tn			$0.00	$0.00
1717	8/5/15	2129785	4185.366 Gal	17.160 tn			$0.00	$0.00
1715	8/7/15	2130008	6909.756 Gal	28.330 tn			$0.00	$0.00
1717	8/13/15	2131032	1453.659 Gal	5.960 tn			$0.00	$0.00
1717	8/24/15	2132685	2087.805 Gal	8.560 tn			$0.00	$0.00
1717	9/15/15	2136133	2836.585 Gal	11.630 tn			$0.00	$0.00
1717	9/24/15	2137432	2373.171 Gal	9.730 tn			$0.00	$0.00
1717	10/1/15	2138630	2887.805 Gal	11.840 tn			$0.00	$0.00
1717	10/1/15	2138647	665.854 Gal	2.730 tn			$0.00	$0.00
1717	10/5/15	2139031	2843.902 Gal	11.660 tn			$0.00	$0.00
1717	10/5/15	2139039	717.073 Gal	2.940 tn			$0.00	$0.00
1717	10/6/15	2139221	3419.512 Gal	14.020 tn			$0.00	$0.00
1717	10/16/15	2140683	1353.659 Gal	5.550 tn			$0.00	$0.00
1717	10/22/15	2141464	4800.000 Gal	19.680 tn			$0.00	$0.00
1717	10/22/15	2141577	317.073 Gal	1.300 tn			$0.00	$0.00
1717	10/26/15	2142098	4929.268 Gal	20.210 tn			$0.00	$0.00
1715	11/6/15	2143844	2836.585 Gal	11.630 tn			$0.00	$0.00
1715	11/13/15	2144794	2853.659 Gal	11.700 tn			$0.00	$0.00
1715	11/13/15	2144805	3919.512 Gal	16.070 tn			$0.00	$0.00
1717	11/20/15	2146033	2860.976 Gal	11.730 tn			$0.00	$0.00
1717	12/2/15	2147653	2968.293 Gal	12.170 tn			$0.00	$0.00
1717	12/4/15	2148049	5046.341 Gal	20.690 tn			$0.00	$0.00
1717	12/7/15	2148308	5070.732 Gal	20.790 tn			$0.00	$0.00
1717	12/7/15	2148366	5058.537 Gal	20.740 tn			$0.00	$0.00
1717	12/9/15	2148645	2821.951 Gal	11.570 tn			$0.00	$0.00
1717	12/21/15	2150176	2839.024 Gal	11.640 tn			$0.00	$0.00
1717	12/21/15	2150179	2163.415 Gal	8.870 tn			$0.00	$0.00
1717	12/21/15	2150222	4990.244 Gal	20.460 tn			$0.00	$0.00
1717	12/23/15	2150621	914.634 Gal	3.750 tn			$0.00	$0.00
1717	12/31/15	2151485	1800.000 Gal	7.380 tn			$0.00	$0.00
1717	12/31/15	2151546	4765.854 Gal	19.540 tn			$0.00	$0.00
Fred A. Cook Jr. Inc Totals			222919.514 Gal	913.970 tn			$0.00	$0.00

Tickets: 80

Material Usage ALL SITES

From Date: 1/1/2015 to 12/31/2015
From Material: 047 to 049
From Customer: to zzzzzzzzzzzzzzz
Direction: ALL

Print Date: 2/5/2016
Print Time: 10:59AM

Truck ID	Ticket Date	Ticket Number	Unit	Net		Material	Tax	Other	Total
NEW CONST.-DITCH/POND Totals			222919.514 Gal	913.970	tn			$0.00	$0.00
Tickets: 80									
Outgoing Totals				2021.180	tn			$0.00	$0.00
Tickets: 147									
In and Outbound Combined Totals				**2,021.18**		**$0.00**	**$0.00**	**$0.00**	**$0.00**
				0.00					

APPENDIX C

NYSDEC INSTITUTIONAL AND ENGINEERING CONTROLS CERTIFICATION FORM

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details Box 1

Site No. 336007

Site Name Orange County Landfill

Site Address: ROUTE 17M Zip Code: 10924
City/Town: Goshen
County: Orange
Site Acreage: 75.0

