



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

STATEMENT OF BASIS

MAX ENVIRONMENTAL TECHNOLOGIES, INC.
BULGER FACILITY
200 MAX DRIVE
BULGER, PENNSYLVANIA

EPA ID NO. PAD 059 087 072

Prepared by
RCRA Corrective Action Program
Land, Chemicals, and Redevelopment Division
July 2021

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List of Acronyms

| | |
|-------|--|
| EPA | Environmental Protection Agency |
| COA | Consent Order and Agreement |
| MAX | MAX Environmental Technologies, Inc. |
| MCL | National Primary Drinking Water Standard Maximum Contaminant Level |
| NPDES | National Pollutant Discharge and Elimination System |
| PADEP | Pennsylvania Department of Environmental Protection |
| RCRA | Resource Conservation and Recovery Act |
| ROI | Radius of Influence |
| RSL | EPA Regional Screening Level |

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Figure 1: Facility Location

Figure 2: Facility Layout

Section 1: Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis to solicit public comment on its proposed remedy for the MAX Environmental Technologies, Inc. (MAX) Bulger Facility, located in Bulger, Pennsylvania (Facility).

EPA's proposed remedy for the Facility consists of capping and land use restrictions for soil; operation of pump-and-treat system and leachate collection systems, monitored natural attenuation, and use restrictions for groundwater; and monitoring for surface water in compliance with a) the terms and conditions of a Pennsylvania Department of Environmental Protection (PADEP) Solid Waste Permit No. 301359 (Solid Waste Permit) and b) the remaining obligations of the Consent Order and Agreements (COAs) dated May 24, 1985; September 11, 2006; and April 6, 2018 until such time as those obligations have been satisfied.

This Statement of Basis highlights key information relied upon by EPA in proposing its remedy for the Facility.

The Facility is subject to EPA's Corrective Action program under the Solid Waste Disposal Act, as amended, commonly referred to as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 et seq. The Corrective Action program requires that owners or operators of facilities subject to certain provisions of RCRA investigate and address releases of hazardous waste and hazardous constituents, usually in the form of soil or groundwater contamination, that have occurred at or from their properties. The Commonwealth of Pennsylvania is not authorized for the Corrective Action Program under Section 3006 of RCRA. Therefore, EPA retains primary authority in the Commonwealth of Pennsylvania for the Corrective Action Program.

EPA is providing a 30-day public comment period on this Statement of Basis. EPA may modify its proposed remedy based on comments received during this period. EPA will announce its selection of a final remedy for the Facility in a Final Decision and Response to Comments (Final Decision) after the public comment period has ended.

Information on the Corrective Action program as well as a fact sheet for the Facility can be found by navigating to: <https://www.epa.gov/hwcorrectiveactionsites/hazardous-waste-cleanup-max-environmental-technologies-incorporated>.

The Administrative Record for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed remedy is based. See Section 8, Public Participation, below, for information on how you may review the Administrative Record.

Section 2: Facility Background

The Facility is located approximately ½ mile northwest of Bulger, PA, in Smith Township, Washington County, Pennsylvania. The Facility is surrounded by agricultural, wooded, and residential properties. Residual waste operations are permitted on 129 acres of the 202-acre Facility (see Figure 1, Facility Location).

Mill Service, Inc. began waste treatment and disposal operations in 1958 at the Facility in the location of a former strip mine. In 2002, Mill Service, Inc. changed its corporate name to MAX Environmental Technologies, Inc., which currently operates the Facility as a nonhazardous residual waste treatment facility. The Facility has operated under the Solid Waste Permit and COAs that direct the disposal operations, unit closures, environmental investigations, and environmental remediation at the Facility.

From approximately 1981 to 1987, the Facility operated as a hazardous waste treatment and disposal facility. The Facility accepted wastes in liquid and semi-solid form generated primarily from the iron/steel and metal finishing industries. Treatment included neutralization/precipitation, hexavalent chromium reduction for chromium-bearing wastes, cyanide destruction/oxidation for cyanide-bearing wastes, or no treatment for non-hazardous wastes already at the proper pH for disposal. The treated slurry was then placed in disposal impoundments.

In accordance with the provisions of the May 24, 1985 COA, disposal operations at the facility ceased in June 1987. Since the 1990s, residual wastes received at the Facility for treatment are primarily solids, including slag, electric arc furnace dust, metal-impacted soils, and drill cuttings from the oil and gas industry. Since the early 2000s, PADEP has allowed the Facility to dispose of some treated residual wastes onsite in order to maintain grade requirements as part of impoundment closures. Sludge generated at the facility's wastewater treatment plant was included in this onsite disposal allowance; however, onsite disposal of the Facility's wastewater sludge ceased in 2011 when EPA determined that the sludge should be classified as a listed hazardous waste (F039).

The Facility currently operates under the following enforcement documents:

- The February 3, 2014 Solid Waste Permit issued by PADEP, which authorizes residual waste processing operations.
- The May 24, 1985 order issued by the Pennsylvania Department of Environmental Resources (predecessor to the PADEP), which primarily concerns closure of Impoundment 2.
- The September 11, 2006 COA issued and amended on February 3, 2014 by PADEP, which primarily concerns re-closure of Impoundments 1 and 1A.
- The April 6, 2018 COA issued by PADEP concerning management of F039 waste from Impoundment 2.

