Prepared for

DTE Electric Company
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2025 ANNUAL INSPECTION REPORT
FLY ASH BASIN

MONROE POWER PLANT

Monroe, Michigan

Prepared by

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1. INTRODUCTION

1.1 Overview

The 2025 Annual Inspection Report (AIR) was prepared by Geosyntec Consultants of Michigan, Inc. (Geosyntec) to provide the results of the annual inspection of the Monroe Fly Ash Impoundment (Fly Ash Basin) at DTE Electric Company's (DTE) Monroe Power Plant disposal facility. The annual inspection has been prepared to comply with the United States Environmental Protection Agency (USEPA) Coal Combustion Residual (CCR) Rule (CCR Rule) published on April 17, 2015, as amended. Under the CCR Rule, the Ash Basin is an "existing surface impoundment" per 40 CFR 257.53 and must be inspected by a qualified professional engineer on a periodic basis, not to exceed one year. The annual inspection is also required as part of the Inspection, Monitoring, and Maintenance Manual (IMMM) for the Fly Ash Basin.

The Fly Ash Basin is located about one mile southwest of the Monroe Power Plant near Monroe, Michigan, and is bounded on the east by Lake Erie and the Plant discharge canal, on the west by Interstate Highway 75 (I-75), on the south by an agricultural field, and on the north by residential property and Plum Creek (Figure 1). As of December 29, 2023, DTE ceased receipt of CCR within the Fly Ash Basin. DTE issued a notice of intent (NOI) to close the Fly Ash Basin on January 25, 2024.

1.2 Purpose

Inspection, monitoring, and maintenance of the Fly Ash Basin and embankment are performed by DTE pursuant to the combined monitoring and maintenance program described in the IMMM (MONPP – 1301 – Rev. E) and the CCR Rule. The objective of the inspections that are part of the IMMM is to detect indications of instability in time to allow planning, design, and implementation of appropriate mitigation measures. The purpose of the inspection under the CCR Rule [40 CFR 257.83(b)(1)] is:

"…to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards."

The inspection must, at a minimum, include:

(i) A review of the available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., the results of an inspection by a qualified person, and results of previous annual inspections);

(ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit; and

(iii) A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation.

The purpose is accomplished through periodic visual inspection (and photo-documentation) of the Fly Ash Basin, review of the previous inspection, review of instrumentation monitoring data, and discussions with site personnel about the history of the site and general operations at the Fly Ash Basin. Observations from the visual inspection, document and instrumentation data review, and discussions are summarized in an inspection report. The inspection report addresses the following under the CCR Rule [40 CFR 257.83(b)(2)]:

(i) Any changes in geometry of the impounding structure since the previous annual inspection;

(ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection;

(iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;

(iv) The storage capacity of the impounding structure at the time of the inspection;

(v) The approximate volume of the impounded water and CCR at the time of the inspection;

(vi) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures; and

(vii) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

1.3 Report Organization

The remainder of this report is organized as follows:

- Section 2 - Review of Available Information: summarizes various historical documents that were reviewed as part of this inspection.
- Section 3 - Facility Description: provides information about the facility.

- Section 4 - Observations from Annual Inspection: summarizes visual observations recorded during the 2025 inspection of the Fly Ash Basin.

- Section 5 - Instrumentation Monitoring and Bathymetric Survey: provides information about the instrumentation monitoring and bathymetry survey of the Fly Ash Basin.

- Section 6 - Current Operations and Maintenance Activities: describes DTE's current operations and maintenance activities performed since the 2024 annual inspection.

- Section 7 - Evaluation of Observations: based on the inspection results, evaluated if the design, construction, operation, and maintenance of the Fly Ash Basin are consistent with recognized and generally accepted good engineering standards.

- Section 8 - Conclusions: provides the overall conclusions of the annual inspection and certification of the AIR.

1.4 Terms of Reference

The annual visual inspection was performed on May 6, 2025, by Dr. Clinton Carlson, Ph.D., P.E. and Dr. Jorge Romaña Giraldo, Ph.D. of Geosyntec, with assistance from DTE staff. The weekly inspections and monitoring of inclinometers are performed by DTE's qualified person[1]. This report was prepared by Dr. Carlson and Dr. Romaña Giraldo with input by Mr. John Seymour, P.E. of Geosyntec. Dr. Carlson is the qualified professional engineer per the requirements of §257.53 of the CCR Rule. He has over ten years of experience with coal ash related projects and his resume is provided in Appendix A.

[1] Qualified person means a person or persons trained to recognize specific appearances of structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit by visual observation and, if applicable, to monitor instrumentation.

2. REVIEW OF AVAILABLE INFORMATION

Geosyntec reviewed the following documents for the annual inspection. These documents are summarized in the table below.

Table 1: Available Information Reviewed for Annual Inspection

Title	Prepared by	Date	Content
Monroe Fly Ash Disposal Basin Technical Report	DTE	1977	Design, construction and operational information.
2009 Construction Completion Report	Geosyntec	March 8, 2010	Construction information for the 2009 construction.
2010 Construction Completion Report	Geosyntec	May 4, 2011	Construction information for the 2010 construction.
Geotechnical Site Characterization Report	Geosyntec	September 2012	Summary of data from various site investigation studies conducted around the perimeter of the embankment.
2012 Construction Completion Report	Geosyntec	November 30, 2012	Construction information for the 2012 construction.
2013 Construction Completion Report	Geosyntec	December 13, 2013	Construction information for the 2013 construction.
Potential Failure Mode Analysis Results – Rev. 3	Geosyntec	January 2015	Results of potential failure mode analysis for the Monroe Power Plant. Reassessed certain potential failure modes based on changes in operational procedures prior to the analysis.
Fill Plan Alternatives – Rev. B	Geosyntec	April 22, 2015	Pros and cons of various fill plan alternatives for the remaining life of the ash basin.
Overliner Construction, Phase 1- Construction Quality Assurance Report	Golder	September 16, 2015	Construction completion document.
Groundwater Monitoring System Summary Report	TRC	October 2017	Information on groundwater monitoring system components and details for the Monroe Ash

Table 1: Available Information Reviewed for Annual Inspection

Title	Prepared by	Date	Content
			Basin and Vertical Extension Landfill.
Groundwater Statistical Evaluation Plan	TRC	October 2017	Basis for statistical evaluation for groundwater monitoring events for the Monroe Ash Basin and Vertical Extension Landfill.
Location Restrictions Demonstration	TRC	October 2018	Provides details of location restrictions demonstration for the Ash Basin per CCR Rule.
Structural Stability Assessment	Geosyntec	October 15, 2021	Structural stability assessment per the CCR Rule. Provides a five-year update to the original assessment performed in 2016.
Hydrologic and Hydraulic Capacity Assessment	Geosyntec	October 15, 2021	Hydraulic capacity assessment per the CCR Rule. Provides a five-year update to the original assessment performed in 2016.
Hazard Potential Assessment	Geosyntec	October 15, 2021	An assessment of the hazard potential of the Ash Basin per the CCR Rule. Includes a dam breach analysis.
Fugitive Dust Control Plan	DTE	November 8, 2021	Presents fugitive dust control measures. Added operating license information, updated process for the inactive bottom ash impoundment, and further defined activities for assessing and monitoring effectiveness of dust control measures.
Safety Factor Assessment – Revised	Geosyntec	February 22, 2023	Safety factor assessment per the CCR Rule. Provides a five-year update to the original assessment performed in 2016. Updated peak horizontal acceleration, horizontal seismic coefficient, and slope stability analyses.

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Table 1: Available Information Reviewed for Annual Inspection

Title	Prepared by	Date	Content
Final Alternate Liner Demonstration	Geosyntec	April 10, 2023	Details the alternate liner demonstration for the Monroe Fly Ash Basin in accordance with the CCR Rule (Part B) 40 CFR 257.71(d)(ii)(A).
Closure Plan	Burns & McDonnell	October 6, 2023	Documenting how the plan will meet the CCR Rule. Update to October 2016 Closure Plan.
Post-Closure Plan	Burns & McDonnell	October 6, 2023	Documenting how the plan will meet the CCR Rule. Update to October 2016 Post-Closure Plan
Notice of Intent to Close CCR Unit	DTE	January 25, 2024	Provide details of the closure plan for the Ash Basin and the Vertical Extension Landfill. Completed under 40 CFR 257.102(g).
Request to Withdraw Part B Application-Monroe Power Plant Fly Ash Basin	DTE	January 25, 2024	Details on the withdrawal of the Part B application for the Monroe Power Plant Fly Ash Basin
Weekly Inspection Reports	DTE	May 2024 to November 2025	Qualified person inspections from May 2024 through November 2025.
Bathymetric Survey	DTE	November 2024	Bathymetry survey of the Fly Ash Basin.
Inspection, Monitoring and Maintenance Manual, Rev. E.	Geosyntec	December 2024	Provides details of operations, monitoring, action levels and items for the Fly Ash Basin. Updated for changes in continuous monitoring system and operations at the Facility.
2024 Annual Inspection Report	Geosyntec	January 9, 2025	Provides the results of the 2024 annual inspection.
Annual Groundwater Monitoring Report	TRC	January 31, 2025	Summary of annual groundwater monitoring results for 2024 for the Monroe Ash Basin and Vertical Extension Landfill

Table 1: Available Information Reviewed for Annual Inspection

Title	Prepared by	Date	Content
Emergency Action Plan	DTE	January 2025	Provides the emergency action plan to safeguard lives and reduce the potential for damage to public resources and private property per the CCR Rule 40 CFR 257.73.
Monroe Emergency Action Plan Meeting	DTE	October 31, 2025	Documentation of annual meeting for emergency preparedness table-top study of the Monroe Power Plant. Completed pursuant to 40 CFR 257.73(a)(3)(i)(E).
Annual Fugitive Dust Report	DTE	November 19, 2025	Annual report of dust control actions, any complaints, and corrective actions taken, if any. Completed pursuant to 40 CFR 257.80(c).

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3. FACILITY DESCRIPTION

The permitted area for the site is located in Section 16, Township 7 South, Range 9 East, of Monroe Township, Michigan. The facility includes the 331-acre Fly Ash Basin and a 79-acre Vertical Extension Landfill (Landfill) for a total permitted area of 410 acres. The Fly Ash Basin is a coal ash surface impoundment under Michigan Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994, Operating License No. 9725. The Landfill is a coal ash landfill located within the northwest area of the Fly Ash Basin, including the Landfill perimeter berms and swales.