Reporting Period: January 1, 2015 to December 31, 2015

	YES	NO
1. Is the information above correct?	X	
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?		X

Box2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Closed Landfill	X	
7. Are all ICs/ECs in place and functioning as designed?		X

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.*
*As described in Section 4.2.2 of the Periodic Review Report, seeps have been investigated through work plans approved by NYSDEC pursuant to the Order on Consent

Signature of Owner, Remedial Party or Designated Representative — Date: 2/24/16

SITE NO. 336007 **Box3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
16-1-1.1	1. C. Dept. Envrion. Facilities Services	
		Monitoring Plan
		O&M Plan

Box4

Description of Engineering Controls

Parcel	Engineering Control
16-1-1.1	
	Cover System
	Leachate Collection

Engineering Control Details for Site No. 336007

Parcel: 16-1-1.1

This is a municipal landfill that has been capped under Title 3, with leachate collection and gas collection. Periodic groundwater monitoring and inspections and reporting in accordance with the 1997 OM &M plan (and updates thereto) are required.

Box5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATIONS
SITE NO. 336007

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true.. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

_____ _____ at _____ _____ _____

print name print business address

am certifying as _____ (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

_____ _____

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification Date

IC/EC CERTIFICATIONS

Box7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

_____ at _____ _____

print name print business address

am certifying as a Professional Engineer for the _____

(Owner or Remedial Party)

_____ _____

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

Date

APPENDIX D

2015 PCM SAMPLING EVENT FORMS

WATER LEVEL MEASUREMENTS

Sterling Environmental Engineering, P.C.

24 Wade Road
Latham, N.Y. 12110

Project Name: Orange County LF
Project No. 2010-15
Location New Hampton, NY
Weather: Sunny, 40's
Field Personnel: Cody Sargood, Amanda Post
Measuring Device: Water Level Indicator

Well ID	Date	Time	Total Well Depth	Depth to Water	Measuring Point	Meas. Pt. Elevation	Calc. Water Level Elev.	Remarks
PZ-1A	11/17/2015	1200	75.32	14.18	To PVC	385.28	371.10	No PID/4 Gas Hits
MW-222	11/17/2015	1320	26.42	20.87	To PVC	382.49	361.62	PID 0.3/4 Gas LEL 42%
MW-221S	11/17/2015	1330	25.98	18.72	To PVC	381.44	362.72	No PID/4 Gas Hits
MW-221D	11/17/2015	1333	56.59	17.84	To PVC	381.29	363.45	No PID/4 Gas Hits
MW-304S	11/17/2015	1340	32.58	27.79	To PVC	390.92	363.13	No PID/4 Gas Hits
MW-304VS	11/17/2015	1345	10.11	4.69	To PVC	390.72	386.03	No PID/4 Gas Hits
MW-304D	11/17/2015	1350	62.16	27.49	To PVC	390.08	362.59	No PID/4 Gas Hits
MW-312S	11/17/2015	1354	26.25	19.62	To PVC	385.93	366.31	No PID/4 Gas Hits
MW-303S	11/17/2015	1425	27.20	19.97	To PVC	389.95	369.98	No PID/4 Gas Hits/ Cannot Remove Bailer / Broken Pipe
MW-305D	11/17/2015	1420	74.77	22.15	To PVC	389.83	367.68	No PID/4 Gas Hits
MW-207D	11/17/2015	1432	61.51	20.31	To PVC	390.92	370.61	No PID/4 Gas Hits
MW-207SA	11/17/2015	1447	24.86	19.17	To PVC	389.74	370.57	No PID Hits / 4 Gas LEL 23%
PZ-14-5	11/17/2015	1448	37.86	30.96	To PVC	392.08	361.12	No PID Hits / 4 Gas Hits
PZ-14-1	11/17/2015	1451	39.50	28.99	To PVC	390.10	361.11	No PID Hits / 4 Gas Hits
PZ-14-2	11/17/2015	1453	30.26	21.24	To PVC	381.84	360.60	No PID Hits / 4 Gas Hits
PZ-14-3	11/17/2015	1454	29.92	21.19	To PVC	381.71	360.52	No PID Hits / 4 Gas Hits
PZ-14-4	11/17/2015	1455	28.91	21.08	To PVC	381.70	360.62	No PID Hits / 4 Gas Hits
PA-14-6	11/17/2015	1456	39.20	29.82	To PVC	390.95	361.13	No PID Hits / 4 Gas Hits
PZ-11	11/17/2015	1502	30.11	19.02	To PVC	390.41	371.39	No PID Hits / 4 Gas Hits
MW-230D	11/17/2015	---	---	3.52	From top of steel casing	385.51	381.99	Broken Well
MW-230S	11/17/2015	1506	65.42	13.78	To PVC	385.60	371.82	No PID Hits / 4 Gas Hits
MW-223S	11/17/2015	1513	67.84	17.63	To PVC	389.25	371.62	No PID Hits / 4 Gas Hits
MW-223D	11/17/2015	1515	87.40	18.39	To PVC	389.36	370.97	No PID Hits / 4 Gas Hits
MW-232S	11/17/2015	1525	89.40	11.40	To PVC	388.64	377.24	No PID Hits / 4 Gas Hits
MW-234S	11/17/2015	1537	41.60	20.52	To PVC	389.29	368.77	No PID Hits / 4 Gas Hits
MW-234D	11/17/2015	1540	86.46	19.73	To PVC	390.10	370.37	No PID Hits / 4 Gas Hits