Waste management units at the Facility include three closed impoundments, a proposed residual waste landfill, waste storage tanks and containers, waste treatment tanks, and a leachate

management-wastewater treatment system. The waste management units and monitoring locations are depicted on Figure 2, Facility Layout, and are further described as follows.

Closed Disposal Impoundments

- Impoundments 1 and 1A: The two adjacent disposal impoundments collectively cover approximately 30 acres. The unlined impoundments operated from 1958 to 1981, prior to RCRA regulatory requirements. A perimeter leachate collection and treatment system was installed in the late 1970s. The impoundments received treated industrial waste and were initially closed in 1979 (Impoundment 1A) and 1981 (Impoundment 1) with waste left in place.
- Impoundment 2: The 16-acre impoundment operated from 1981 to 1988 and was constructed with a bentonite-clay liner and a leachate collection system. MAX capped and closed the impoundment in 2008 in accordance with RCRA closure requirements under oversight of PADEP.

Proposed Landfill

- MAX submitted an application for a new residual waste landfill, also known as Landfill 3, to PADEP in December 2017, which was revised and resubmitted in November 2020. Landfill 3 would be approximately 21 acres and located directly to the east of Impoundment 1 (see Figure 2). The application is currently under review by PADEP.

Waste Treatment and Storage Units

- Residual wastes are chemically and physically treated in tanks to render them stabilized or otherwise adequately processed for either beneficial use in re-closure of Impoundments 1 and 1A or for off-site disposal. Treatment processes include neutralization/precipitation, chemical reduction/oxidation, oil separation, solidification, and dewatering. Waste is stored in approved tanks, storage units, or solid waste storage areas prior to and after treatment.

Leachate Management/Wastewater Treatment Plant

- Leachate from the treatment and disposal units, surface water runoff from the impoundments, and contaminated groundwater are treated at the Facility's wastewater treatment plant. The effluent is discharged to Little Raccoon Run under National Pollutant Discharge and Elimination System (NPDES) Permit No. PA0044326.
- The sludge generated at the wastewater treatment plant was previously considered a residual waste and disposed in the Facility's impoundment closures/re-closures to maintain grade requirements. In 2011, EPA determined that the sludge should be classified as a listed hazardous waste (F039). The sludge is currently being managed and taken off-site as a listed hazardous waste until it is specifically delisted by PADEP. In compliance with the April 2018 COA, MAX submitted a delisting petition for the sludge to PADEP and the PA Environmental Quality Board on May 30, 2018, which is under review.

Section 3: Environmental Investigations and Cleanup Actions

Environmental Investigations

Several hydrogeological investigations have been performed to characterize the geological, hydrogeological, and mining conditions at the Facility. The Facility overlies competent aquitards, resulting in low hydraulic conductivities that are reflected in the slow rate of groundwater flow (estimated at 0.035 to 0.05 ft/day) beneath the Facility. Three groundwater flow zones are monitored: Pittsburgh Limestone, Connelsville Sandstone, and Morgantown Sandstone. The Pittsburgh Coal zone overlies the Pittsburgh Limestone and was removed beneath most of the Facility via strip and pit mining. Groundwater generally follows topography and flows radially (i.e., northeasterly to southeasterly in the northern to southern parts of the Facility, respectively) toward Little Raccoon Run in all zones, although vertical (downward) gradients predominate in the Pittsburgh Limestone and Connelsville Sandstone.

In the mid-1980's, groundwater assessment reports showed that releases from Impoundment 2 had impacted the underlying groundwater, which was contaminated by salts from the disposal of treated spent pickle liquor. PADEP then required MAX to close Impoundment 2 and implement a groundwater remediation and monitoring system.

Current Monitoring Program

Currently, the Sitewide Sampling and Analysis Plan approved by PADEP and required under the 1985 COA incorporates the closed impoundments, with the proposed Landfill 3 location to be added upon permit approval by PADEP. The monitoring locations are identified in Figure 2, Facility Layout.

Pursuant to the 1985 COA, the monitoring requirements are specified in Appendix D of the June 2020 Groundwater Assessment approved by PADEP. The requirements include sampling:

- groundwater at 42 wells in the three flow zones;
- groundwater at two private wells, which are located side-gradient and upgradient of the Facility;
- surface water at two locations; and
- four leachate and seep management locations.

Sample analysis includes metals, ammonia-nitrogen, chloride, nitrate, sulfate, cyanide, volatile organic compounds, and phenols. The required analysis for each sampling point is based on the waste material managed in the sample area and an assessment of past sampling results. Chloride and nitrate are established as indicator parameters for release detection because they are primary contaminants associated with the disposal impoundments, and they are not associated with past coal mining impacts. All sample locations, including the two residential wells located approximately ¼ mile (to the west and to the north) of Impoundment 2, are analyzed for these indicator parameters.

As part of permitting requirements for proposed Landfill 3, MAX installed 18 monitoring wells

in 2014 around the perimeter of proposed Landfill 3, and in 2019, installed six monitoring wells upgradient of the proposed Landfill 3 location. The wells are screened to monitor the water table (Pittsburgh Limestone), Connelville Sandstone, and Morgantown Sandstone.

Monitoring Assessment

MAX submitted a revised Groundwater Assessment Report (2020 Assessment Report) to PADEP, including an evaluation of historical water quality (from as far back as the 1980s) and an analysis of current conditions (2019 data). PADEP approved the 2020 Assessment Report in June 2020.

An evaluation of the most recent monitoring data from 2019 shows the following environmental conditions.

