

DTE Energy Monroe Power Plant

Bottom Ash Impoundment CCR Rule Compliance Project

Annual Inspection Report - 2023

Project Number: 60715100

September 1, 2023

Prepared by:

AECOM

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- A. 2023 Annual Inspection Report

1. Introduction

1.1 Introduction

The 2023 Annual Inspection Report (AIR) was prepared by AECOM for the DTE Electric Company (DTE) to summarize the results of the annual inspection of the Monroe Power Plant Bottom Ash Impoundment. This annual inspection complies with the United States Environmental Protection Agency Coal Combustion Residuals Rule (40 CFR 257.83). Under the CCR Rule, the Bottom Ash Impoundment is an "existing surface impoundment" and must be inspected by a qualified professional engineer on a periodic basis, not to exceed one year.

1.2 Background Information

The Bottom Ash Impoundment area was constructed in the late 1960's by building a perimeter dike to surround a low area of the adjacent Lake Erie; the area south of the plant was removed from the Waters of the United States by an Act of Congress prior to plant construction. CCR materials had been placed and allowed to drain into the pond from the north end of the pond; these materials formed a delta that extended about 1/3 of the way into the pond before cessation of CCR placement occurred. Wastewater flow into the pond ceased on October 21, 2020.

Closure Construction for the impoundment began in May 2021 and continues; approx. 85% of the residuals by volume have been removed as of August 2023.

1.3 Personnel

The annual inspection was performed by Mr. Scott G. Hutsell, P.E., with assistance from DTE personnel. Weekly inspections have been and continue to be performed by DTE's plant personnel.

2. Annual Inspection Results

2.1 2022/2023 Inspections

DTE performed the following visual inspections in 2023:

- The annual inspection on August 14, 2023 (provided in Appendix A)
- Weekly inspections during 2022 and 2023

Prior to the physical inspection on August 14th, AECOM reviewed the updated available information about the condition of the Bottom Ash Impoundment

The annual and weekly inspections included the embankment crest, exterior slopes of the embankment, discharge structures, and discrete observations of the interior of the basins based on accessibility. In addition to the annual and weekly inspections, the general condition of the site and embankment was visually inspected by DTE on a daily basis.

No sign of vegetative distress or structural issues were observed during the annual inspection on the embankment crest, exterior slopes of the embankment and discharge structure. These structures appeared to be in good condition. No changes to the exterior geometry of the impoundment have occurred since the last inspection, however closure construction continues as described below. Instrumentation related to geotechnical monitoring of the impoundment slopes is not present at the impoundment.

The water elevation of the pond is approximately ~574.5 MSL as noted in the inspection report in Appendix A. Water depth ranges from zero along the northern shore to 3 feet along the eastern and southern perimeter and up to 25 feet in depth near the weir. The storage capacity of the impoundment has been estimated to be 15.8M cubic feet ("CCR Impoundment Inflow Design Flood Control System Plan: Bottom Ash Impoundment, Monroe Power Plant", AECOM revised August 30, 2021). CCR materials have not been placed in the impoundment since 2015.

Closure construction in the Bottom Ash Impoundment commenced in March 2021. As of August 14, 2023, approximately 85% of the volume of CCR residuals in the pond has been removed through wet excavation and transported off-site. The northern third of the impoundment has been regraded to accommodate the construction contractor's equipment, access roads, settling basins, and a geotube field.

Noteworthy observations are listed below; these conditions do not represent an immediate concern for the safe operation or stability of the Bottom Ash Impoundment and will be addressed through the closure of the Bottom Ash Impoundment.

- The northern/upstream face side of the separation berm is showing signs of sloughing; especially on the western edge for a length of 100-150' where plastic bollards have been impacted. Repair of this upstream section will occur either with completion of the closure project or immediately after – the sloughing is not an immediate threat (a width of over 20+ feet of the separation berm still exists and DTE has limited vehicle traffic over the berm)

- The downslope sides of portions of the Impoundment (especially the western side) are heavily vegetated and/or below the water surface. A thorough inspection of the entire surface perimeter of the impoundment is not practical.