Notes: Remarks with PID/4-Gas readings only list alarmed gases. Those not listed did not alarm and should be considered 0's (or 20.9).

GROUNDWATER QUALITY DATA FORM

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

Project Name: Orange County
Project No. 2010-15
Date: 11/16 - 17/2015
Field Personnel: Cody Sargood, Amanda Post
Measuring Device: Water Level Indicator, YSI Pro DSS
Reference Point/Elev.:

Well ID	Measuring Point Elevation (feet)	Depth to Water (feet BMP)	Water Level Elev.	Time	Spec. Cond. (µs/cm)	ORP (mV)	pH	Turbidity (NTUs)	Temp ℃
PZ-4	382.34	15.22	367.12	1035	1.165	117.8	7.03	25.8	11.5
MW-3B	385.73	27.76	357.97	925	1.147	-37.8	6.82	7.8	12.8
MW-220	378.94	20.86	358.08	1645	1.096	41.3	6.78	142.9	14.1
MW-245D	391.08	33.82	357.26	1525	0.883	-13.5	7.17	73.5	12.8
MW-245S	391.13	31.88	359.25	1440	1.165	66.1	6.85	119.3	13.5
MW-233D	---	19.06	---	1320	0.989	199.6	7.78	0.1	17.1
MW-233S	389.29	14.24	375.05	1225	0.868	218	6.96	10.1	14.5

REMARKS:

SURFACE WATER DATA FORM

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

Project Name: Orange County LF
Project No. 2010-15
Date: November 17, 2015
Field Personnel: Cody Sargood, Amanda Post
Measuring Devices: YSI Pro DSS

Location	Date	Time	Temp (°F)	Spec. Cond. (mS)	pH	ORP (mV)	Turbidity (NTUs)	Dissolved Oxygen (mg/L)
SW-13	11/17/2015	1215	8.1	0.512	7.78	119.5	6.7	10.19
SW-5	11/17/2015	1245	8.1	0.513	7.74	188.5	5.6	10.20
SW-8	11/17/2015	1300	8.1	0.516	7.68	143.6	7.2	10.15

REMARKS:

LOW-FLOW GROUNDWATER SAMPLING RECORD

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

PROJECT NAME Orange County
PROJECT NUMBER 2010-150
SITE LOCATION New Hampton, NY

WELL ID MW-3B
DATE 11/17/15
Page 1 of 1

GENERAL

Weather Conditions: Sunny 30's
Site Access/Conditions: Normal
Physical Condition of Well: Good condition but missing a lock

PURGING INFORMATION

Total well depth (from top of casing): 52.84 feet
Depth to water surface before purging (from top of casing): - 27.76 feet
Height of water column: (a) = 25.08 feet
Screen length (b) feet
Lesser of a and b 25.08 feet
Well diameter (d): 2 inches — d^2 x 0.0408 x gal/ft

WELL VOLUMES:
2" Diam. = 0.16 gal/ft
4" Diam. = 0.65 gal/ft.
6" Diam. = 1.47 gal/ft.