1. Groundwater

The following contaminants were detected above the Federal drinking water standards, known as Maximum Contaminant Levels (MCLs), promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of the Safe Drinking Water Act and codified at 40 CFR Part 141, or if there is no MCL for a contaminant, EPA Regional Screening Levels (RSLs) for tapwater.

Impoundment 1 Area Wells

Arsenic, chromium, lead, manganese, nickel, and nitrate were detected above the applicable EPA MCL or RSL as follows:

- Arsenic exceeded its MCL of 0.01 mg/L in seven wells, all of which were wells installed to monitor proposed Landfill 3 (MW-LF3 prefix): 1I(R), 1D(R), 2I, 3D, 4I, 5I, and 7S. A maximum concentration of 0.0821 mg/L occurred at 5I.
- Chromium exceeded its MCL of 0.1 mg/L in well WO-16B, with a maximum concentration of 0.605 mg/L.
- Lead exceeded EPA's Lead and Copper Rule action level of 0.015 mg/L only once in well WO-38I at a concentration of 0.02 mg/L.
- Manganese exceeded its RSL of 0.43 mg/L in 10 wells: WO-15, WO-16A, WO-38S, WO-38I, MW-LF3-5S, MW-LF3-5D, MW-LF3-6S, MW-LF3-6D, MW-LF3-7S, and MW-LF3-9S. A maximum concentration of 58.8 mg/L occurred at MW-LF3-5S.
- Nickel exceeded its RSL of 0.39 mg/L in four wells: WO-38S, WO-38I, MW-LF3-5S, and MW-LF3-6S. A maximum concentration of 1.36 mg/L occurred at WO-38S.
- Nitrate exceeded its MCL of 10 mg/L in 10 wells: WO-15, WO-38S, WO-38I, WO-38C, WO-39C, MW-LF3-3D, MW-LF3-5S, MW-LF3-6S, MW-LF3-6D, and MW-LF3-9S. A maximum concentration of 76.27 mg/L occurred at MW-LF3-5S.

Table 1, below, provides a broader historical analysis of the contaminants remaining in the Impoundment 1 Area, including a comparison of historical maximum contaminant concentration versus maximum in 2019, as well as any trend in contaminant concentrations using the last eight monitoring events in which the contaminant was

detected.

Table: 1 Historical Analysis of Impoundment 1 Area Contaminant Concentrations (mg/L)

| Monitoring location | Contaminant | Maximum historical concentration (date) | Maximum 2019 concentration | Recent Trend |
|---------------------|-------------|---|----------------------------|--------------|
| | | | | |
| MW-LF3-5I | Arsenic | 0.0893 (2015) | 0.0821 | None/stable |
| WO-16B | Chromium | 0.605 (2019) | 0.605 | None/stable |
| WO-38I | Lead | 0.06 (2004) | 0.02 | Decreasing |
| MW-LF3-5S | Manganese | 79.5 (2015) | 58.8 | None/stable |
| WO-38S | Nickel | 53.7 (2015) | 1.36 | Decreasing |
| MW-LF3-5S | Nitrate | 418 (2015) | 76.27 | Decreasing* |

* trend cannot be definitively established due to negative predictions at tail of graph

Impoundment 2 Area Wells

Manganese and nitrate were detected above the applicable EPA MCL or RSL as follows:

- Manganese exceeded its RSL of 0.43 mg/L in two wells: WO-22 and WO-23. A maximum concentration of 12.2 mg/L occurred at WO-22.
- Nitrate exceeded its MCL of 10 mg/L in three wells: WO-23, WO-27, and WO-28. A maximum concentration of 21.83 mg/L occurred at WO-28.

Table 2, below, provides a broader historical analysis of the contaminants remaining in the Impoundment 2 Area, including a comparison of historical maximum contaminant concentration versus maximum in 2019, as well as any trend in contaminant concentrations using the last eight monitoring events in which the contaminant was detected.

Table 2: Historical Analysis of Impoundment 2 Area Contaminant Concentrations (mg/L)

| Monitoring location | Contaminant | Maximum historical concentration (date) | Maximum 2019 concentration | Recent Trend |
|----------------------------------|-------------|---|----------------------------|--------------|
| | | | | |
| WO-22 (within ROI of GW pumping) | Manganese | 12.2 (2019) | 12.2 | Increasing* |
| WO-28 (pumping well) | Nitrate | 960 (2005) | 21.83 | Increasing* |

* trend cannot be definitively established due to negative predictions at head of graph

Sampling at the two off-Facility residential wells showed no evidence of groundwater contamination from the Facility.

2. Surface Water

Because groundwater discharges to Little Raccoon Run, its surface water is monitored at five locations for nitrate, chloride, as well as metals. None of the samples showed nitrate concentrations above its Pennsylvania Surface Water Quality Criteria, and in 2019, only one out of four samples at location SWTR-1 exceeded Pennsylvania's Surface Water Quality Criteria for chloride of 250 mg/L with a concentration of 486 mg/L. For metals, in 2019, manganese exceeded its Pennsylvania Surface Water Quality Criteria of 1 mg/L once at both SWTR-1 and SWTR-3, with a maximum concentration of 1.24 mg/L occurring at SWTR-1.

Table 3, below, provides a broader historical analysis of the contaminants remaining in surface water, including a comparison of historical maximum contaminant concentration versus maximum in 2019, as well as any trend in contaminant concentrations using the last eight monitoring events in which the contaminant was detected.