The Fly Ash Basin was constructed in the early 1970s as a 410-acre basin to impound sluiced ash. The Fly Ash Basin includes a 3.5-mile-long embankment constructed of on-site fine grained (clayey) soils that were excavated from within the footprint of the Fly Ash Basin. Ash and water were pumped to the Fly Ash Basin from the Monroe Power Plant using above grade steel and high-density polyethylene pipes. After treatment within the Fly Ash Basin, water would flow out from the Fly Ash Basin through a discharge structure in accordance with the facility National Pollutant Discharge Elimination System (NPDES) permit #MI0001848. DTE ceased receipt of CCR in the Fly Ash Basin as of December 29, 2023, and is in the process of closing the Fly Ash Basin.

4. OBSERVATIONS FROM ANNUAL INSPECTION

The annual visual inspection and DTE's weekly inspections included the perimeter embankment crest, exterior slopes of the embankment, stormwater features, and discharge structure and canal. Inspection results and photographs from the annual visual inspection are provided in Appendix B. The key observations from the inspection are summarized below.

1. The aggregate access roads to the perimeter road atop the perimeter embankment near Station 0+00 (Photograph #1), on the east side (Photograph #11), and on the north side (Photograph #50) were in good condition with minimal erosion rills and minimal rutting observed.

2. No structural damage was observed in the concrete, discharge pipes, or gates of the discharge structure and no obstructions were observed in the gates and discharge pipes (Photographs #2, #3, #4). The stop logs were in poor condition and in the raised position (Photograph #3); the stop log gates are no longer used. The slope between the discharge structure and the discharge canal had no apparent indicators of slope movements (e.g., sinkholes, cracks) (Photograph #5). The outfall structures and culverts to the discharge canal were in satisfactory condition with no obstructions observed (Photograph #6). A remote-operated vehicle was used to inspect and record the interiors of the discharge pipes shortly after the annual visual inspection (June 23, 2025). No cracks, joint separation, or excessive buildup of sediments (or blockages) were observed in the recordings of the discharge pipes.

3. The pool level within the Fly Ash Basin at the time of the inspection was approximately 608 feet (Photograph #4), which is less than the maximum operating pool level of 609.0 feet and approximately equal to the concrete sill in front of the discharge pipes. Some water was flowing over the discharge structure (Photograph #3), into the pipes (Photograph #2), and out from the outfall (Photograph #6) due to precipitation prior to and during the inspection. As a result of the sluicing operations at the Fly Ash Basin having stopped, water is generally not flowing through the discharge structure.

4. The discharge canal leading into Plum Creek and the silt curtain and weir at the end of the canal were in satisfactory condition (Photographs #7, #8). Significant vegetation was observed growing in the discharge canal. Some water was observed flowing over the weir outlet during the inspection due to precipitation prior to and during the inspection. Sluicing operations to the Fly Ash Basin have stopped, so flow through the discharge canal is normally minimal.

5. The perimeter road atop the perimeter embankment (Photographs #9, #12, #33, #66), including the asphalt road leading to the Vertical Extension Landfill (Photographs #33,

#34), was generally in good condition with no erosion or rutting and minimal low spots. A couple low spots were observed along the perimeter road atop the perimeter embankment on the south side near Station 120+00 (Photograph #31) and on the north side between Stations 20+00 and 38+00 (Photograph #53). Water had ponded in these low spots due to precipitation prior to and during the inspection.

6. The exterior slopes of the perimeter embankment were generally in good condition (Photographs #10, #16, #19, #23, #28, #33, #34, #35, #45, #49, #52, #57, #58, #66, #67). The vegetation was well maintained, and no indicators of slope instabilities (e.g., cracks) or erosion were observed along most of the perimeter embankment. Specific observations regarding the exterior slopes of the perimeter embankment included the following.

    a. Sand-bentonite repairs made in September 2024 to the sloughing/cracking of the exterior slopes on the perimeter embankment near Station 12+00 had experienced erosion (Photograph #65). Existing "bunching" of materials at the toe of the embankment was still present (Photograph #64). The slope inclinometer at Station 11+50 did not indicate significant ground movements (i.e., less than 1.0 inch of cumulative movement), suggesting that only surficial movement has occurred.

    b. The aggregate covering the HDPE slotted pipes along the southeast corner has experienced some erosion and exposed the geotextile upslope of the pipe (Photograph #21).

    c. The geotextile has been exposed at the toe of the exterior slopes of the perimeter embankment on the west side; however, no tears were observed in the geotextile (Photograph #37).

    d. A previous crack repair near Station 83+00 using a sand-bentonite mix was still in satisfactory condition (Photograph #39).

    e. Vegetation was sparser at some locations on the perimeter embankment on the west side near Station 83+00 (Photograph #39). This area was affected by a fire in early 2023 but continues to show signs of regrowth.

    f. Small, woody vegetation was observed on the upslope sides of the SmartDitch near Stations 62+00 (Photograph #47) and 76+50 (Photograph #41).

    g. The aggregate placed on the perimeter embankment between Stations 67+00 and 68+00 has shown signs of erosion from the upper slope to the lower slope and exposed the covered high-density polyethylene (HDPE) slotted pipe (Photograph #44).

7. The low point in the perimeter embankment near Station 165+00 for emergency overflow was in good condition (Photograph #12).

8. The stormwater features including the SmartDitch® trenches (corrugated HDPE channels used to manage stormwater), SmartDitch outlets, riprap downchutes, and perimeter swales were inspected. The following observations were made.

    a. In general, the SmartDitch trenches along the perimeter embankment were in fair condition with some settlement, cut vegetation within the ditches, and erosion around the edges (Photographs #16, #19, #23, #35, #45, #57, #58).

    b. The riprap downchutes used to convey water from the SmartDitch to the perimeter swales were generally in satisfactory condition (Photograph #13). Denser vegetation was observed in the downchutes at Stations 26+50 (Photograph #59) and 139+50 (Photograph #24). Some small, woody vegetation was observed in the riprap downchutes at Stations 70+00 (Photograph #43) and 139+50 (Photograph #24). This vegetation did not appear to affect the functionality of the riprap downchutes.

    c. Significant cut vegetation was observed within many of the SmartDitch outlets (Photographs #14, #24, #36, #42, #43, #46, #55, #59, #60). The vegetation was not observed to impede conveyance of stormwater flows from the SmartDitch outlets into the riprap downchutes.

    d. Riprap has eroded from below all but one of the SmartDitch outlets (i.e., Station 26+50) (Photographs #14, #15, #20, #25, #36, #40, #42, #43, #46, #55, #56, #60, #61). Other observations related to erosion below the SmartDitch outlets include the following.

        i. At Station 18+50, concentrated flow beneath the outlet eroded over one foot of riprap and resulted in a hole (Photograph #61). Some flow into the hole was observed during the inspection due to precipitation prior to and during the inspection. Erosion was observed along the left side of the riprap downchute (facing downslope) (Photograph #62), which is down the slope from the hole. Finer sediments were observed near the bottom of the riprap downchute of this SmartDitch outlet (Photograph #63).

        ii. The amount of erosion has exposed the geotextile below the SmartDitch outlets at Stations 18+50 (Photograph #61), 32+50 (Photograph #56), 145+50 (Photograph #20), 151+00 (Photograph #15), and 157+00

(Photograph #14). The geotextile fabric is ripped at Stations 18+50, 32+50, and 157+00.

iii. The SmartDitch outlets at Stations 18+50 (Photograph #60), 32+50 (Photograph #55), 76+00 (Photograph #42), 82+00 (Photograph #40), 88+00 (Photograph #36), 139+50 (Photograph #25), 145+50 (Photograph #20), and 151+00 (Photograph #15) have been distorted due to settlements resulting from erosion below the outlets.

e. The covered HDPE pipes connecting sections of the SmartDitch were generally in good condition with minimal sediments and cut vegetation near the outlets and within the pipes. Minimal erosion was observed in the aggregate covering these pipes for the vehicle crossings (Photograph #17). Some sediments or cut vegetation were observed within the pipes near Stations 22+50, 30+00, and 149+00 (Photograph #18). However, the sediments and cut vegetation were not observed to impede conveyance of stormwater through the pipes.

f. One of the observation ports covering the HDPE slotted pipes along the southeast corner was damaged and separated from the HDPE pipe (Photograph #22).

g. Portions of the SmartDitch on the west side of the perimeter embankment were damaged by a fire in March 2023. Some embankment materials have eroded into the SmartDitch near Station 86+00 (Photograph #38). However, the damage did not appear to affect the overall functionality of the SmartDitch.

h. A small erosion rill was observed on the downslope side of the SmartDitch near Station 33+00 (Photograph #54). The erosion did not appear to have caused the SmartDitch to settle.

i. The perimeter swales along the perimeter embankment were in satisfactory condition (Photograph #48). Water was observed within the perimeter channels, but flow was minimal. The denser vegetation on the sides of the perimeter channels did not appear to impede the flow of water through the channels.

9. Water from the perimeter channel is no longer being redirected into the Fly Ash Basin. It is now directed from the pump house to a discharge point located south of the Fly Ash Basin. The modifications made to the pump house piping, the access road, and the manhole at the southeast corner of the Fly Ash Basin were in good condition (Photographs #26, #27).

10. The instrumentation monitoring equipment, which includes the slope inclinometer casings, equipment boxes, solar panels, antennae, and wiring, were in satisfactory condition

(Photograph #29). The seals of the equipment boxes are damaged, but the inside of the monitoring equipment boxes including the wiring and data acquisition device were in satisfactory condition (Photograph #30).

11. Sluicing operations and receipt of CCR at the Fly Ash Basin have stopped as of December 2023. The sluice lines have been partially removed. The south side of the Fly Ash Basin was graded and instrumented for a dewatering pilot study (Photograph #32).

12. The asphalt access road by the south entrance was observed to be in good condition (Photograph #33). The stormwater drainage channel and check dams along the road between Stations 104+50 and 112+00, at the toe of the embankment slope were in satisfactory condition.

13. The security gates at the north and south entrances were in good condition and locked (Photograph #51). Signs were posted for DTE private property. The perimeter fences around the Fly Ash Basin were also generally in satisfactory condition and had proper signage.