3. Maintenance Activities in 2023

3.1 Maintenance Activities

Site access roads have been repaired/improved as part of the ongoing closure construction.

4. Conclusion and Certification

4.1 Conclusion

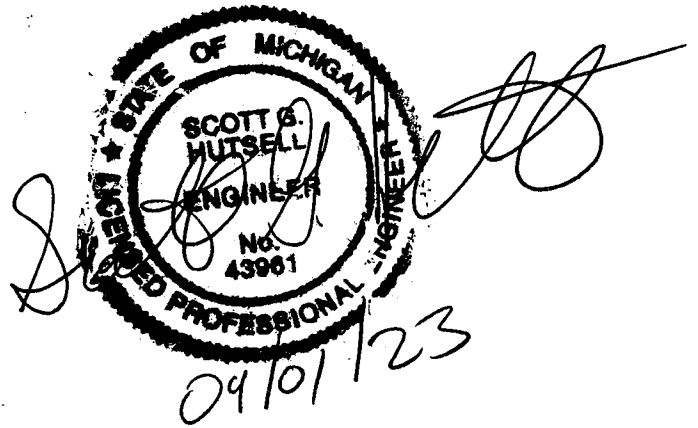
The annual inspection did not identify any evidence of structural weakness or instability in the Bottom Ash Impoundment at DTE's Monroe Power Plant. Observations included continued inspections of the perimeter of the impoundment as well as a review of closure construction that began in March 2021.

Based on the annual inspection results and review of available data (including design documents and weekly inspection documentation) the Bottom Ash Impoundment was designed and constructed with generally accepted good engineering standards. Additionally, the Bottom Ash Impoundment is operated and maintained using generally accepted good engineering practice.

4.2 Certification

Certified by:

Scott G. Hutsell, P.E. Michigan License #43961
Senior Project Manager



CCR Impoundment Inspection Report

Station/Owner Monroe Bottom Ash Impoundment / DTE Energy	County Monroe	State Michigan
Inspected By Scott G. Hutsell, P.E.	Date 08/14/23	Phone No. 517-505-1301
Type of Impoundment: <input type="checkbox"/> Concrete Gravity <input checked="" type="checkbox"/> Embankment <input type="checkbox"/> Concrete Arch <input type="checkbox"/> Stone Masonry <input type="checkbox"/> Concrete Buttress <input type="checkbox"/> Other	Type of Inspection <input type="checkbox"/> Initial <input checked="" type="checkbox"/> Periodic <input type="checkbox"/> Follow up <input type="checkbox"/> Other	Weather <input type="checkbox"/> Wet <input checked="" type="checkbox"/> Dry <input type="checkbox"/> Snow Cover <input type="checkbox"/> Other
Hazard Description The Bottom Ash Impoundment is a CCR surface impoundment; prior to closure the northern half is deposited sluiced ash while the southern half contains from 3 to 25 ft of water surrounded by embankments/berms.	Condition Assessment <input checked="" type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory <input type="checkbox"/> Poor <input type="checkbox"/> Not rated <input type="checkbox"/> Fair	
Remarks: Closure Construction for the impoundment continues; approx. 85% of the residuals by volume have been removed.	Actions <input type="checkbox"/> None <input checked="" type="checkbox"/> Maintenance <input checked="" type="checkbox"/> Monitoring <input checked="" type="checkbox"/> Minor Repair <input type="checkbox"/> Engineering	Recommendations <input checked="" type="checkbox"/> Inspection letter <input type="checkbox"/> <input type="checkbox"/> Deficiency letter <input type="checkbox"/> <input type="checkbox"/> EOR notice <input type="checkbox"/> <input type="checkbox"/> Engineering study <input type="checkbox"/> Inspection by EOR <input type="checkbox"/> Other reinspection
Pool Level (ft) ~574.5 ft MSL	Total Precipitation since last inspection n/a	