One wetted screen volume before purging (1 gallon = 3.785 liters): = 4.01 gallons or 15.18 liters
Volume of water equal to five wetted screen volumes: = 20.06 gallons or 75.94 liters

Pump Type: WQ Meter Type:

Flow Rate	Time	Volume Purged (Gallons/ Liters)	Depth to Water (feet bmp)	SC (mmhos/cm or umhos/cm)	Temp. (°C or °F)	pH (SU)	Dissolved Oxygen (mg/L)	RedOx Potential (mV)	Turbidity (NTU)
	Stabilization Criteria*		Drawdown <0.3 ft	+/- 10%	+/- 0.2 °C	+/- 0.2 SU	+/- 0.2 mg/L	+/- 20 mV	+/- 10%
.125	0845	.625/2.37	27.81	0.864	10.0	7.02	0.18	50.5	13.5
.125	0850	.625/2.37	27.83	1.027	10.1	6.77	0.012	21.5	28.7
.210	0855	1.05/3.97	27.87	1.105	12.1	6.81	0.18	-8.4	28.8
.225	0900	1.125/4.26	27.86	1.118	13.0	6.82	0.09	-27.0	15.8
.200	0905	1/3.785	27.86	1.130	13.0	6.82	0.08	-34.7	10.1
.200	0910	1/3.785	27.86	1.147	12.8	6.82	0.02	-37.8	7.8

* - Stabilization based on three consecutive readings collected at 3 to 5 minute intervals. Minimum of 30 minutes of purging, maximum of five wetted screen volumes.

Total Volume of Water Purged: 5.43/20.54 gallons/liters
Depth of pump intake: — feet btoc

OBSERVATIONS

Color: Clear — Odor: None
Turbidity: Limited to None — Sheen: None
Presence of NAPL: No — Other: —
Remarks: —

SAMPLING INFORMATION

Field Personnel: Cody Sargood
Sampling Method: low flow
Sample Date: 11/17/15 — Time: 925 with MSD/MS
Sample Description: 50ft tubing used
Analysis: Part 360 Baseline '88 Parameters

LOW-FLOW GROUNDWATER SAMPLING RECORD

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

PROJECT NAME Orange County
PROJECT NUMBER 2010-15
SITE LOCATION New Hampton, NY

WELL ID PZ-4
DATE 11/17/15
Page 1 of 1

GENERAL

Weather Conditions: Sunny 30's
Site Access/Conditions: Normal
Physical Condition of Well: Good, No lock present

PURGING INFORMATION

Total well depth (from top of casing): 54.43 feet
Depth to water surface before purging (from top of casing): - 15.22 feet
Height of water column: (a) = 39.21 feet
Screen length (b) feet
Lesser of a and b 39.21 feet
Well diameter (d): 2 inches — d^2 x 0.0408 x ____ gal/ft

WELL VOLUMES:
2" Diam. = 0.16 gal/ft
4" Diam. = 0.65 gal/ft.
6" Diam. = 1.47 gal/ft.

One wetted screen volume before purging (1 gallon = 3.785 liters): = 6.27 gallons or 23.75 liters
Volume of water equal to five wetted screen volumes: = 31.37 gallons or 118.73 liters