5. INSTRUMENTATION MONITORING AND BATHYMETRY SURVEY RESULTS

5.1 Slope Inclinometers

5.1.1 Background and Overview

Ten automated, shape accel array (SAA) slope inclinometers (SIs) have been installed along the Fly Ash Basin perimeter embankment. The purpose of the SAAs is to provide continuous measurements of any outward movements of the perimeter embankment. The automated SAAs were installed in late 2015 to replace the decommissioned manual SIs and baseline readings were taken on January 1, 2016. The SAAs extend from the crest of the embankment to depths of approximately 45 to 50 feet below the crest.

The SAA measurements provide values of horizontal displacement at discrete depths (at 1.6-foot intervals) in two orthogonal directions (A-axis and B-axis). Plots of horizontal displacement versus depth are generated that provide a vertical profile of the horizontal displacement experienced by the SAA at the time of the reading. The orientation of the A-axis and B-axis are unique to each SAA. Displacements in the positive A-axis correspond to an outward displacement of the perimeter embankment from the Fly Ash Basin in an approximately perpendicular direction. The B-axis is oriented parallel to the perimeter embankment.

5.1.2 Displacements

The horizontal displacements at select depths are summarized below for the readings at the approximate time of this report (April 24, 2025) unless noted otherwise. The selected depths correspond to sensor locations below ground surface where outward movements have historically been more prominent (i.e., approximately 0.2 inches or more) for the given direction. The changes in horizontal displacements since the 2024 annual inspection were observed to be less than 0.2 inches.

To supplement the measurements recorded by the SAAs along the south side of the Fly Ash Basin, measurements were also collected at the manual inclinometer SI-6. A baseline measurement was collected for SI-6 on April 17, 2025. Displacements measured at SI-6 were less than 0.05 inches as of May 2, 2025.

5.1.2.1 *Station 11+50 Slope Inclinometer*

- A-axis direction
    - Cumulative displacement magnitude and direction: +0.69 inches at approximately five feet below ground surface.

5.1.2.2 ***Station 34+00 Slope Inclinometer***

- A-axis direction
    - Cumulative displacement magnitude and direction: +0.27 inches at approximately six feet below ground surface.
    - Cumulative displacement magnitude and direction: +0.21 inches at approximately 25 feet below ground surface.

5.1.2.3 ***Station 56+00 Slope Inclinometer***

- A-axis direction
    - Cumulative displacement magnitude and direction: +0.19 inches at approximately six feet below ground surface.
- B-axis direction
    - Cumulative displacement magnitude and direction: -0.47 inches (movement to the east) at approximately six feet below ground surface.

5.1.2.4 ***Station 65+50 Slope Inclinometer***

- A-axis direction
    - Cumulative displacement magnitude and direction: +0.01 inches at approximately six feet below ground surface.
    - Cumulative displacement magnitude and direction: +0.08 inches at approximately 29 feet below ground surface.
- B-axis direction
    - Cumulative displacement magnitude and direction: +0.28 inches (movement to the west) at approximately 29 feet below ground surface.

5.1.2.5 ***Station 77+00 Slope Inclinometer***

- A-axis direction
    - Cumulative displacement magnitude and direction: +0.22 inches at approximately six feet below ground surface.

- B-axis direction
    - Cumulative displacement magnitude and direction: -0.37 inches (movement to the north) at approximately six feet below ground surface.

5.1.2.6 *Station 118+00 Slope Inclinometer*

The virtual machine was not able to communicate with the SAA at Station 118+00 at the time of the visual inspection. Communication was temporarily restored after the visual inspection. The data reported below are from June 24, 2025.

- A-axis direction
    - Cumulative displacement magnitude and direction: +1.36 inches at approximately six feet below ground surface.
- B-axis direction
    - Cumulative displacement magnitude and direction: -0.21 inches (movement to the west) at approximately six feet below ground surface.

5.1.2.7 *Station 133+00 Slope Inclinometer*

The virtual machine was not able to communicate with the SAA at Station 133+00 at the time of the visual inspection. The data reported below are from June 24, 2025.

- A-axis direction
    - Cumulative displacement magnitude and direction: +3.13 inches at approximately five feet below ground surface.

5.1.2.8 *Station 142+00 Slope Inclinometer*

The virtual machine was not able to communicate with the SAA at Station 142+00 at the time of the visual inspection. The data reported below are from June 24, 2025.

- A-axis direction
    - Cumulative displacement magnitude and direction: +0.29 inches at approximately six feet below ground surface.

5.1.2.9 ***Station 162+50 Slope Inclinometer***

- A-axis direction
    - Cumulative displacement magnitude and direction: +2.37 inches at approximately six feet below ground surface.

5.1.2.10 ***Station 178+00 Slope Inclinometer***

- A-axis direction
    - Cumulative displacement magnitude and direction: +0.28 inches at approximately six feet below ground surface.
- B-axis direction
    - Cumulative displacement magnitude and direction: -0.18 inches (movement to the south) at approximately six feet below ground surface.

5.2 Bathymetric Survey Results

The bathymetric survey of the Fly Ash Basin was performed by DTE's surveying services in August 2025. The following were observed or estimated based on the survey results.

1. Water level at the time of survey was at elevation 607.5 feet[2], which is lower than the maximum operation water level of 609 feet. The water level has remained around an elevation of 607 feet since sluicing operations have stopped at the Fly Ash Basin.

2. Approximately 87 percent of the Fly Ash Basin footprint has CCR above the free water level.

3. The maximum water depth is approximately 34 feet. The top of ash at this location is slightly less than approximate elevation 574 feet.

4. The maximum ash thickness is approximately 50 feet, measured from the top of ash at approximate elevation 613 feet to the bottom of the Fly Ash Basin, which is at approximate elevation 563.4 feet. The minimum thickness of ash is approximately 11 feet.

[2] Elevations in this AIR are reported in the National Geodetic Vertical Datum of 1929 (NGVD29).

5. At the time of the bathymetry measurements:

    a. the remaining storage capacity of the Fly Ash Basin is approximately 1.4 million cy;

    b. approximately 28.0 million cy of ash is deposited in the Fly Ash Basin; and

    c. approximately 304 million gallons of water is impounded in the Fly Ash Basin.

As noted, DTE has ceased receipt of CCR at the Fly Ash Basin, stopped sluicing operations, and is in the process of closing the Fly Ash Basin. The impounded water slightly increased (21 million gallons) since the 2024 annual inspection. The remaining storage capacity and amount of deposited ash has not changed.

6. CURRENT OPERATIONS AND MAINTENANCE ACTIVITIES

DTE has ceased receipt of CCR within the Fly Ash Basin, stopped sluicing operations, and is in the process of closing the Fly Ash Basin as of December 2023. However, inspection, monitoring, and maintenance operations will still be active while the Fly Ash Basin is being closed.

6.1 Operations Organization

The Fly Ash Basin is operated by DTE. The responsible personnel include:

- Dan Casey – DTE Energy Supply, Plant Manager, Monroe Site Operations
- Adam Frank - DTE Project Management Organization, Project Manager
- Jason Logan and Claire Souder– DTE Environmental Management and Safety (EM&S), Monroe Power Plant

6.2 Operation Activities

Operation details are provided in the IMMM Rev. E. and Operations Plan Drawings Rev. E. (Geosyntec, 2024). In addition, the following are currently being completed as required by the CCR Rule.

- Weekly inspections by a qualified person.
- Dust control in accordance with the Fugitive Dust Control Plan.
- Annual Fugitive Dust Control Report.
- Annual Groundwater Monitoring and Corrective Action Report.

6.3 Maintenance Activities Since Previous Annual Inspection

The following maintenance activities were performed in addition to general site maintenance between the 2024 and 2025 inspections (Section 4 provides additional details). Additional maintenance activities completed after the visual inspection are discussed in Section 7.

1. Sand-bentonite repairs and grading were made to the perimeter embankment slopes near Station 12+00 (slough/crack).
2. Desiccant canisters within the instrumentation equipment boxes were replaced in August 2024.

7. EVALUATION OF OBSERVATIONS

The Fly Ash Basin was not observed to have any existing structural weaknesses or conditions that would disrupt the overall operation and/or safety of the Fly Ash Basin. The maximum cumulative displacement observed within the SAA slope inclinometers is 3.13 inches (since 2016) at Station 133+00 and no evidence of movement of the perimeter embankment at the monitored locations that would suggest global instabilities has been observed. However, there are two maintenance conditions that have the potential to develop into structural weaknesses or disrupt the operation and or/safety at the Fly Ash Basin during the closure process if not addressed.

- Erosion was observed below all but one of the SmartDitch outlets. The SmartDitches and outlets should be repaired or replaced with alternative stormwater features. The riprap and damaged geotextile fabric below the SmartDitch outlets should be replaced. Geosyntec is currently formulating recommendations for corrective actions to address necessary repairs.

- After the visual inspection, DTE personnel observed some sloughing of previous sand-bentonite repairs on the exterior slopes of the perimeter embankment near Station 65+00 on August 8, 2025. Geosyntec inspected the sloughing and determined the sloughing extended approximately 100 feet along the slope (Photograph #69). DTE and Geosyntec have identified the necessary repair for the sloughing; however, Geosyntec has recommended implementing the repair during better weather in Spring 2026 because no additional sloughing has been observed in this area.

There are other maintenance conditions identified during the 2025 annual inspection that should be addressed in accordance with the IMMM. Some of these conditions have already been addressed by DTE after the visual inspection.

1. Additional repairs and grading were made to the sloughing near Station 12+00 in June 2025 using clay materials from the on-site stockpile (Photograph #68). Erosion controls have been placed on the slope while vegetation becomes fully established. The repairs and vegetation on the exterior slopes near Station 12+00 should continue to be monitored. DTE and Geosyntec are currently monitoring this area.

2. The exposed HDPE pipe near Station 67+00 should be covered with aggregate and the area should continue to be monitored for additional erosion.

3. Apply approved chemical sprays (for woody vegetation) and remove small, woody vegetation from the upslope side of the SmartDitch and within the riprap downchutes.

4. Fill in the low spots along the perimeter road atop the perimeter embankment with aggregate to ensure proper stormwater drainage and prevent water from ponding on the crest.

5. Cut vegetation from maintenance operations should be cleared from the SmartDitch outlets to improve the ability of the SmartDitch to convey stormwater to the riprap downchutes.