Table 3: Historical Analysis of Surface Water Contaminant Concentrations (mg/L)

| Monitoring location | Contaminant | Maximum historical concentration (date) | Maximum 2019 concentration | Recent Trend |
|---------------------|-------------|---|----------------------------|--------------|
| | | | | |
| SWTR-1 | Chloride | 1190 (2015) | 486 | None/stable |
| SWTR-1 | Manganese | 2.6 (2015) | 1.24 | None/stable |

Cleanup Actions

1. Impoundments 1 and 1A

The disposal impoundments were initially closed in 1979 (Impoundment 1A) and in 1981 (Impoundment 1); however, subsequent sampling data indicated groundwater contamination existed downgradient of the unlined closed impoundments and consolidation of waste material led to subsidence of the existing impoundments' covers. Because of these factors, PADEP issued MAX the 2006 COA to re-close the impoundments to RCRA requirements. Under the oversight of PADEP, MAX has been re-closing the impoundments in phases by rebuilding the surface grading with residual waste, then installing a low-permeable cap on each unit to seal off precipitation infiltration. Five of seven phases have been completed, with the completion of Impoundment 1 re-closure (phase six) anticipated to be completed by late 2021 and the completion of Impoundment 1A re-closure (phase seven) anticipated to be completed by early 2022. It is anticipated that, with final RCRA closure of Impoundments 1 and 1A, contaminant concentrations in groundwater downgradient of the impoundments will continue to decrease.

2. Impoundment 2

In accordance with the 1985 COA, Impoundment 2 ceased operation in 1987. Cover material was placed over the waste surface, and the surface was monitored for settlement from consolidation of the waste in the impoundment. Because of continuing consolidation, PADEP allowed MAX to regrade the surface of the impoundment with residual waste to assure long-term positive drainage prior to final capping. A RCRA cap was then installed over the entire disposal area. Final closure was completed with PADEP approval in 2008.

3. Groundwater Remediation

The pump and treat groundwater remediation system has treated contaminated groundwater downgradient of Impoundment 2 for over 30 years. Accumulated groundwater is withdrawn from three pumping wells and conveyed to the on-site wastewater treatment plant. A time-trend analysis of groundwater over time shows that water quality downgradient of Impoundment 2 continues to improve over time; however, as noted above, manganese and nitrate concentrations downgradient of Impoundment 2 continue to exceed their applicable RSL and MCL, respectively.

Section 4: Corrective Action Objectives

1. Soil:

Contaminants remain in soil at the Facility at levels that create an unacceptable risk to human health and the environment. Therefore, EPA's Corrective Action Objective for soil is to prevent unacceptable exposure to human health and the environment from any hazardous constituents remaining in the soil.

2. Groundwater:

EPA expects final remedies to return groundwater to its maximum beneficial use within a timeframe that is reasonable given the particular circumstances of the facility. For facilities where aquifers are either currently used for water supply or have the potential to be used for water supply, EPA will use MCLs as the cleanup standards for groundwater, or RSLs for contaminants that do not have an MCL.

Therefore, EPA's Corrective Action Objectives for Facility groundwater is to restore the groundwater to drinking water standards, and until such time as drinking water standards are restored, to control exposure to the hazardous constituents remaining in the groundwater by requiring the continued implementation of the groundwater monitoring program and compliance with and maintenance of groundwater use restrictions.

3. Surface Water:

Contaminants remain in surface water at levels that create an unacceptable risk to human health and the environment. Therefore, EPA's Corrective Action Objective for surface water is to prevent the migration of contaminants to surrounding surface water at concentrations that may exceed Surface Water Quality Criteria.

Section 5: Proposed Remedy

EPA's proposed remedy for the Facility consists of the following components:

1. Soil:

EPA's proposed remedy for soils consists of the following:

- The Facility property shall be restricted to commercial and/or industrial purposes and shall not be used for residential purposes unless it is demonstrated to EPA that such use will not pose a threat to human health or the environment or adversely affect or interfere with the final remedy, and EPA provides prior written approval for such use;
- For Impoundment 2, operate and maintain the existing cap over the waste disposal area in accordance with the 1985 COA and the Solid Waste Permit; and
- For Impoundments 1 and 1A, install, operate and maintain a RCRA cap in accordance with the 2006 COA and the Solid Waste Permit.

2. Groundwater:

Ongoing groundwater monitoring shows sporadic exceedances of MCLs or RSLs, as applicable. Remaining groundwater contamination primarily occurs downgradient of Impoundment 1. Analysis of historical trends in groundwater contamination shows a general decrease in contaminant concentrations over time. Following completion of re-closure of Impoundments 1 and 1A, groundwater conditions are expected to continue to improve.

Therefore, EPA's proposed groundwater remedy consists of:

- monitored natural attenuation outside the pump-and-treat system's zone of influence downgradient of Impoundment 2 in accordance with the COAs and the Solid Waste Permit until MCLs, or RSLs for contaminants that do not have MCLs, are achieved;
- continued operation of the groundwater pump-and-treat and leachate collection systems in accordance with the Solid Waste Permit and the NPDES Permit; and
- a groundwater use restriction prohibiting potable use of groundwater unless it is demonstrated to EPA that:
 - such use will not pose a threat to human health or the environment or adversely affect or interfere with the final remedy selected by EPA, and EPA provides prior written approval for such use.