	Problems				COVER:
UPSTREAM SLOPE/FACE	<input type="checkbox"/> 1. None <input checked="" type="checkbox"/> 2. Vegetation >2" dia. <input checked="" type="checkbox"/> 3. Veg. height >6" <input checked="" type="checkbox"/> 4. High bushes <input type="checkbox"/> 5. Animal Burrows <input type="checkbox"/> 6. Livestock damage	<input type="checkbox"/> 7. Wave Erosion <input type="checkbox"/> 8. Slides <input type="checkbox"/> 9. Depressions <input type="checkbox"/> 10. Bulges <input type="checkbox"/> 11. Cracks <input type="checkbox"/> 12. Spalling	<input type="checkbox"/> 13. Scarps <input checked="" type="checkbox"/> 14. Sloughing <input type="checkbox"/> 15. Holes <input type="checkbox"/> 16. Undermining <input type="checkbox"/> 17. Displaced joints <input type="checkbox"/> 18. Deteriorated joints	<input type="checkbox"/> 19. Exposed reinforcement <input type="checkbox"/> 20. Veg. or sediment in rip rap <input type="checkbox"/> 21. Displaced rip rap <input type="checkbox"/> 22. Sparse rip rap <input type="checkbox"/> 23. Other Erosion <input type="checkbox"/> 24. Other	<input type="checkbox"/> Vegetation <input checked="" type="checkbox"/> Rip rap <input type="checkbox"/> Concrete <input type="checkbox"/> Asphalt <input type="checkbox"/> Other
	Comments /Action Items <p>The embankments surrounding the Bottom Ash Impoundment are typically 20' wide at the crest – while the access road is made up of crushed rock and rip-rap. The interior sideslopes, especially on the western side of the pond are heavily vegetated. The southern embankment is a rip-rap separation berm built in 2015 – this berm was upgraded in 2021 to raise the elevation 1' to 1.5 feet across the length of the berm.</p> <p>The northern/upstream face side of the separation berm is showing signs of sloughing; especially on the western edge for a length of 100-150' where plastic bollards have been impacted. Repair of this upstream section will occur either with completion of the closure project or immediately after – the sloughing is not an immediate threat (a width of over 20+ feet of the separation berm still exists and DTE has limited vehicle traffic over the berm)</p>				
	Actions <input type="checkbox"/> None <input checked="" type="checkbox"/> Maintenance <input checked="" type="checkbox"/> Monitoring <input checked="" type="checkbox"/> Minor Repair <input type="checkbox"/> Engineering				

CCR Impoundment Inspection Report

TOP OF DAM/CREST	PROBLEMS				COVER:
	<input type="checkbox"/> 1. None <input type="checkbox"/> 2. Vegetation >2" dia. <input checked="" type="checkbox"/> 3. Veg. height >6" <input checked="" type="checkbox"/> 4. High bushes <input type="checkbox"/> 5. Animal Burrows <input type="checkbox"/> 6. Livestock damage	<input type="checkbox"/> 7. Ruts <input type="checkbox"/> 8. Depressions <input type="checkbox"/> 9. Unlevel <input type="checkbox"/> 10. Misalignment <input type="checkbox"/> 11. Signs of overtopping	<input type="checkbox"/> 12. Cracks <input type="checkbox"/> 13. Deteriorated joints <input type="checkbox"/> 14. Displaced joints <input type="checkbox"/> 15. Exposed reinforcement <input type="checkbox"/> 16. Settlement	<input type="checkbox"/> 17. Scarps <input type="checkbox"/> 18. Spalling <input type="checkbox"/> 19. Sinkholes <input type="checkbox"/> 20. Puddles <input type="checkbox"/> 21. Other	<input checked="" type="checkbox"/> Vegetation <input checked="" type="checkbox"/> Rip rap <input type="checkbox"/> Concrete <input type="checkbox"/> Asphalt <input type="checkbox"/> Other
	Comments /Action Items <p>The embankments surrounding the Bottom Ash Impoundment are typically 20' wide at the crest; the access road is made up of crushed rock and rip-rap. The southern embankment is a rip-rap separation berm built in 2015 and upgraded in 2020 and 2021.</p>				
Actions <input checked="" type="checkbox"/> None <input type="checkbox"/> Maintenance <input type="checkbox"/> Monitoring <input type="checkbox"/> Minor Repair <input type="checkbox"/> Engineering					
D O	PROBLEMS				COVER:

CCR Impoundment Inspection Report

TOE CONTACT	<input type="checkbox"/> 1. None <input checked="" type="checkbox"/> 2. Vegetation >2" dia.\ <input checked="" type="checkbox"/> 3. Veg. height >6" <input checked="" type="checkbox"/> 4. High bushes <input type="checkbox"/> 5. Poor grass cover <input type="checkbox"/> 6. Animal Burrows <input type="checkbox"/> 7. Livestock damage	<input type="checkbox"/> 8. Wetness <input type="checkbox"/> 9. Seepage <input type="checkbox"/> 10. Boils <input type="checkbox"/> 11. Puddles <input type="checkbox"/> 12. Erosion <input type="checkbox"/> 13. Slope instability <input type="checkbox"/> 14. Scarps	<input checked="" type="checkbox"/> 15. Sloughs/bulges <input type="checkbox"/> 16. Depressions <input type="checkbox"/> 17. Undercutting <input type="checkbox"/> 18. Rutting/rills <input type="checkbox"/> 19. Cracks <input type="checkbox"/> 20. Scour <input type="checkbox"/> 21. Spalling	<input type="checkbox"/> 22. Displaced joints <input type="checkbox"/> 23. Deteriorated joints <input type="checkbox"/> 24. Exposed reinforcement <input checked="" type="checkbox"/> 25. Riprap needs attention <input checked="" type="checkbox"/> 26. Veg. or sediment in rip rap <input type="checkbox"/> 27. Other	<input checked="" type="checkbox"/> Vegetation <input type="checkbox"/> Rip rap <input type="checkbox"/> Concrete <input type="checkbox"/> Asphalt <input type="checkbox"/> Other
	28. Does standing water or seepage contain sediment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA				
	29. Is there natural hillside seepage in in embankment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA				
	Describe seepage with regard to quantity and clarity (turbidity). Note changes: None				
	Comments /Action Items Along the outside embankment large trees (1-2' in diameter) are visible. The southern embankment is a rip-rap separation berm built in 2015. Some minor sloughing apparent along western perimeter along the discharge canal – augmented w/ riprap in 2020 and suspect areas are currently being monitored by DTE personnel on a weekly basis.				
Actions <input type="checkbox"/> None <input type="checkbox"/> Maintenance <input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Minor Repair <input type="checkbox"/> Engineering					
TOE CONTACT	PROBLEMS				COVER:
	<input type="checkbox"/> 1. None <input checked="" type="checkbox"/> 2. Vegetation >2" dia. <input type="checkbox"/> 3. Veg. height >6" <input checked="" type="checkbox"/> 4. High bushes <input type="checkbox"/> 5. Poor grass cover <input type="checkbox"/> 6. Animal Burrows <input type="checkbox"/> 7. Livestock damage	<input type="checkbox"/> 8. Wetness <input type="checkbox"/> 9. Seepage <input type="checkbox"/> 10. Boils <input type="checkbox"/> 11. Puddles <input type="checkbox"/> 12. Erosion <input type="checkbox"/> 13. Slope instability <input type="checkbox"/> 14. Scarps	<input type="checkbox"/> 15. Sloughs/bulges <input type="checkbox"/> 16. Depressions <input type="checkbox"/> 17. Undercutting <input type="checkbox"/> 18. Rutting/rills <input type="checkbox"/> 19. Cracks <input type="checkbox"/> 20. Scour <input type="checkbox"/> 21. Spalling	<input type="checkbox"/> 22. Displaced joints <input type="checkbox"/> 23. Deteriorated joints <input type="checkbox"/> 24. Exposed reinforcement <input type="checkbox"/> 25. Riprap needs attention <input type="checkbox"/> 26. Veg. or sediment in rip rap <input type="checkbox"/> 27. Other	<input checked="" type="checkbox"/> Vegetation <input type="checkbox"/> Rip rap <input type="checkbox"/> Concrete <input type="checkbox"/> Asphalt <input type="checkbox"/> Other
	28. Does standing water or seepage contain sediment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA				
	Describe seepage with regard to quantity and clarity (turbidity). Note changes: None				
	Comments /Action Items Toe is inaccessible for direct inspection due to heavy construction activities along the northern boundaries. Toe is inaccessible along the western and eastern perimeter due to the water surface. The northern/upstream face side of the separation berm is showing signs of sloughing; especially on the western edge for a length of 100-150' where plastic ballards have been impacted. . Repair of this upstream section will occur either with completion of the closure project or immediately after – the sloughing is not an immediate threat (a width of over 20+ feet of the separation berm still exists and DTE has limited vehicle traffic over the berm)				
Actions <input type="checkbox"/> None <input checked="" type="checkbox"/> Maintenance <input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Minor Repair <input type="checkbox"/> Engineering					
ABUTMENT CONTACTS	PROBLEMS				COVER:
	<input type="checkbox"/> 1. None <input type="checkbox"/> 2. Vegetation >2" dia. <input type="checkbox"/> 3. Veg. height >6" <input type="checkbox"/> 4. High bushes <input type="checkbox"/> 5. Poor grass cover <input type="checkbox"/> 6. Animal Burrows <input type="checkbox"/> 7. Livestock damage	<input type="checkbox"/> 8. Wetness <input type="checkbox"/> 9. Seepage <input type="checkbox"/> 10. Boils <input type="checkbox"/> 11. Puddles <input type="checkbox"/> 12. Erosion <input type="checkbox"/> 13. Slope instability <input type="checkbox"/> 14. Scarps	<input type="checkbox"/> 15. Sloughs/bulges <input type="checkbox"/> 16. Depressions <input type="checkbox"/> 17. Undercutting <input type="checkbox"/> 18. Rutting/rills <input type="checkbox"/> 19. Cracks <input type="checkbox"/> 20. Scour <input type="checkbox"/> 21. Spalling	<input type="checkbox"/> 22. Displaced joints <input type="checkbox"/> 23. Deteriorated joints <input type="checkbox"/> 24. Exposed reinforcement <input type="checkbox"/> 25. Riprap needs attention <input type="checkbox"/> 26. Veg. or sediment in rip rap <input type="checkbox"/> 27. Other	<input type="checkbox"/> Vegetation <input type="checkbox"/> Rip rap <input type="checkbox"/> Concrete <input type="checkbox"/> Asphalt <input type="checkbox"/> Other