6. The erosion rill observed near Station 33+00, downslope of the SmartDitch, should be filled in with suitable material to prevent further erosion.

7. Repair the observation port of the covered HDPE slotted pipe near Station 145+00.

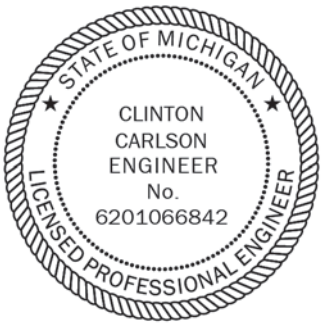
8. CONCLUSIONS AND CERTIFICATION

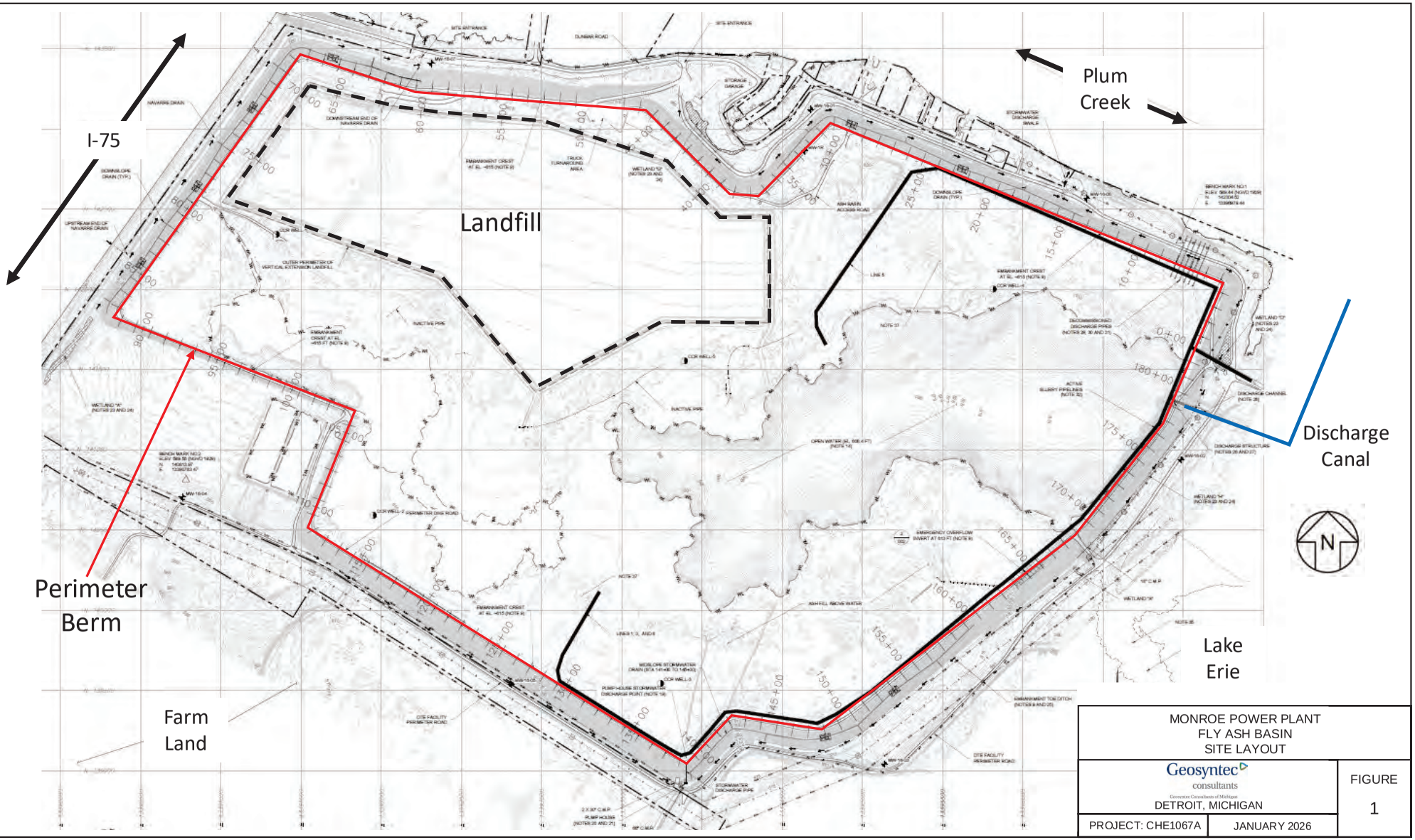
The design, construction, operation, and maintenance of the Fly Ash Basin is generally consistent with recognized and generally accepted good engineering standards in accordance with the CCR Rule [40 CFR 257.84(b)(1)]. DTE ceased sluicing to the Fly Ash Basin in December 2023. Active operations are related to inspection, maintenance, and monitoring while the Fly Ash Basin is closed. The 2025 annual visual inspection did not identify any existing structural weaknesses or conditions that are disrupting the operation and safety of the Fly Ash Basin. There are a couple conditions that could develop into structural weaknesses in the future if not addressed in the next one to two years. Geosyntec identified other conditions that require maintenance in accordance with the IMMM as detailed in Section 7. Recommendations to address the maintenance conditions are provided in Section 7 for DTE's consideration.

Certified by:

Clinton Carlson Digitally signed by Clinton Carlson Date: 2026.01.09 11:19:06 -05'00' Date January 9, 2026

Clinton Carlson, Ph.D., P.E.
Michigan P.E. License Number 6201066842
Project Engineer





MONROE POWER PLANT
FLY ASH BASIN
SITE LAYOUT

Geosyntec consultants
DETROIT, MICHIGAN

FIGURE 1

PROJECT: CHE1067A

JANUARY 2026

APPENDIX A

Resume of Clinton Carlson, Ph.D., P.E.
(Qualified Professional Engineer)

Clinton P. Carlson, PhD, PE

Qualifications

Dr. Carlson is a geotechnical engineer with eleven years of experience on projects related to design and remediation of landfills and coal combustion residual (CCR) impoundments, dam safety, and geotechnical instrumentation. He is a Senior Engineer with Geosyntec and part of the firm's dams and levees practice area. His work has included managerial responsibilities for project budgets and schedules and has primarily supported federal and power clients for both small and large projects. Clinton has managed and supported projects for risk assessments, slope stability analyses, and instrumentation for landfills and dams.

Specialties

Landfill and CCR Design and Remediation
Dam Safety
Geotechnical Instrumentation

Education

PhD, Civil Engineering, University of Michigan, Ann Arbor, MI, 2014
MSE, Civil Engineering, University of Michigan, Ann Arbor, MI, 2010
BSE, Civil & Environmental Engineering, University of Michigan, Ann Arbor, MI, 2009

Licenses/Certifications

Professional Engineer: IN, MI

Relevant Project Experience

Annual Inspections of CCR Units, Confidential Client, Midwest US | Inspections of CCR units are conducted annually as part of the United States Environmental Protection Agency (USEPA) CCR Rule to identify any site conditions that pose a concern to the safe operation and stability of the CCR units. Project manager in charge of financials and engineer in charge of performing annual inspections for three CCR units for a client in the Midwest United States. As the qualified professional engineer, prepared inspection reports to summarize observed conditions at the three CCR units. Interacted with client representatives to discuss necessary actions to address potential concerns. (Mar. 2022–Present)

Monitoring and Maintenance for CCR Units, Confidential Client, Midwest US | Project manager in charge of financials and engineer in charge of overseeing inspections, monitoring, and maintenance of geotechnical instrumentation system of two CCR units for a client in the Midwest United States. The geotechnical instrumentation system included multiple monitoring wells, settlement plates, vibrating wire piezometers, manual inclinometers, and ShapeArray inclinometers. Instrumentation data were evaluated to identify near real-time concerns for the safe operation and stability of the CCR units. Provided monthly summary reports to the client representatives and met with them to discuss the monitoring data on a bi-monthly basis. Conducted site inspections of observed conditions posing concerns for the safe operation and stability of the CCR units on at the request of the client. (Mar. 2022–Present)

Initial Safety Factor Assessment for CCR Units, Confidential Client, Southeast US | The USEPA CCR Rule requires periodic safety factor assessments are performed to assess the stability of perimeter embankments for existing CCR surface impoundments. A confidential client in the Southeast United States has a site with four CCR units impounded by earthen embankment dams. Safety factor assessments in accordance with the CCR Rule had not been previously performed for these four earthen embankment dams. Led the geotechnical team performing the initial safety factor assessments for the four CCR units. Reviewed available information, developed models for slope stability analyses, calculated safety factors, and prepared reports to summarize the results. The analyses included development of pseudostatic coefficients to represent seismic loading conditions. (June 2025–Present)

FERC Part 12D External Audits of Owner's Dam Safety Programs, Multiple Clients, MI and OH | The FERC regulations require dam owners periodically have an external consultant audit the Owner's Dam Safety Program (ODSP), which includes dam safety documents like the Dam Safety Surveillance and Monitoring Plan (DSSMP) and Emergency Action Plan (EAP). The City of Ann Arbor and American Municipal Power, Inc. contracted Geosyntec to perform the audits of the ODSP for their portfolio of dams

(two and four, respectively) in 2024. Performed reviews of the dam safety documents, conducted interviews with dam safety personnel to evaluate their understanding of the dam safety program, observed site inspections conducted by personnel as part of the dam safety program, and prepared a report with the findings and conclusions on the content and implementation of the ODSP. Project manager in charge of the project financials and schedule and the point-of-contact with the owners. (Jan. 2024-Dec. 2024)

FERC Part 12D Periodic Inspections for Barton and Superior Dams, City of Ann Arbor, Ann Arbor, MI | The City of Ann Arbor owns and operates the Barton and Superior Hydroelectric Projects (Barton and Superior Dams) in Ann Arbor, Michigan. Barton and Superior Dams are used by the City of Ann Arbor for power generation and thus, are under regulation by the Federal Energy Regulatory Commission (FERC). FERC regulations require dam safety inspections are performed every five years by Independent Consultant (IC) Teams. Geosyntec served as the IC Team for the City of Ann Arbor for the Ninth FERC Part 12D Periodic Inspections of Barton and Superior Dams performed in 2023. Served as the project manager and point-of-contact with the City of Ann Arbor on behalf of the IC Team. Member of the IC Team (geotechnical engineering support and field inspection team) that performed the document review, developed the Inspection Plans, prepared the Pre-Inspection Preparation Reports, performed the field inspections, and prepared the Periodic Inspection Reports. The Periodic Inspection Reports were completed and submitted to FERC before the December 2023 deadline. (Jan. 2023–Dec. 2023)