3. Surface Water:

Ongoing stream sampling shows sporadic exceedances of Surface Water Quality Criteria. Analysis of historical trends shows general improvement of surface water quality over time, and EPA anticipates that completion of Impoundments 1 and 1A re-closure along with continued operation of the leachate collection system will further reduce the contaminant levels migrating to Little Raccoon Run.

Therefore, EPA's proposed remedy requires, until Surface Water Quality Criteria are achieved, surface water monitoring in accordance with the Solid Waste Permit and NPDES Permit to verify that contaminant levels continue to decrease.

If, however, monitoring results show that contaminant levels are not decreasing, EPA may determine that additional corrective measures are necessary to protect human health and/or the environment. EPA will then solicit public comments on any such additional corrective measures prior to including them in the final remedy for the Facility.

Section 6: Evaluation of Proposed Remedy

This section provides a description of the criteria EPA used to evaluate the proposed remedy consistent with EPA guidance. The criteria are applied in two phases. In the first phase, EPA evaluates three decision threshold criteria as general goals. In the second phase, for those remedies which meet the threshold criteria, EPA then evaluates seven balancing criteria.

| Threshold Criteria | Evaluation |
|---|--|
| 1) Protect human health and the environment | The primary human health and environmental threats posed by the disposal areas are related to direct contact with the waste and contamination remaining in place as well as any hazardous constituents leaching to the groundwater. These threats have been mitigated by the monitoring and closure activities required by PADEP under the Solid Waste Permit and the COAs, and EPA's proposed remedy will continue to protect human health and the environment by requiring compliance with the Solid Waste Permit and COAs. |
| 2) Achieve media cleanup objectives | Media cleanup objectives for soil were achieved and will continue to be achieved by consolidating, stabilizing, and capping the waste material. Groundwater objectives, MCLs or RSLs, as applicable, will be achieved by continued operation of the groundwater pump-and-treat and leachate collection systems as well as monitored natural attenuation. Completion of Impoundments 1 and 1A re-closure along with continued operation of the leachate collection system are expected to decrease surface water contamination. Surface water monitoring will also ensure that surface water contaminants continue to decrease to achieve Surface Water Quality Criteria. |
| 3) Remediating the Source of Releases | Remediation of source areas was achieved by consolidating, stabilizing, and capping the waste material. In addition, groundwater monitoring and site inspections continue under the Solid Waste Permit and the COAs to detect any releases that may occur in the future. |

| Balancing Criteria | Evaluation |
|---|--|
| 4) Long-term effectiveness | Facility use restrictions under the Solid Waste Permit will maintain protection of human health and the environment over time by controlling exposure to contaminated waste and soil. |
| 5) Reduction of toxicity, mobility, or volume of the Hazardous Constituents | Reduction of toxicity, mobility, and volume of hazardous constituents has been achieved through closure and capping of the impoundments in accordance with RCRA requirements, as well as operation of the groundwater and leachate collection and treatment systems. |
| 6) Short-term effectiveness | EPA's proposed remedy does not involve any activities, such as construction or excavation that would pose short-term risks to workers, residents, and the environment. |
| 7) Implementability | EPA's proposed remedy is readily implementable. EPA's proposed remedy requires capping and monitoring that Facility property owners may implement in accordance with the existing Solid Waste Permit and the COAs. |
| 8) Cost | The proposed remedy is cost effective, as it does not propose any further corrective actions other than maintaining compliance with existing permits and orders. Also, the existing Solid Waste Permit requires financial assurance, and EPA proposes not to require additional financial assurance. |
| 9) Community Acceptance | EPA will evaluate community acceptance during the public comment period and provide an analysis in the Final Decision. |
| 10) State/Support Agency Acceptance | EPA will evaluate state acceptance during the public comment period and provide an analysis in the Final Decision. |

Overall, based on the evaluation criteria, EPA has determined the proposed remedy meets the threshold criteria and provides the best balance of tradeoffs with respect to the evaluation criteria.

Section 7: Financial Assurance

EPA has evaluated whether financial assurance for corrective action is necessary to implement EPA's proposed remedy at the Facility. PADEP requires financial assurance in accordance with the Solid Waste Permit. EPA has determined that additional financial assurance is not required.

Section 8: Public Participation

Interested persons are invited to comment on EPA's proposed remedy. The public comment period will last thirty (30) calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, or electronic mail to Griff Miller at the contact information listed below.

A public meeting may be held upon request. Requests for a public meeting should be submitted to Mr. Miller in writing at the contact information listed below. A meeting will not be scheduled unless one is requested. If EPA receives a request for a public meeting, EPA will assess how to hold such a meeting given current public health concerns.

The Administrative Record contains all the information considered by EPA for the proposed remedy at this Facility. The Administrative Record is available at the following location:

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
Contact: Griff Miller (3LD20)
Phone: (215) 814-3407
Email: miller.griff@epa.gov

Section 9: Signature

Date: _____

Dana Aunkst, Director
Land, Chemicals, and Redevelopment Division
US EPA, Region III

Attachments

Figure 1 - Facility Location
Figure 2 – Facility Layout

Section 10: Index to Administrative Record

Consent Order – Bulger Facility, prepared by Pennsylvania Department of Environmental Resources, May 24, 1985.

Historical Environmental Audit – Bulger and Yukon Sites, prepared by The Chester Engineers, June 1992.

Consent Order and Agreement, prepared by Pennsylvania Department of Environmental Protection, September 11, 2006.