CCR Impoundment Inspection Report

	Comments /Action Items Not applicable				
	Actions <input checked="" type="checkbox"/> None <input type="checkbox"/> Maintenance <input type="checkbox"/> Monitoring <input type="checkbox"/> Minor Repair <input type="checkbox"/> Engineering				
PRINCIPAL SPILLWAY	OBSERVATIONS				
	<input type="checkbox"/> No Spillway				
	Is spillway control system operating properly?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	PROBLEMS				CHANNEL LINING
	<input type="checkbox"/> 1. None <input type="checkbox"/> 2. Trashguard <input checked="" type="checkbox"/> 3. Debris <input checked="" type="checkbox"/> 4. Obstructed <input type="checkbox"/> 5. Plugged/Clogged <input type="checkbox"/> 6. Gates Damaged <input type="checkbox"/> 7. Gates leaking <input type="checkbox"/> 8. Gates Rusted	<input type="checkbox"/> 9. Misalignment <input type="checkbox"/> 10. Joints leaking <input type="checkbox"/> 11. Joint deterioration <input type="checkbox"/> 12. Joint displacement <input type="checkbox"/> 13. Conduit collapsed <input type="checkbox"/> 14. Exposed reinforcement <input type="checkbox"/> 15. Erosion	<input type="checkbox"/> 16. Undermining <input type="checkbox"/> 17. Voids <input type="checkbox"/> 18. Cracks <input type="checkbox"/> 19. Holes <input type="checkbox"/> 20. Spalling <input type="checkbox"/> 21. Slides <input type="checkbox"/> 22. Outlet undercutting	<input type="checkbox"/> 23. Sloughing <input type="checkbox"/> 24. Scarps <input type="checkbox"/> 25. Deteriorated lining <input type="checkbox"/> 26. Boils <input type="checkbox"/> 27. Outlet erosion <input type="checkbox"/> 28. Displaced rip rap <input type="checkbox"/> 29. Sparse rip rap <input type="checkbox"/> 30. Other	<input checked="" type="checkbox"/> Vegetation <input type="checkbox"/> Rip rap <input type="checkbox"/> Concrete <input type="checkbox"/> Asphalt <input type="checkbox"/> Other
	Comments /Action Items Spillway appears to be in good repair – water levels in the pond and discharge canal are lower than in 2021. There are no control systems so the spillway acts as both principal and emergency. See Photo 1 of this report for debris and vegetative overgrowth of weir discharge.				
	Actions <input checked="" type="checkbox"/> None <input type="checkbox"/> Maintenance <input type="checkbox"/> Monitoring <input type="checkbox"/> Minor Repair <input type="checkbox"/> Engineering				
EMERGENCY SPILLWAY	OBSERVATIONS				
	<input type="checkbox"/> No emergency spillway			<input checked="" type="checkbox"/> Same as primary spillway	
	PROBLEMS				CHANNEL LINING
	<input type="checkbox"/> 1. None <input type="checkbox"/> 2. Debris in channel <input type="checkbox"/> 3. Gates <input type="checkbox"/> 4. Misalignment	<input type="checkbox"/> 5. Joint deterioration <input type="checkbox"/> 6. Joint displacement <input type="checkbox"/> 7. Exposed reinforcement <input type="checkbox"/> 8. Erosion	<input type="checkbox"/> 9. Undermining <input type="checkbox"/> 10. Voids <input type="checkbox"/> 11. Cracks <input type="checkbox"/> 12. Holes <input type="checkbox"/> 13. Outlet erosion	<input type="checkbox"/> 14. Displaced rip rap <input type="checkbox"/> 15. Sparse rip rap <input type="checkbox"/> 16. Outlet undercutting <input type="checkbox"/> 17. Inadequate capacity <input type="checkbox"/> 18. Other	<input type="checkbox"/> Vegetation <input type="checkbox"/> Rip rap <input type="checkbox"/> Concrete <input type="checkbox"/> Asphalt <input type="checkbox"/> Other
	Comments /Action Items See Principal Spillway Above				
		Actions <input checked="" type="checkbox"/> None <input type="checkbox"/> Maintenance <input type="checkbox"/> Monitoring <input type="checkbox"/> Minor Repair <input type="checkbox"/> Engineering			