Landfill Stability Evaluation, Confidential Client, Southeast US | Contacted by the client to evaluate an instability at an existing landfill including the implementation of instruments to measure and evaluate progression of instability. Project manager in charge of financials and engineer in charge of developing instrumentation plan and evaluating measurements of instrumentation. Conventional surveying stakes and an automated monitoring total station were implemented to measure progression of instability. Evaluation of measurements was used to inform the client on progression of instability and provide recommendations for implementation of mitigation measures. Weekly summary reports of instrumentation measurements were provided to the client while implementing mitigation measures. Additional support was provided to the client in discussions with the state regulator. The monitoring systems were also utilized to provide additional safety measures during the staged temporary removal of a buttress berm in order to tie-in liner systems for new landfill cells to the existing liner system. Monitoring data are currently summarized in monthly reports and provided to the client. (Aug. 2019–Present)

Landfill Design Projects for Power Company, Confidential Client, Southeast US | Engineer in charge of coordinating and performing the geotechnical analyses for the permitting and closure of multiple sites for a power company. Geotechnical analyses performed for the sites included subsurface investigation and geotechnical material properties interpretation, slope stability analyses (including veneer and liner stability), settlement calculations for liner and cover systems, and hydrologic evaluations for liner and cover systems. The computer programs Slide and HELP were used to perform the slope stability analyses and hydrologic evaluations, respectively. (June 2015–Present)

Portsmouth Gaseous Diffusion Plant On-Site Waste Disposal Facility, Fluor-BWXT Portsmouth, Piketon, OH | The Department of Energy's Portsmouth On-Site Waste Disposal Facility is being constructed for the disposal of on-site hazardous waste materials. Engineer that aided geotechnical analyses for the design and construction of the facility. Geotechnical analyses performed during the design phase included slope stability analyses (including veneer and liner stability), settlement calculations for liner and cover systems under variable loads, and foundation design for leachate conveyance systems. During construction, performed slope stability analyses for excavation conditions and geo-structural calculations and reinforcement detailing for reinforced concrete valve houses constructed as part of a leachate transmission system and a footing for an interim transfer ramp. The computer program Slide was used to perform the slope stability analyses. (Apr. 2015–Present)

Inspections and Mitigation for CCR Landfill, Confidential Client, Midwest US | Probabilistic slope stability analyses for a CCR landfill in Southeast Michigan identified unsatisfactory conditions for existing slopes that required mitigation measures. Project manager in charge of project financials and schedule and engineer in charge of developing inspection and construction plans to mitigate unsatisfactory conditions. Developed an inspection plan to identify indicators of slope instabilities and allow for safe

operation conditions. The inspection plan was carried out by site personnel prior to and during construction and supported by Geosyntec. Developed a construction plan to regrade the slopes and mitigate the unsatisfactory conditions. Performed site inspections and met with client representatives and contractors during construction to verify safe working conditions and satisfactory slope conditions were achieved. (Feb. 2022–May 2022).

Probabilistic Slope Stability Assessment for CCR Landfill, Confidential Client, Midwest US | Previous site inspections identified potentially unstable slopes at a CCR landfill in the Midwest United States, so probabilistic slope stability analyses were performed to evaluate the reliability of the slope conditions given limited site information. Engineer that aided in review of probabilistic slope stability analyses and slope stability assessment report. Recommendations were developed and provided to the client to address unsatisfactory conditions for existing slopes identified in the probabilistic site response analyses. (Nov. 2021–May 2022).

Quantitative Risk Assessment for Dam in Southeast US, Confidential Client, Southeast US | The project further refines estimates of risk developed from previous potential failure mode analyses and semi-quantitative risk analyses performed for an embankment dam and its primary and auxiliary spillways located in the Southeastern U.S. Project manager in charge of financials and schedule for the Quantitative Risk Assessment (QRA) of the dam. The main objectives of the QRA are to estimate the risk, in terms of annual failure probabilities and downstream consequences, for seismic, internal erosion, and spillway hydrologic failure modes and the uncertainties associated with the risks. Actively participated in the expert elicitation process to develop risk models and meetings with the client to present the models and results of the QRA. Prepared calculation packages and reports summarizing the methods used in the QRA and the results for the client. Aided in the ground motion selection, internal erosion evaluation, and evaluation of the erodibility of the embankment soils. (May 2018–Apr. 2022)

Field Investigation of Primary Spillway for Dam in Southeast US, Confidential Client, Southeast US | Field engineer for oversight of a visual inspection and investigation of the foundation of the primary spillway slabs and control structure for a dam in the Southeast U.S. Observations from the field investigation were used to inform a QRA performed for the dam and its spillways. The visual inspection was performed to identify vertical offsets and gaps in the joints between the slabs of the primary spillway. A field investigation consisting of shallow cores through the concrete slabs of the spillway and deep borings into competent rock below the control structure was performed to evaluate the foundation materials of the primary spillway and the presence of voids. (Jan. 2021–May 2021)

Landfill Stability Evaluation, Confidential Client, Southeast US | Contacted by the client to evaluate an instability at an existing landfill including the root cause of the instability. Project manager in charge of financials and engineer in charge of coordinating and performing slope stability analyses. Slope stability analyses were performed to evaluate the root cause of the instability and mitigation measures required to stabilize the landfill. Results of the analyses were used to support the client in discussions with the state regulator and advise the client on a path forward for stabilizing the landfill. A facility-wide stability plan was also developed based on the stability of the landfill for the existing conditions and the final planned conditions. Analyses were also performed for a staged temporary removal of a buttress berm in order to tie-in liner systems for new landfill cells to the existing liner system. Aiding in ongoing annual landfill stability assessments. (Aug. 2019–Dec. 2020)

Onondaga Lake Geotechnical Monitoring, Honeywell, Syracuse, NY | Contaminated sediments were dredged from Onondaga Lake and consolidated within geotextile tubes at an off-site landfill as part of a Superfund project. Geotechnical instrumentation systems were implemented to monitor (i) a sheetpile wall around a portion of the Lake dredged for remediation and (ii) a landfill closure comprised of geotextile tubes filled with sediments dredged from the Lake. Manager in charge of financials and engineer in charge of monitoring the instrumentation data. The monitoring systems included manual and automated inclinometers, settlement cells, vibrating wire piezometers, and surface monitoring points. (Feb. 2015–Oct. 2018)

APPENDIX B

2025 Annual Inspection Forms and Photos

Monroe Power Plant
Fly Ash Basin
2025 Annual Inspection Report

Name of Surface Impoundment: Monroe Power Plant Ash Basin
Surface Impoundment ID Number:
Owner: DTE Electric Company
Operator: DTE Electric Company
Qualified Engineer: Clinton Carlson, PhD, PE
Date: 5/6/2025 **Time:** 8:40 am to 2:00 pm
Weather: Light Rain, mid 50s, low clouds
Precipitation (since previous weekly inspection): 1.2 in.
Site Conditions: Wet ground. Stormwater has accumulated along the perimeter swales, and it was observed flowing out of the SmartDitch outlets.

I. Crest

1. Were there any indications of existing structural weaknesses or conditions that have the potential to develop into structural weaknesses (ruts, holes, erosion, cracking, slides, depressions, undesired vegetation etc.)? Provide approximate size and location of any structural weaknesses. Yes ____ No X

The crest and perimeter road atop the perimeter embankment were generally in good condition with no cracking, erosion, or rutting and minimal low spots observed (Photographs #9, #12, #33, #66). However, some low spots were noted along the perimeter road atop the perimeter embankment on the south side and north side (Photographs #31, #53). The asphalt access road to the Vertical Extension Landfill was also observed to be in good condition (Photographs #33, #34). The aggregate access roads to the perimeter road atop the perimeter embankment were in good condition with minimal erosion rills and rutting observed (Photographs #1, #11, #50). The low point in the perimeter embankment near Station 165+00 used for emergency overflow was in good condition (Photograph #12).

2. Were there any significant changes since the last inspection? Yes ____ No X

No significant changes to the crest, perimeter road atop the perimeter embankment, or access roads have occurred since the last inspection.

II. Embankment Slopes

1. Were there any indications of existing structural weaknesses or conditions that have the potential to develop into structural weaknesses on the embankment slopes (ruts, holes, erosion, cracking, sloughs, depressions, bulges, undesired vegetation etc.)? Provide approximate size and location of any structural weaknesses. Yes X No ____

The exterior slopes of the perimeter embankment were generally in good condition (Photos #10, #16, #19, #23, #28, #33, #34, #35, #45, #49, #52, #57, #58, #66, #67). The vegetation was well maintained, and no indicators of slope instabilities (e.g., cracks) or erosion were observed along most of the perimeter embankment. A previous sand-bentonite repair near Station 83+00 was still in satisfactory condition (Photo #39). However, there were a couple conditions observed that should be addressed before they develop into a potential structural weakness:

- The sloughing/cracking near Station 12+00 repaired with sand-bentonite showed some erosion within the repairs (Photo # 65). Recurrent sloughing has been noted at this location due to the 2H:1V slope and cuased "bunching" of materials at the toe of the embankment (Photo #64). In June 2025, additional repairs and grading were made to the slope using clay materials from the on-site stockpile to address the erosion and establish vegetation (Photo #68). Erosion controls have been installed on the slope while egetation becomes fully established. The slope and vegetation should continue to be monitored.
- In August 2025, DTE personnel observed some sloughing of previous sand-bentonite repairs near Station 65+00. Geosyntec inspected the sloughing and determined the sloughing extended approximately 100 feet (Photo #69). DTE personnel continued to monitor these conditions during weekly inspections and plan to repair the sloughing in Spring 2026 based on Geosyntec's recommendation.
- The aggregate placed on the slope between Stations 67+00 and 68+00 has shown signs of erosion from the upper slope to the lower slope and exposed the covered HDPE slotted pipe (Photo #44).
- Geotextile has been exposed at the toe of the embankment on the west side of the perimeter embankment; however, no tears were observed (Photo #37).
- Vegetation was sparser at some locations on the perimeter embankment on the west side where a fire occurred in early 2023 (Photo #39), but there are signs of regrowt
- The aggregate covering the HDPE slotted pipes along the southeast corner has experienced some erosion and exposed the geotextile upslope of the pipe (Photo #21).
- Small woody vegetation was observed at a couple locations upslope of the SmartDitches (Photos #41, #47)

2. Were there any visible wet areas on the embankment slopes? Yes ____ No X

No visible wet areas were observed on the slopes. Additionally, there were no significant mossy areas noted on the embankment slopes.