First Amendment to September 11, 2006 Consent Order and Agreement, prepared by Pennsylvania Department of Environmental Protection, February 3, 2014.

Solid Waste Permit No. 301359, prepared by Pennsylvania Department of Environmental Protection, February 3, 2014.

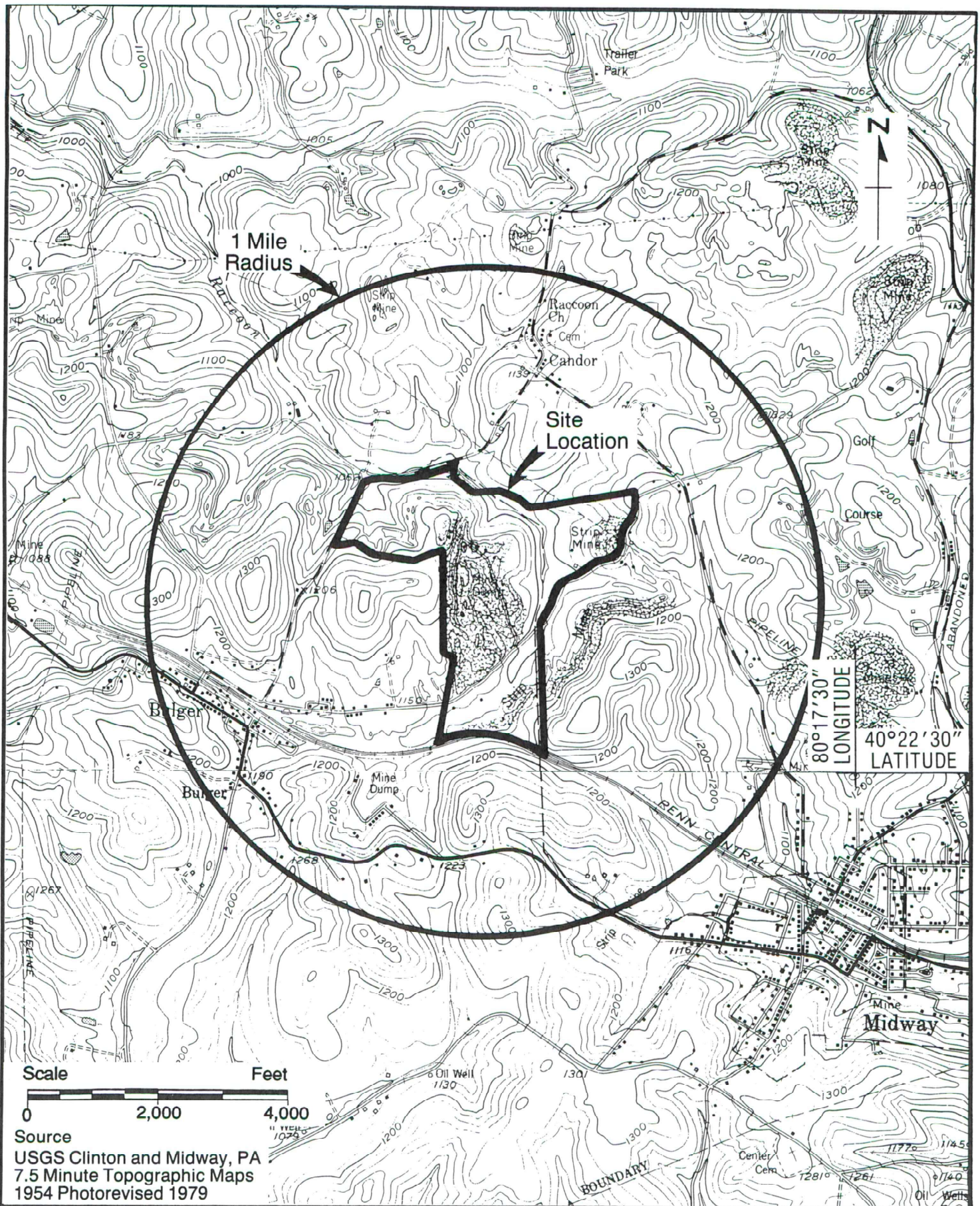
MAX Fact Sheet, prepared by MAX Environmental, June 2017.

Consent Order and Agreement, prepared by Pennsylvania Department of Environmental Protection, April 6, 2018.

NPDES Permit No. PA0044326, prepared by Pennsylvania Department of Environmental Protection, September 17, 2019.

Groundwater Assessment – Bulger Facility, prepared by BAI Group, June 2020.

Response to April 27, 2021 Request for Information email, prepared by MAX, April 29, 2021.



TheChesterEngineers

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|--------------|-----------------|--------|
| DWN.BY: JS | SCALE: As Shown | DATE |
| CHK'D.BY: CH | APPR.BY: | 6/2/92 |