Pump Type: ____ WQ Meter Type: ____

Flow Rate	Time	Volume Purged (Gallons/ Liters)	Depth to Water (feet bmp)	SC (mmhos/cm or umhos/cm)	Temp. (°C or °F)	pH (SU)	Dissolved Oxygen (mg/L)	RedOx Potential (mV)	Turbidity (NTU)
	Stabilization Criteria*		Drawdown <0.3 ft	+/- 10%	+/- 0.2 °C	+/- 0.2 SU	+/- 0.2 mg/L	+/- 20 mV	+/- 10%
.100	1015	0.5/1.89	15.32	1.149	10.5	7.07	3.87	99.0	22.5
.100	1020	0.5/1.89	15.35	1.155	10.8	7.07	3.48	105.8	31.2
.210	1025	1.05/3.97	15.34	1.157	12.0	7.02	3.12	111.0	25.3
670	1030	0.35/1.32	15.29	1.165	11.5	7.03	3.21	117.8	25.8

* - Stabilization based on three consecutive readings collected at 3 to 5 minute intervals. Minimum of 30 minutes of purging, maximum of five wetted screen volumes.

Total Volume of Water Purged: 2.4/9.08 gallons/liters
Depth of pump intake: — feet btoc

OBSERVATIONS

Color: clear — Odor: None
Turbidity: Fairly low — Sheen: None
Presence of NAPL: No — Other: —
Remarks: —

SAMPLING INFORMATION

Field Personnel: Cody Sergood
Sampling Method: low flow
Sample Date: 11/17/15 — Time: 1035
Sample Description: Used tubing ~~from~~ present in well
Analysis: Part 360 Baseline '88 Parameters

LOW-FLOW GROUNDWATER SAMPLING RECORD

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

PROJECT NAME Orange County
PROJECT NUMBER 2010-15
SITE LOCATION New Hampton, NY

WELL ID 220
DATE 11/16/15
Page 1 of 1

GENERAL

Weather Conditions: Sunny, 50's
Site Access/Conditions: Normal
Physical Condition of Well: Good, locked w/ CAT key

PURGING INFORMATION

Total well depth (from top of casing): 29.94 feet
Depth to water surface before purging (from top of casing): - 20.86 feet
Height of water column: (a) = 9.08 feet
Screen length: (b) feet
Lesser of a and b: 9.08 feet
Well diameter (d): 2 inches — $d^2 \times 0.0408$ x ____ gal/ft

WELL VOLUMES:
2" Diam. = 0.16 gal/ft
4" Diam. = 0.65 gal/ft.
6" Diam. = 1.47 gal/ft.

One wetted screen volume before purging (1 gallon = 3.785 liters): = 1.45 gallons or 5.49 liters
Volume of water equal to five wetted screen volumes: = 7.25 gallons or 27.44 liters

Pump Type: ____ WQ Meter Type: ____

Flow Rate	Time	Volume Purged (Gallons/ Liters)	Depth to Water (feet bmp)	SC (mmhos/cm or umhos/cm)	Temp. (°C or °F)	pH (SU)	Dissolved Oxygen (mg/L)	RedOx Potential (mV)	Turbidity (NTU)
	Stabilization Criteria*		Drawdown <0.3 ft	+/- 10%	+/- 0.2 °C	+/- 0.2 SU	+/- 0.2 mg/L	+/- 20 mV	+/- 10%
.140	1600	.7/2.65	~~20.~~ 19.89	1.087	14.0	6.77	2.33	52.6	316.7
.125	1605	.625/2.37	19.90	1.082	14.1	6.76	0.61	34.9	278.1
.090	1610	.45/1.70	19.89	1.080	14.3	6.76	0.56	29.8	227.3
.225	1615	1.125/4.26	19.89	1.087	14.2	6.77	0.71	30.6	200.3
.060	1620	0.3/1.14	19.89	1.083	14.5	6.77	0.85	33.6	155.8
.125	1625	.625/2.37	19.89	1.091	14.5	6.78	0.99	36.4	152.9
.080	1630	.4/1.51	19.89	1.096	14.1	6.78	1.13	41.3	142.9

* - Stabilization based on three consecutive readings collected at 3 to 5 minute intervals. Minimum of 30 minutes of purging, maximum of five wetted screen volumes.