3. Were there any significant changes since the last inspection? Yes X No ____

Sand-bentonite repairs were made to the sloughing/cracking near Station 12+00 in September 2024 (Photo #65).

III. Surface Impoundment Conditions

1. Were the sluice lines to the surface impoundment flowing freely to open water? If 'No' describe obstructions. Yes ____ No X

Sluicing operations at the Fly Ash Basin have stopped, so the lines were not flowing at the time of the inspection. Portions of the sluice lines have been removed.

2. What was the water level in the surface impoundment at the time of the inspection?

Pool Level at Time of Inspection 608 ft / NGVD29 Maximum Pool Level / Datum 609.0 ft / NGVD29

3. Was there an excessive amount of CCR above the water surface that could lead to overtopping of the perimeter berm? Yes ____ No X

CCR was present above the water level in the Fly Ash Basin, primarily due to a reduction in the pond's operating level several years ago. CCR remains below below the embankment crest. The discharge structure was active, and the water level was approximately 608 feet.

4. Were there any significant changes since the last inspection? Yes X No ____

The south side of the Fly Ash Basin was graded and instrumented for a dewatering pilot study (Photo #32).

IV. Stormwater Feature Conditions

1. Were there any existing or potential conditions (erosion, impediments, etc.) that could affect the function of the stormwater features or the stability of the embankments? Provide approximate size and location of any conditions. Yes X No

In general the SmartDitch trenches along the perimeter embankment were in fair condition with some settlement, cut vegetation within the ditches, and erosion around the edges (Photos #16, #19, #23, #35, #45, #57, #58). The riprap downchutes were generally in satisfactory condition (Photo #13). The covered HDPE pipes and aggregate for the vehicle crossings were generally in good condition (Photo #17) with only some sediments or cut vegetation observed at a couple pipes (Photo #18). The perimeter swales along the perimeter embankment were in satisfactory condition (Photo #48). A number of potential conditions that could affect the function of the stormwater features were observed.

- Riprap has eroded from below all but one of the SmartDitch outlets (Photos #14, #15, #20, #25, #36, #40, #42, #43, #46, #55, #56, #60, #61). If not addressed and the eroded areas enlarge, potential structural weaknesses could develop in the exterior slopes of the perimeter embankment at these locations.

- At Station 18+50, water has eroded a hole beneath the SmartDitch outlet (Photo #61). Water was observed flowing into the hole at the time of the inspection. Erosion was observed along the left side of the riprap downchute (Photo #62), which is down the slope from the hole. Finer sediments were observed near the bottom of the riprap downchute (Photo #63).

- At Stations 18+50, 32+50, 145+50, 151+00, and 157+00, the geotextile fabric below the SmartDitch outlets has been exposed (Photos #14, #15, #20, #56, #61). The geotextile fabric is ripped at Stations 18+50, 32+50, and 157+00.

-The outlets at Stations 18+50, 32+50, 76+00, 82+00, 88+00, 139+50, 145+50, and 151+00 have been distorted due to settlements resulting from erosion below the outlets (Photos #15, #20, #25, #36, #40, #42, #55, #60).

- Significant cut vegetation was observed within many of the SmartDitch outlets (Photos #14, #24, #36, #42, #43, #46, #55, #59, #60), but was not observed to impede conveyance of stormwater flows from the outlets into the riprap downchutes.

- Portions of the SmartDitch on the west side of the perimeter embankment were damaged by a fire in March 2023. Some embankment materials have eroded into the SmartDitch near Station 86+00 (Photo #38); however, it did not appear to affect the overall functionality of the SmartDitch.

- A small erosion rill was observed on the downslope side of the SmartDitch near Station 33+00 (Photo #54).

- Some small, woody vegetation was observed in the riprap downchutes at Stations 70+00 and 139+50 (Photos #24, #43). Denser vegetation was observed in the downchutes at Stations 26+50 and 139+50 (Photos #24, #59). The vegetation did not appear to affect the functionality of the downchutes.

- One of the observation ports covering the HDPE slotted pipes along the southeast corner was damaged and separated from the HDPE pipe (Photo #22).

2. Were there any significant changes since the last inspection? Yes X No

Water from the perimeter channel is no longer being directed into the Fly Ash Basin. It is now directed from the pump house to a discharge point located south of the Fly Ash Basin. The modifications made to the pump house piping, access road, and manhole at the southeast corner of the Fly Ash Basin were in good condition (Photos #26, #27). No other significant changes to the stormwater features (i.e., SmartDitch, riprap downchutes, perimeter swales) have occurred since the last inspection. Geosyntec is developing corrective action recommendations for repairs.

V. Discharge Structure and Canal

1. Are there any cracks or breaks in concrete or steel parts or obstructions to discharge at the discharge structure? If 'Yes' report the location and severity. Yes No X

No structural damage was found in the concrete, pipes, or gates at the inlet to the discharge structure (Photos #2, #3, #4); however, the stop logs were in poor condition (Photo #3) though they are no longer used. No obstructions were observed. The outfall structures and culverts to the discharge canal were in satisfactory condition and had no observed damage (Photo #6). Flow was observed due to precipitation prior to and during the inspection.

2. Are there signs of slope distress or seepage on the slope between the inlet and outlet structures or turbidity in the outflow? Yes No X

The exterior slopes of the perimeter embankment between the discharge structure and the discharge canal were in satisfactory condition with no apparent indicators of slope movements (e.g., sinkholes or cracks) (Photo #5). Flow was observed due to precipitation prior to and during the inspection, but it was clear (Photo #6).

3. Is the weir at the exit of the discharge canal in working condition? If 'No', describe any issues. Yes X No

The weir (Photo #7) and the silt curtain and discharge canal upstream of the weir (Photo #8) were in satisfactory condition. Significant vegetation was observed in the discharge canal. However, water was observed flowing over the weir outlet during the inspection due to precipitation prior to and during the inspection.

VI. Slurry Piping

1. Were there any breaks or leaks in the sluice lines along the embankment? If 'Yes' describe the line #, location, severity, etc. Yes No X

Sluicing operations at the Fly Ash Basin have stopped, so the lines were not flowing at the time of the inspection. Portions of the sluice lines have been removed.

VII. Repairs, Maintenance, Action Items

2. Has this inspection identified any need for repair or maintenance? If 'Yes', describe and state the urgency of maintenance. "Urgent" for maintenance that should be conducted as soon as possible, "Moderate" for maintenance that should be conducted within approximately two years, and "Not Urgent" for maintenance that should be conducted within approximately five years. Yes X No

Moderate - Repair the SmartDitches and outlets or replace with an alternative stormwater feature. Replace eroded riprap and damaged geotextile fabric.

Geosyntec is currently formulating recommendations for corrective actions to address necessary repairs.

Moderate - Repair the sloughing observed near Station 65+00. **DTE and Geosyntec have identified the necessary repair, and will implement in Spring 2026**.

Not Urgent - Continue to monitor repairs and vegetation on the exterior slopes near Station 12+00. **DTE and Geosyntec are currently monitoring.**

Not Urgent - The exposed HDPE pipe near Station 67+00 should be covered with aggregate and the area should continue to be monitored for additional erosion.

Not Urgent - Apply approved chemical sprays and remove small, woody vegetation from the upslope side of the SmartDitch and within the riprap downchutes.

Not Urgent - Fill in the low spots along the perimeter road atop the perimeter embankment with aggregate to ensure proper stormwater drainage.

Not Urgent - Remove the cut vegetation from the SmartDitch outlets.

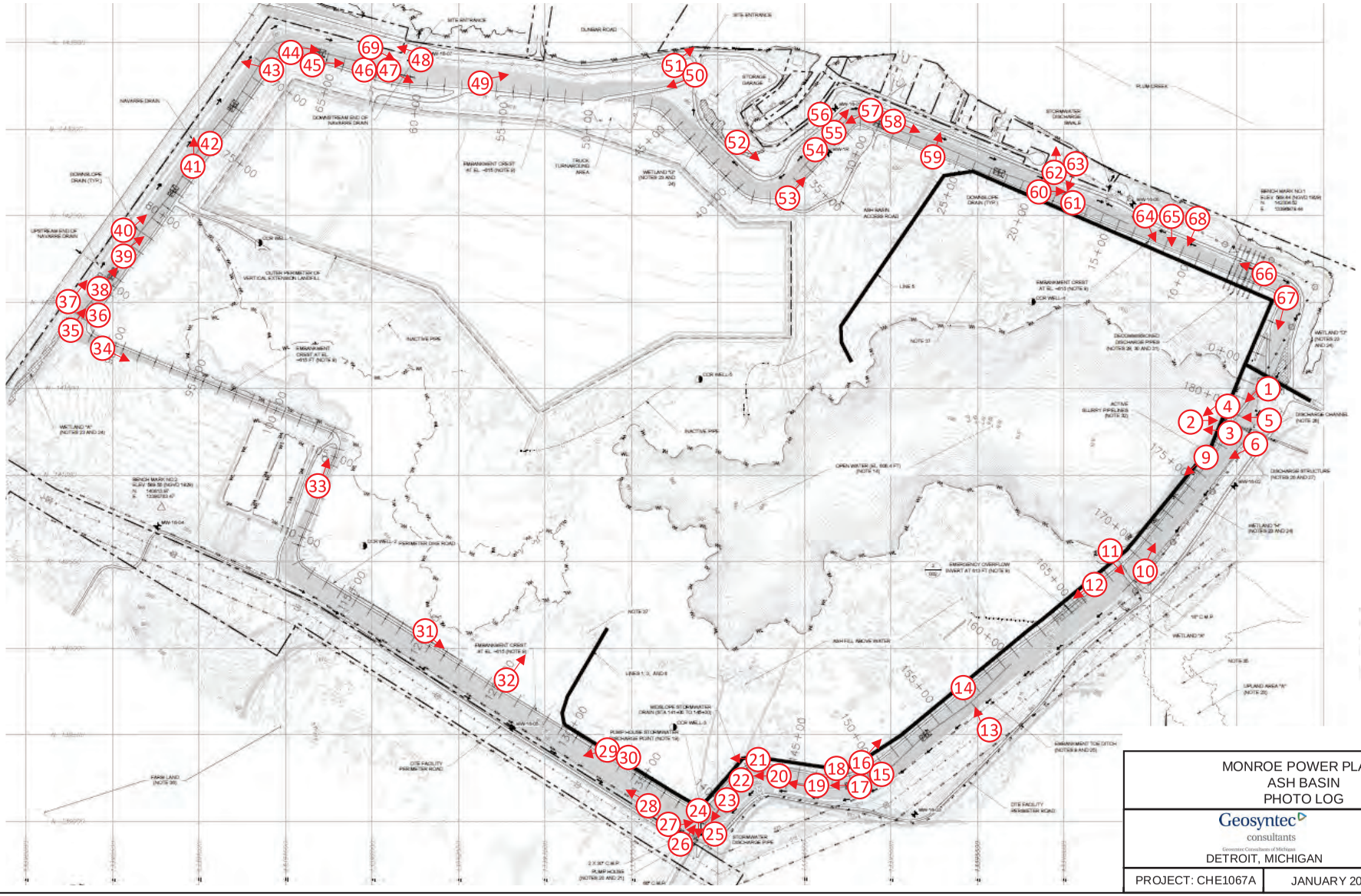
Not Urgent - The erosion rill observed near Station 33+00, downslope of the SmartDitch, should be filled in with suitable material to prevent further erosion.