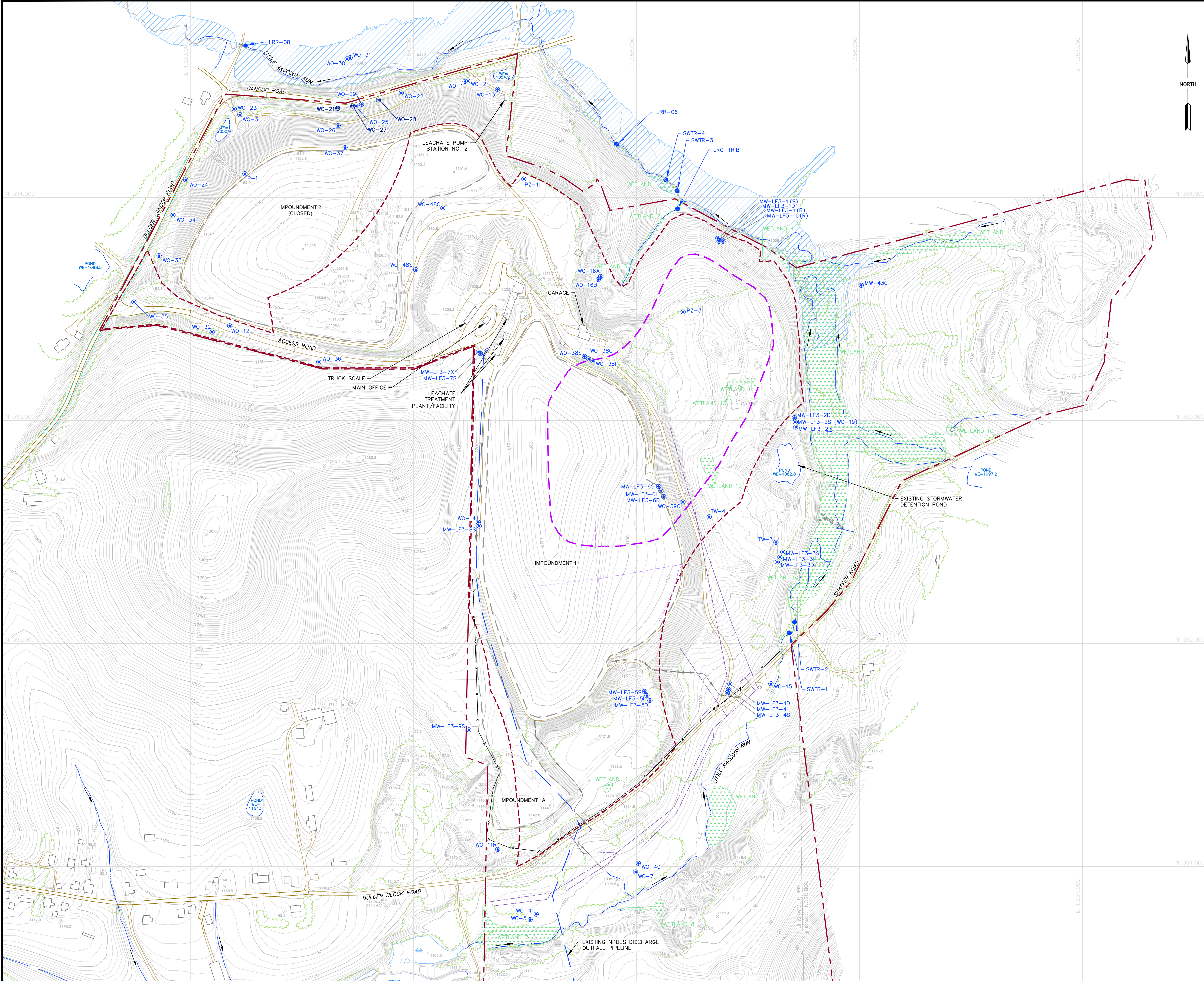
SHEET NO.

DWG. NO.

Figure II-1

Mill Service Inc.
Bulger Facility, Bulger PA
Site Location

Figure 1



MONITORING WELL NOTES

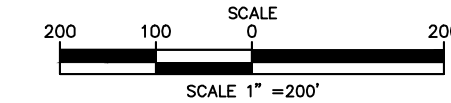
1. NEW WELLS MW-LF3-11(R), MW-LF3-10(R), MW-LF3-7X, MW-LF3-7S, MW-LF3-8S AND MW-LF3-9S WERE SURVEYED BY ENERCON ON MARCH 11, 2019.
2. TEN (10) MONITORING WELLS IN THE MONITORING WELL NETWORK ARE PROPOSED FOR GROUNDWATER QUALITY ANALYSIS SPECIFIC TO LANDFILL 3 AND MAY NEED TO BE EXTENDED BASED ON FINAL LANDFILL DESIGN AND PROXIMITY TO THE LANDFILL BERM. WELL MW-LF3-6S WILL REMAIN IN-PLACE UNTIL CONSTRUCTION OF LANDFILL 3 AND WILL THEN BE ABANDONED.
3. OTHER WELLS PROPOSED FOR SITEWIDE MONITORING OF THE EXISTING IMPOUNDMENTS WILL CONTINUE TO BE MONITORED IN ACCORDANCE WITH THE APPROVED SITEWIDE SAMPLING AND ANALYSIS PLAN AND WILL BE EXTENDED AND/OR ABANDONED AS NECESSARY AS LANDFILL 3 IS CONSTRUCTED.