Total Volume of Water Purged: 4.23/16.0 gallons/liters
Depth of pump intake: — feet btoc

OBSERVATIONS

Color: Yellow/Brown — Odor: None
Turbidity: Murky — Sheen: None
Presence of NAPL: No — Other: —
Remarks: —

SAMPLING INFORMATION

Field Personnel: Cody Sargood
Sampling Method: low flow
Sample Date: 11/16/15 — Time: 1645
Sample Description: 30 ft tubing used
Analysis: Part 360 Baseline '88 Regulations

LOW-FLOW GROUNDWATER SAMPLING RECORD

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

PROJECT NAME Orange County
PROJECT NUMBER 2010-15
SITE LOCATION New Hampton, NY

WELL ID 245-D
DATE 11/16/15
Page 1 of 1

GENERAL

Weather Conditions: Sunny, 50's
Site Access/Conditions: Normal
Physical Condition of Well: Good, locked w/ CAT Key

PURGING INFORMATION

Total well depth (from top of casing): 81.02 feet
Depth to water surface before purging (from top of casing): - 33.82 feet
Height of water column: (a) = 47.2 feet
Screen length (b) feet
Lesser of a and b 47.2 feet
Well diameter (d): 2 inches — d^2 x 0.0408 x gal/ft

WELL VOLUMES:
2" Diam. = 0.16 gal/ft
4" Diam. = 0.65 gal/ft.
6" Diam. = 1.47 gal/ft.

One wetted screen volume before purging (1 gallon = 3.785 liters): = 7.55 gallons or 28.58 liters
Volume of water equal to five wetted screen volumes: = 37.75 gallons or 142.88 liters

Pump Type: WQ Meter Type:

Flow Rate	Time	Volume Purged (Gallons/ Liters)	Depth to Water (feet bmp)	SC (mmhos/cm or umhos/cm)	Temp. (°C or °F)	pH (SU)	Dissolved Oxygen (mg/L)	RedOx Potential (mV)	Turbidity (NTU)
	Stabilization Criteria*		Drawdown <0.3 ft	+/- 10%	+/- 0.2 °C	+/- 0.2 SU	+/- 0.2 mg/L	+/- 20 mV	+/- 10%
.115	1505	.575/2.18	34.83	0.878	13.0	7.16	4.30	38.1	64.5
.080	1510	.4/1.51	35.31	0.885	13.0	7.16	1.93	-6.5	77.4
.115	1515	.575/2.18	36.58	0.884	12.6	7.17	1.18	-16.0	75.8
.100	1520	.5/1.89	37.16	0.883	12.8	7.17	1.38	-13.5	73.5

* - Stabilization based on three consecutive readings collected at 3 to 5 minute intervals. Minimum of 30 minutes of purging, maximum of five wetted screen volumes.

Total Volume of Water Purged: 2.05/7.76 gallons/liters
Depth of pump intake: — feet btoc

OBSERVATIONS

Color: Clear (mostly) — Odor: None
Turbidity: Limited amount of turbidity — Sheen: None
Presence of NAPL: No — Other: —
Remarks: —

SAMPLING INFORMATION

Field Personnel: Cody Sargood
Sampling Method: Low Flow
Sample Date: 11/16/15 — Time: 1525
Sample Description: 40 ft tubing
Analysis: Part 360 Baseline 0'88 ~~Parameters~~ Regulations

LOW-FLOW GROUNDWATER SAMPLING RECORD

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

PROJECT NAME Orange County
PROJECT NUMBER 2010-15
SITE LOCATION New Hampton, NY

WELL ID 245-S
DATE 11/16/15
Page 1 of 1

GENERAL

Weather Conditions: Sunny, 50's
Site Access/Conditions: Normal
Physical Condition of Well: Good, locked w/ CAF key

PURGING INFORMATION

Total well depth (from top of casing): 46.86 feet
Depth to water surface before purging (from top of casing): - 31.88 feet
Height of water column: (a) = 14.98 feet
Screen length (b) feet
Lesser of a and b 14.98 feet
Well diameter (d): 2 inches — d^2 x 0.0408 x ____ gal/ft

WELL VOLUMES:
2" Diam. = 0.16 gal/ft
4" Diam. = 0.65 gal/ft.
6" Diam. = 1.47 gal/ft.