Not Urgent - Repair the observation port of the covered HDPE slotted pipe near Station 145+00.

VIII. Photography

Photographs can be taken of notable features. List of photographs:

	Location	Direction of Photo	Description
1	SEE ATTACHED PHOTO LOG.		
2			
3			
4			
5			
6			
7			
8			
9			
10			



MONROE POWER PLANT
ASH BASIN
PHOTO LOG

Geosyntec consultants
DETROIT, MICHIGAN

FIGURE
B1

PROJECT: CHE1067A

JANUARY 2026

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 1 **Date:** 5/6/2025 **Direction:** Southwest **Comments:** The access roads near Station 0+00 were in good condition with minimal erosion rills and rutting observed.	
Photograph 2 **Date:** 5/6/2025 **Direction:** East **Comments:** No structural damage was observed in the concrete or discharge pipes. No obstructions were observed in the discharge pipes. Sluicing operations at the Fly Ash Basin have stopped, but some water was flowing over the discharge structure and into the pipes during the inspection due to precipitation prior to and during the inspection.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 3 **Date:** 5/6/2025 **Direction:** West **Comments:** The gates of the discharge structure were in satisfactory condition with no significant damage or obstructions observed. The stop logs were in poor condition and in the raised position.	
Photograph 4 **Date:** 5/6/2025 **Direction:** Southwest **Comments:** Sluicing operations at the Fly Ash Basin have stopped, but the water level within the Fly Ash Basin was approximately 608 feet at the time of the inspection due to precipitation prior to and during the inspection.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 5 **Date:** 5/6/2025 **Direction:** West **Comments:** The exterior slopes of the perimeter embankment between the discharge structure and the discharge canal were in good condition. No indicators of slope movements (e.g., cracks or sinkholes) were apparent.	
Photograph 6 **Date:** 5/6/2025 **Direction:** Southwest **Comments:** Some outflow from the discharge box structures was observed during the inspection because of precipitation prior to and during the inspection. The outfall structures and culverts to the discharge canal were in satisfactory condition with no obstructions observed. The outflow is typically minimal because sluicing operations have stopped at the Fly Ash Basin.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 7 **Date:** 5/6/2025 **Direction:** Southeast **Comments:** The weir outlet for the discharge canal was in satisfactory condition. Flow was observed during the inspection because of precipitation prior to and during the inspection. The weir typically has minimal discharge because sluicing operations have stopped at the Fly Ash Basin.	
Photograph 8 **Date:** 5/6/2025 **Direction:** Southwest **Comments:** The silt curtain upstream of the weir and the discharge canal was in satisfactory condition. Significant vegetation was observed within the canal. Sluicing operations have stopped at the Fly Ash Basin, so there is minimal flow within the canal that did not appear to be impeded by the vegetation.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 9 **Date:** 5/6/2025 **Direction:** Southwest **Comments:** Perimeter road atop the perimeter embankment was generally in good condition with no erosion or rutting and minimal low spots observed (typical conditions shown).	
Photograph 10 **Date:** 5/6/2025 **Direction:** North **Comments:** Exterior slopes of the perimeter embankment on the east side (Stations 160+50 to 179+00) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 11

Date: 5/6/2025

Direction: Southeast

Comments: East access road to the perimeter road atop the perimeter embankment was in good condition with no erosion rills or rutting observed.

Photograph 12

Date: 5/6/2025

Direction: Southwest

Comments: Perimeter road atop the perimeter embankment was generally in good condition with no erosion and minimal rutting observed (typical conditions shown). The low point near Station 165+00 (circled) for emergency overflow was in good condition.

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 13 **Date:** 5/6/2025 **Direction:** Northwest **Comments:** The riprap downchutes used to convey water from the SmartDitch® to the perimeter swales were generally in satisfactory condition (typical conditions shown). Some vegetation and minor erosion were observed in many downchutes and did not appear to affect the functionality of the downchutes.	
Photograph 14 **Date:** 5/6/2025 **Direction:** -- **Comments:** Approximately 0.5 feet of riprap has eroded from below the SmartDitch outlet at Station 157+00. The erosion has exposed the geotextile and caused minor tears. Significant cut vegetation was observed within the outlet but did not appear to impede conveyance of stormwater flow into the riprap.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 15

Date: 5/6/2025

Direction: --

Comments:
Approximately 1 foot of riprap has eroded from below the SmartDitch outlet at Station 151+00. The outlet has been distorted due to settlements, which has also exposed the geotextile upslope of the SmartDitch.

Photograph 16

Date: 5/6/2025

Direction: Northeast

Comments: Exterior slopes of the perimeter embankment on the east side (Stations 149+00 to160+50) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained. The SmartDitch was in fair condition: some cut vegetation, erosion around the edges, and settlement.

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 17 **Date:** 5/6/2025 **Direction:** West **Comments:** The covered high-density polyethylene (HDPE) drainpipes connecting sections of the SmartDitch were generally in good condition. Minimal erosion was observed in the aggregate for the vehicle crossing. (typical conditions shown). Many of the drainpipes had minimal sediments and cut vegetation near the outlets.	
Photograph 18 **Date:** 5/6/2025 **Direction:** -- **Comments:** The covered HDPE drainpipes connecting sections of the SmartDitch near Stations 149+00 (shown in picture), 30+00, and 22+50 had some sediments or cut vegetation within the pipes. However, the sediments and cut vegetation were not observed to impede conveyance of stormwater through the pipes.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 19 **Date:** 5/6/2025 **Direction:** West **Comments:** Exterior slopes of the perimeter embankment on the southeast side (Stations 143+50 to 149+00) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained. The SmartDitch was in fair condition: some cut vegetation, erosion around the edges, and settlement.	
Photograph 20 **Date:** 5/6/2025 **Direction:** West **Comments:** More than 1 foot of riprap has eroded from below the SmartDitch outlet at Station 145+50. The outlet has been distorted due to settlements. The geotextile below the outlet of the SmartDitch has been exposed.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 21 **Date:** 5/6/2025 **Direction:** West **Comments:** The aggregate covering the HDPE drainpipe along the southeast corner has eroded and exposed the geotextile.	
Photograph 22 **Date:** 5/6/2025 **Direction:** -- **Comments:** One of the observation ports for the HDPE drainpipe covered by the aggregate along the southeast corner was damaged and separated from the drainpipe.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 23 **Date:** 5/6/2025 **Direction:** Southwest **Comments:** Exterior slopes of the perimeter embankment on the southeast side (Stations 139+50 to 143+50) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained. The SmartDitch was in fair condition: some cut vegetation, erosion around the edges, and settlement.	
Photograph 24 **Date:** 5/6/2025 **Direction:** South **Comments:** Denser vegetation including some woody vegetation was observed within the riprap downchute at Station 139+50. Some erosion was also observed in the riprap. However, the vegetation and erosion did not appear to impede the ability of the downchute to convey stormwater to the perimeter channel.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 25

Date: 5/6/2025

Direction: --

Comments: More than 1 foot of riprap has eroded from below the SmartDitch outlet at Station 145+50. The outlet has been distorted due to settlements. Significant cut vegetation was observed within the outlet but did not appear to impede conveyance of stormwater flow into the riprap.

Photograph 26

Date: 5/6/2025

Direction: Northeast

Comments: Water from the perimeter channel is no longer being redirected into the Fly Ash Basin. It is now directed from the pump house to a discharge point located south of the Fly Ash Basin. The modifications made to the pump house piping and the access road at the southeast corner were in good condition.