BASEMAP NOTES

1. BASEMAP PREPARED BY NOR EAST MAPPING, INC., KYLERTOWN, PA FROM AERIAL PHOTOGRAPHY ON 3/17/2005 IN LOCAL SITE COORDINATE SYSTEM AND MANUALLY ADJUSTED BY WOODARD CURRAN TO PA STATE PLANE SOUTH NAD 1983 USING COORDINATE TRANSLATION POINTS FROM MONITORING WELLS WO-14 AND WO-38C BASED ON WOODARD CURRAN 2014 SURVEY. TOPOGRAPHIC UPDATES HAVE BEEN MADE IN THE IMPOUNDMENT 1 AREA PER PLANNED FILL GRADES PROVIDED BY MAX ENVIRONMENTAL TECHNOLOGIES, INC. WHERE PERMIT BOUNDARY IS SHOWN ADJACENT TO PROPERTY BOUNDARY, PERMIT BOUNDARY IS OFFSET FOR CLARITY. IN THOSE AREAS, THE PERMIT AND PROPERTY BOUNDARY ARE ACTUALLY THE SAME. WHERE NOT ADJACENT TO PROPERTY BOUNDARY, PERMIT BOUNDARY IS SHOWN IN ACTUAL LOCATION.
2. PROPERTY BOUNDARIES AND LANDOWNER INFORMATION TAKEN FROM CONSOLIDATION PLAN AND PROPERTY SURVEY BY TRI-COUNTY ENGINEERING, LLC, AN ENERCON COMPANY, HUNKER, PA, IN PA STATE PLANE SOUTH NAD 83 AND RECORDED BY WASHINGTON COUNTY ON 9/8/2017 VIA INSTRUMENT NO. 201723332. CONSOLIDATION JOINED SIX SEPARATE TAX PARCELS OWNED BY MAX ENVIRONMENTAL TECHNOLOGIES, INC. WHERE PERMIT BOUNDARY IS SHOWN ADJACENT TO PROPERTY BOUNDARY, PERMIT BOUNDARY IS OFFSET FOR CLARITY. IN THOSE AREAS, THE PERMIT AND PROPERTY BOUNDARY ARE ACTUALLY THE SAME. WHERE NOT ADJACENT TO PROPERTY BOUNDARY, PERMIT BOUNDARY IS SHOWN IN ACTUAL LOCATION.
3. 100-YEAR FLOODPLAIN AND MUNICIPAL BOUNDARIES WERE OBTAINED FROM PASDA (PA SPATIAL DATA ACCESS).
4. WETLAND BOUNDARIES 1-10 OBTAINED FROM WETLANDS DELINEATION BY WOODARD & CURRAN IN 2014, AND WERE OBSERVED BY BAI IN SEPTEMBER, 2020. WETLANDS 11-14 AND NEW SEEP IN PERMIT AREA DELINEATED BY BAI IN SEPTEMBER, 2020 AS WELL AS RE-EVALUATION OF WETLAND 6. SEE FORM D FOR BOTH WETLAND REPORTS. A CHAPTER 105 ENCROACHMENT PERMIT WILL BE SUBMITTED FOR IMPACTS TO WETLANDS 11-14 WITHIN THE PROPOSED FOOTPRINT AND SUPPORT AREAS. OTHER WETLANDS SHOWN WILL NOT BE IMPACTED.
5. LEACHATE TREATMENT PLANT NPDES OUTFALL PIPELINE TAKEN FROM CONSTRUCTION DRAWINGS BY DUNCAN, LAGNESE AND ASSOCIATES, INC., DATED MARCH 10, 1986, AND IS APPROXIMATE.

BASEMAP LEGEND

- PROPERTY BOUNDARY (SEE BASEMAP NOTE 2)
- APPROXIMATE ADJACENT PROPERTY LINE (SEE BASEMAP NOTE 2)
- MUNICIPAL BOUNDARY (SEE BASEMAP NOTE 3)
- PROPOSED LANDFILL 3 PERMIT BOUNDARY
- PROPOSED LANDFILL 3 LIMIT OF WASTE
- EXISTING GRADE CONTOUR (C.I. = 2/10') (SEE BASEMAP NOTE 1)
- EXISTING WASTE IMPOUNDMENT BOUNDARY
- EXISTING IMPOUNDMENT NO. 1 LEACHATE INTERCEPTOR TRENCH/CONVEYANCE
- EXISTING GROUNDWATER INTERCEPTOR
- EXISTING LEACHATE FORCE MAIN (6" SCH 40 PVC)
- EXISTING NPDES DISCHARGE OUTFALL LINE (SEE BASEMAP NOTE 5)
- FEMA 100 YEAR FLOODPLAIN (SEE BASEMAP NOTE 3)
- WETLANDS BOUNDARY (SEE BASEMAP NOTE 4)
- WATERCOURSE
- PAVED ROAD
- UNPAVED ROAD
- WATER LINE INCLUDING 4" CITY WATER
- COMMUNICATIONS LINE (TELEPHONE OR FIBER OPTIC)
- COLUMBIA GAS LINE
- ELECTRIC LINE
- EASEMENT OR RIGHT-OF-WAY
- GROUNDWATER MONITORING WELL
- GROUNDWATER PUMPING WELL/MONITORING WELL
- SURFACE WATER SAMPLING LOCATION (SWTR POINTS ARE ALSO SURFACE WATER FLOW MEASUREMENT POINTS)



| REVISIONS | | DATE: | |
|---|--|------------------------|--|
| | | 8/2/21 | |
| MAX ENVIRONMENTAL TECHNOLOGIES, INC. | | DRAWN BY: | |
| BULGER LANDFILL 3 - RESIDUAL WASTE LANDFILL | | KEF | |
| SMITH TOWNSHIP WASHINGTON COUNTY PENNSYLVANIA | | CHECKED: | |
| | | EJL | |
| | | BAI DRAWING NO: | |
| | | MAX-003D009 | |
| | | SHEET NO. | |
| State College Office | | Delaware Valley Office | |
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| | | FIGURE 2 | |