One wetted screen volume before purging (1 gallon = 3.785 liters): = 2.40 gallons or 9.08 liters
Volume of water equal to five wetted screen volumes: = 12 gallons or 45.42 liters

Pump Type: ____ WQ Meter Type: ____

Flow Rate	Time	Volume Purged (Gallons/ Liters)	Depth to Water (feet bmp)	SC (mmhos/cm or umhos/cm)	Temp. (°C or °F)	pH (SU)	Dissolved Oxygen (mg/L)	RedOx Potential (mV)	Turbidity (NTU)
	Stabilization Criteria*		Drawdown <0.3 ft	+/- 10%	+/- 0.2 °C	+/- 0.2 SU	+/- 0.2 mg/L	+/- 20 mV	+/- 10%
.140	1405	.7/2.65	31.89	1.130	13.2	6.86	3.20	86.4	200.1
.060	1410	.3/1.14	31.91	1.156	14.2	6.87	1.43	67.5	183.1
.065	1415	.325/1.23	31.91	1.178	14.6	6.82	1.29	61.2	171.3
.160	1420	.8/3.028	31.92	1.172	13.3	6.84	1.44	60.7	153.1
.040	1425	.2/.757	31.91	1.162	14.1	6.85	1.58	62.7	125.8
.155	1430	.775/2.9	31.91	1.165	13.5	6.85	1.716	66.1	119.3

* - Stabilization based on three consecutive readings collected at 3 to 5 minute intervals. Minimum of 30 minutes of purging, maximum of five wetted screen volumes.

Total Volume of Water Purged: 3.1/11.7 gallons/liters
Depth of pump intake: — feet btoc

OBSERVATIONS

Color: Cloudy — Odor: None
Turbidity: Fairly turbid — Sheen: None
Presence of NAPL: No — Other: —
Remarks: —

SAMPLING INFORMATION

Field Personnel: Cody Sargood
Sampling Method: low flow
Sample Date: 11/16/15 — Time: 1440
Sample Description: 40ft tubing used
Analysis: Part 360 Baseline '88 Regulations

LOW-FLOW GROUNDWATER SAMPLING RECORD

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

PROJECT NAME Orange County
PROJECT NUMBER 2010-15
SITE LOCATION New Hampton, NY

WELL ID 233-D
DATE 11/16/15
Page 1 of 1

GENERAL

Weather Conditions: Sunny, 55°F
Site Access/Conditions: Normal
Physical Condition of Well: Vector hole ~1ft wide @base. Locked w/ CAT key

PURGING INFORMATION

Total well depth (from top of casing): 104.73 feet
Depth to water surface before purging (from top of casing): - 19.06 feet
Height of water column: (a) = 85.67 feet
Screen length (b) feet
Lesser of a and b 85.67 feet
Well diameter (d): 2 inches — d^2 x 0.0408 x ____ gal/ft

WELL VOLUMES:
2" Diam. = 0.16 gal/ft
4" Diam. = 0.65 gal/ft.
6" Diam. = 1.47 gal/ft.

One wetted screen volume before purging (1 gallon = 3.785 liters): = 13.71 gallons or 51.89 liters
Volume of water equal to five wetted screen volumes: = 68.55 gallons or 259.46 liters

Pump Type: ____ WQ Meter Type: ____

Flow Rate	Time	Volume Purged (Gallons/ Liters)	Depth to Water (feet bmp)	SC (mmhos/cm or umhos/cm)	Temp. (°C or °F)	pH (SU)	Dissolved Oxygen (mg/L)	RedOx Potential (mV)	Turbidity (NTU)
	Stabilization Criteria*		Drawdown <0.3 ft	+/- 10%	+/- 0.2 °C	+/- 0.2 SU	+/- 0.2 mg/L	+/- 20 mV	+/- 10%
0.075	1256	3.75/1.42	20.42	0.985	15.4	7.79	6.25	228.0	0.5
0.090	1301	.45/1.70	20.8	0.984	16.1	7.78	5.24	212.7	0.5
0.150	1305	.75/2.83	21.91	0.988	16.4	7.78	5.15	205.3	0.1
0.105	1309	.525/1.98	22.87	0.988	16.6	7.78	5.08	202.0	0.1
0.100	1313	.5/1.89	22.41	0.989	17.1	7.78	5.09	199.6	0.1

* - Stabilization based on three consecutive readings collected at 3 to 5 minute intervals. Minimum of 30 minutes of purging, maximum of five wetted screen volumes.