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 27 **Date:** 5/6/2025 **Direction:** East **Comments:** The manhole constructed to reroute stormwater at the southeast corner of the Fly Ash Basin was in good condition. This manhole is connected to the new discharge point located south of the Fly Ash Basin.	
Photograph 28 **Date:** 5/6/2025 **Direction:** Northwest **Comments:** Exterior slopes of the perimeter embankment on the southeast side (Stations 112+00 to 139+50) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 29 **Date:** 5/6/2025 **Direction:** Southwest **Comments:** The exteriors of the instrumentation monitoring equipment including the slope inclinometer casings, equipment boxes, solar panels, and antennae were in good condition (typical conditions shown).	
Photograph 30 **Date:** 5/6/2025 **Direction:** -- **Comments:** The interiors of the instrumentation monitoring equipment including the equipment boxes and wiring were in satisfactory condition (typical conditions shown). The desiccant canisters were replaced within the past year. The seals of the equipment boxes have some damage.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 31 **Date:** 5/6/2025 **Direction:** Northeast **Comments:** Perimeter road atop the perimeter embankment on the south side near Station 120+00 had a couple low spots. Puddles were observed in these low spots due to precipitation prior to and during the inspection.	
Photograph 32 **Date:** 5/6/2025 **Direction:** Northeast **Comments:** Sluicing to the Fly Ash Basin has stopped and the lines on the south side have been partially removed. The south side of the Fly Ash Basin was graded and instrumented for a dewatering pilot study.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 33 **Date:** 5/6/2025 **Direction:** North **Comments:** The asphalt access road to the top of the perimeter embankment by the south entrance was in good condition. The stormwater drainage channel and check dams were in satisfactory condition. Exterior slopes of the perimeter embankment (Stations 104+50 to 112+00) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained.	
Photograph 34 **Date:** 5/6/2025 **Direction:** Southeast **Comments:** Exterior slopes of the perimeter embankment on the southwest side (Stations 88+50 to 104+50) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained. The asphalt access road was in good condition with no cracks observed.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 35 **Date:** 5/6/2025 **Direction:** Northeast **Comments:** Exterior slopes of the perimeter embankment on the west side (Stations 68+50 to 88+50) were generally in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained. The SmartDitch was in fair condition: some cut vegetation, erosion around the edges, and settlement.	
Photograph 36 **Date:** 5/6/2025 **Direction:** -- **Comments:** Approximately 0.5 feet of riprap has eroded from below the SmartDitch outlet at Station 88+00. The outlet has been distorted due to settlements. Significant cut vegetation was observed within the outlet but did not appear to impede conveyance of stormwater flow into the riprap.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 37 **Date:** 5/6/2025 **Direction:** Northeast **Comments:** The geotextile has been exposed at the exterior toe of the perimeter embankment on the west side. No tears were observed in the geotextile.	
Photograph 38 **Date:** 5/6/2025 **Direction:** Northeast **Comments:** Portions of the SmartDitch on the west side of the perimeter embankment were damaged by a fire in March 2023. Some embankment materials have eroded into the SmartDitch near Station 86+00. However, the damage did not appear to affect the overall functionality of the SmartDitch.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 39 **Date:** 5/6/2025 **Direction:** Northeast **Comments:** Previous sand-bentonite repairs to the perimeter embankment near Station 83+00 were still in satisfactory condition. There were some bare areas near this location that may have been caused by the fire in March 2023.	
Photograph 40 **Date:** 5/6/2025 **Direction:** Northeast **Comments:** More than 1 foot of riprap has eroded from below the SmartDitch outlet at Station 82+00. The outlet has been distorted due to settlements.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 41 **Date:** 5/6/2025 **Direction:** North **Comments:** Small, woody vegetation was observed on the upslope side of the SmartDitch on the west side near Station 76+50.	

Photograph 42 **Date:** 5/6/2025 **Direction:** -- **Comments:** Approximately 1 foot of riprap has eroded from below the SmartDitch outlet at Station 76+00. The outlet has been distorted due to settlements. Significant cut vegetation was observed within the outlet but did not appear to impede conveyance of stormwater flow into the riprap.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 43 **Date:** 5/6/2025 **Direction:** Northwest **Comments:** Small, woody vegetation was observed in the riprap downchute at Station 70+00. Approximately 0.5 feet of riprap has eroded from below the SmartDitch outlet. Significant cut vegetation was observed within the outlet but did not appear to impede conveyance of stormwater flow into the riprap.	
Photograph 44 **Date:** 5/6/2025 **Direction:** East **Comments:** The aggregate along the previous slope repair between Stations 67+00 and 68+00 has migrated from the upper portion of the embankment to the bottom and exposed portions of the covered HDPE drainpipe. No bare areas were observed along the upper portion of the embankment.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 45 **Date:** 5/6/2025 **Direction:** East **Comments:** Exterior slopes of the perimeter embankment on the northwest side (Stations 61+00 to 67+00) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained. The SmartDitch was in fair condition: some cut vegetation, erosion around the edges, and settlement.	
Photograph 46 **Date:** 5/6/2025 **Direction:** -- **Comments:** Approximately 0.5 feet of riprap has eroded from below the SmartDitch outlet at Station 64+00. Significant cut vegetation was observed within the outlet but did not appear to impede conveyance of stormwater flow into the riprap.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 47 **Date:** 5/6/2025 **Direction:** Southeast **Comments:** Small, woody vegetation was observed on the upslope side of the SmartDitch on the north side near Station 62+00.	
Photograph 48 **Date:** 5/6/2025 **Direction:** Northwest **Comments:** The perimeter channels were generally in satisfactory condition (north side near Station 62+00 shown in photograph). Water was observed within the perimeter channels with minimal flow. The denser vegetation on the sides of the perimeter channels did not appear to impede the flow of water through the channels.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 49 **Date:** 5/6/2025 **Direction:** East **Comments:** Exterior slopes of the perimeter embankment on the north side (Stations 46+50 to 61+00) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained.	
Photograph 50 **Date:** 5/6/2025 **Direction:** Southwest **Comments:** North access road to the perimeter road atop the perimeter embankment was in good condition with no erosion rills and minimal rutting observed.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 51 **Date:** 5/6/2025 **Direction:** Northeast **Comments:** The security gates at the north (shown in photograph) and south entrances were in good condition and locked. Signs were posted for DTE private property. The perimeter fences around the Fly Ash Basin were also generally in satisfactory condition and had proper signage.	
Photograph 52 **Date:** 5/6/2025 **Direction:** East **Comments:** Exterior slopes of the perimeter embankment by the north entrance (Stations 35+50 to 46+50) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 53 **Date:** 5/6/2025 **Direction:** Northeast **Comments:** Perimeter road atop the perimeter embankment on the north side (Stations 20+00 to 38+00) had a couple low spots. Ponded water was observed in these low spots due to precipitation prior to and during the inspection.	
Photograph 54 **Date:** 5/6/2025 **Direction:** -- **Comments:** A small erosion rill was observed on the downslope side of the SmartDitch near Station 33+00. The erosion did not appear to have caused the SmartDitch to settle.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 55

Date: 5/6/2025

Direction: Northeast

Comments: More than 1 foot of riprap has eroded from below the SmartDitch outlet at Station 32+50. The outlet has been distorted due to settlements. Significant cut vegetation was observed within the outlet but did not appear to impede conveyance of stormwater flow into the riprap.

Photograph 56

Date: 5/6/2025

Direction: --

Comments: More than 1 foot of riprap has eroded from below the SmartDitch outlet at Station 32+50. The geotextile below the SmartDitch has been exposed and torn due to the erosion and settlements.

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 57 **Date:** 5/6/2025 **Direction:** Southwest **Comments:** Exterior slopes of the perimeter embankment on the north side (Stations 31+50 to 35+50) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained. The SmartDitch was in fair condition: some cut vegetation, erosion around the edges, and settlement.	
Photograph 58 **Date:** 5/6/2025 **Direction:** East **Comments:** Exterior slopes of the perimeter embankment on the northeast side (Stations 14+00 to 31+50) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained. The SmartDitch was in fair condition: some cut vegetation, erosion around the edges, and settlement.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 59 **Date:** 5/6/2025 **Direction:** North **Comments:** Denser vegetation was observed in the riprap downchute at Station 26+50. However, only minor erosion was observed in the riprap. Significant cut vegetation was observed within the outlet but did not appear to impede conveyance of stormwater flow into the riprap.	
Photograph 60 **Date:** 5/6/2025 **Direction:** East **Comments:** More than 1 foot of riprap has eroded from below the SmartDitch outlet at Station 18+50. The outlet has been distorted due to settlements. Significant cut vegetation was observed within the outlet but did not appear to impede conveyance of stormwater flow into the riprap.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 61 **Date:** 5/6/2025 **Direction:** -- **Comments:** Water has eroded a hole below the SmartDitch outlet at Station 18+50. The geotextile fabric below the SmartDitch has been exposed (right side of photo) and torn due to the erosion and settlement. Water was observed flowing into the hole at the time of the inspection.	
Photograph 62 **Date:** 5/6/2025 **Direction:** North **Comments:** Denser vegetation was observed in the riprap downchute at Station 18+50. Erosion of the riprap was observed on the left side of the downchute (facing downslope) downslope of the hole below the SmartDitch outlet.	

DTE Electric Company
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 63

Date: 5/6/2025

Direction: South

Comments: Finer sediments were observed within the riprap downchute (circled) downslope of the hole below the SmartDitch outlet at Station 18+50.

Photograph 64

Date: 5/6/2025

Direction: Southeast

Comments: Sloughing was observed on the exterior slopes of the perimeter embankment near Station 12+00. Recurrent sloughing has been noted at this location due to the 2H:1V slope and caused "bunching" of materials at the toe of the embankment. DTE has completed additional repairs in this area (Photograph #68).

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 65	
Date: 5/6/2025	
Direction: South	
Comments: Repairs were made to the areas of sloughing using a sand-bentonite mix in September/October 2024. Erosion controls have been placed upslope of the repairs; however, areas of erosion were observed within the repairs. DTE has completed additional repairs in this area (Photograph #68).	

Photograph 66	
Date: 5/6/2025	
Direction: West	
Comments: Exterior slopes of the perimeter embankment on the northeast side (Stations 5+00 to 14+00) were generally in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed (except near Station 12+00). Vegetation was well maintained.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 67 **Date:** 5/6/2025 **Direction:** South **Comments:** Exterior slopes of the perimeter embankment on the northeast side (Stations 0+00 to 5+00) were in good condition. No indicators of slope instabilities (e.g., cracks) or erosion were observed. Vegetation was well maintained.	
Photograph 68 **Date:** 9/29/2025 **Direction:** Southeast **Comments:** Additional repairs using clay materials from the on-site stockpile were made to the sloughing near Station 12+00 in June 2025. Erosion controls have been placed on and upslope of the repairs. Vegetation has started to grow within the repairs but has not become fully established.	

DTE ELECTRIC COMPANY
Photographic Record

Client: DTE Electric Company | **Project Number:** CHE1067A

Site Name: Monroe Power Plant
Fly Ash Basin | **Site Location:** Monroe, MI

Photograph 69

Date: 8/9/2025

Direction: East

Comments: The exterior slopes of the perimeter embankment near Station 65+00 showed some sloughing of previous sand-bentonite repairs. This was originally identified by DTE personnel on August 8, 2025. Geosyntec inspected the area and determined that the extent of the sloughing was approximately 100 feet.