CCR Impoundment Inspection Report

	Actions	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Monitoring	<input type="checkbox"/> Minor Repair	<input type="checkbox"/> Engineering	
DRAINS/OUTLET STRUCTURE	Observations						
	1. Is discharge system operating properly?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A			
	2. Valves and operators in good condition?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	3. Walkway in good condition?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A			
	4. Is there any turbidity observed at the outlet?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A			
	5. Seepage at pipe outlet	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	6. No Bottom Drain	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	7. Bottom Drain Operable	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	8. Subsurface Drain Dry	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	9. Subsurface drain muddy flow	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	10. Subsurface drain obstructed	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	11. Animal guard	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	12. other	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
Comments /Action Items With limited volume of outfall at this time the discharge canal side of the weir and outfall has become overgrown with vegetation and will need to be cut back when higher lake/impoundment levels occur							
	Actions	<input type="checkbox"/> None	<input checked="" type="checkbox"/> Maintenance	<input type="checkbox"/> Monitoring	<input type="checkbox"/> Minor Repair	<input type="checkbox"/> Engineering	
RESERVIOR/POOL	OBSERVATION						
	Has there been a sudden drop in the content level of the Impoundment					<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	PROBLEMS						
	<input checked="" type="checkbox"/> 1. None	<input type="checkbox"/> 2. Inadequate freeboard	<input type="checkbox"/> 3. Skimmer	<input type="checkbox"/> 4. Depressions	<input type="checkbox"/> 5. Whirlpools	<input type="checkbox"/> 6. Sinkholes	<input checked="" type="checkbox"/> 7. Unwanted growth in pond water
	Comments /Action Items Pool level has been relatively steady since observations were first begun by this inspector in late 2015; however, with the cessation of waste water inflow to the pond in October 2020 the water level has dropped 4.5" and stabilized. The surrounding waters (Lake Erie, Discharge Canal) were observed to be lower than documented in the 2022 inspection.						
	Actions	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Monitoring	<input type="checkbox"/> Minor Repair	<input type="checkbox"/> Engineering	
OTHER	OBSERVATIONS						
	1. leachate/stormwater (RCP; CMP) drain pipes that pass through or under an ash basin intact?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	2. Drainage/ diversion ditches/riprap-lined channels in good condition?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	3. Other steel structures/steel reinforcement in concrete structures in good condition?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	4. Other concrete structures in good condition?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	5. Overflow pipes and flap gates on filter dam/ drain pipe filter zone in good condition?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	6. Howell Bunger Valves in good condition?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	7. Weirs in good condition?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	8. Perimeter Fences and Gates in good condition?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A			
	9. Security devices in good condition	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	10. Signs in good condition	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	11. Instrumentation in good condition	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	12. Reference monuments/Survey Monuments in good condition	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
	13. other	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A			
Comments /Action Items							
	Actions	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Monitoring	<input type="checkbox"/> Minor Repair	<input type="checkbox"/> Engineering	

CCR Impoundment Inspection Report

Are there any other abnormal conditions at the Impoundment that could pose a risk to public health, safety or welfare; the environment or natural resources Yes No

Scott G. Hutsell

Inspector Signature _____

Date: 08/14/23 _____



Photo 1: Looking south at discharge weir; heavily vegetated at discharge as water levels continue to decrease along the discharge canal



Photo 2: Area of sloughing along discharge canal that was augmented by rip-rap placement in previous years. Slope looks stable; DTE personnel monitor suspect areas without rip-rap on a weekly basis



Photo 3: The south separation berm (looking southeast) – this northern slope has experienced significant sloughing due to construction activities; plastic bollards placed by DTE on both sides of the berm have been impacted on the northern edge.



Photo 4: Another view of the southern separation berm (looking west) showing the area affected by increased sloughing



Photo 5: Sloughing along separation berm – material appears to be at angle of repose below the water surface and stable.



Photo 6: Looking west from the eastern edge of the southern separation berm



Photo 7: Looking northwest from the south separation berm; dredging activities associated with impoundment closure continue.



Photo 8: Heavy rip-rap along the eastern shore of the perimeter dike facing Lake Erie. No changes are noted in this area.