Total Volume of Water Purged: 2.6/9.82 gallons/liters
Depth of pump intake: — feet btoc

OBSERVATIONS

Color: Very Clear — Odor: None
Turbidity: Very Clear — Sheen: None
Presence of NAPL: No — Other: —
Remarks: —

SAMPLING INFORMATION

Field Personnel: Cody Sargood
Sampling Method: low-flow
Sample Date: 11/16/15 — Time: 1320
Sample Description: 30ft tubing used.
Analysis: Part 360 Baseline 88 Regulations

LOW-FLOW GROUNDWATER SAMPLING RECORD

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

PROJECT NAME Orange County
PROJECT NUMBER 2010-15
SITE LOCATION ~~Goshen~~ New Hampton NY

WELL ID 233-S
DATE 11/16/15
Page 1 of 1

GENERAL

Weather Conditions: Sunny, 55°F
Site Access/Conditions: Normal
Physical Condition of Well: Good, locked w/ CAT Key

PURGING INFORMATION

Total well depth (from top of casing): 20.15 feet
Depth to water surface before purging (from top of casing): - 14.24 feet
Height of water column: (a) = 5.91 feet
Screen length (b) feet
Lesser of a and b 5.91 feet
Well diameter (d): 2 inches — d^2 x 0.0408 x gal/ft

WELL VOLUMES:
2" Diam. = 0.16 gal/ft
4" Diam. = 0.65 gal/ft.
6" Diam. = 1.47 gal/ft.

One wetted screen volume before purging (1 gallon = 3.785 liters): = 0.95 gallons or 3.60 liters
Volume of water equal to five wetted screen volumes: = 4.75 gallons or 17.98 liters

Pump Type: WQ Meter Type:

Flow Rate	Time	Volume Purged (Gallons/ Liters)	Depth to Water (feet bmp)	SC (mmhos/cm or umhos/cm)	Temp. (°C or °F)	pH (SU)	Dissolved Oxygen (mg/L)	RedOx Potential (mV)	Turbidity (NTU)
	Stabilization Criteria*		Drawdown <0.3 ft	+/- 10%	+/- 0.2 °C	+/- 0.2 SU	+/- 0.2 mg/L	+/- 20 mV	+/- 10%
.125	1143	.625/2.36	14.24	0.8816	14.2	6.96	1.40	243.2	113.1
.115	1148	.575/2.17	14.23	0.882	14.5	6.97	1.07	240.6	86.0
.128	1153	.64/2.42	14.24	0.879	14.7	6.97	0.91	234.3	60.4
.190	1157	.95/3.6	14.25	0.874	14.9	6.97	0.72	229.1	43.0
.175	1202	.875/3.31	14.26	0.874	14.8	6.97	0.67	226.2	28.6
.150	1207	.75/2.84	14.27	0.871	14.8	6.97	0.54	223.7	20.1
.200	1212	1/3.785	14.29	0.870	14.7	6.96	0.38	221.0	12.6
.205	1217	1.025/3.88	14.30	0.868	14.5	6.96	0.30	218.0	10.1

* - Stabilization based on three consecutive readings collected at 3 to 5 minute intervals. Minimum of 30 minutes of purging, maximum of five wetted screen volumes.

Total Volume of Water Purged: 6.44/24.37 gallons/liters
Depth of pump intake: — feet btoc

OBSERVATIONS

Color: Slight discoloration — Odor: None
Turbidity: see values, visible — Sheen: None
Presence of NAPL: No — Other: —
Remarks: —

SAMPLING INFORMATION

Field Personnel: Cody Sargood
Sampling Method: low-flow
Sample Date: 11/16/15 — Time: 1225
Sample Description: Fairly clear, no odor, Duplicate Sample Taken; 17ft tubing used
Analysis: Part 360 Baseline 88 Regulations