OHIO VALLEY ELECTRIC CORPORATION
3932 U. S. Route 23
P. O. Box 468
Piketon, Ohio 45661
740-289-7200

WRITER'S DIRECT DIAL NO:
740-289-7259

February 1, 2025

Submitted Electronically

Ms. Anne Vogel
Director
Ohio Environmental Protection Agency
50 West Town Street, Suite 700
P.O. 1049
Columbus, OH 43216-1049

Re: Ohio Valley Electric Corporation
Kyger Creek Station
Notification of CCR Rule Information Posting
Annual Certified CCR Dam and Dike (Surface Impoundment)
Inspection Report Posting

Dear Ms. Vogel:

As required by 40 CFR 257.106(g), the Ohio Valley Electric Corporation (OVEC) is providing notification to the State Director of the Ohio Environmental Protection Agency that a qualified professional engineer has completed the Annual CCR Dam and Dike (Surface Impoundment) Inspection for the 2024 operating year in accordance with 40 CFR 257.83(b) for OVEC's Kyger Creek Station. The inspection report has been placed in the facility's operating record as well as on the company's publicly accessible internet site.

This information can be viewed on OVEC's publicly accessible internet site at: http://www.ovec.com/CCRCompliance.php

If you have any questions, or require any additional information, please call me at 740-289-7259.

Sincerely,

Jeremy Galloway
Environmental Specialist

JDG:zsh

2024 CCR Rule – Surface Impoundments
Kyger Creek Dam/Dike Inspections

Kyger Creek Generating Station
Cheshire, Ohio
Gallia County

January 19, 2025

Prepared for:

Ohio Valley Electric Corporation
Piketon, Ohio

Prepared by:

Stantec Consulting Services Inc.
Cincinnati, Ohio

Sign-off Sheet

This document entitled 2024 CCR Rule – Surface Impoundments, Kyger Creek Dam/Dike Inspections was prepared by Stantec Consulting Services Inc. (“Stantec”) for the account of Ohio Valley Electric Corporation (OVEC) (the “Client”). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule, and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use that a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by Casey Race

(signature)

Casey Race, E.I.T.

Reviewed by

(signature)

James R. Swindler Jr., P.E.

Reviewed by Jacqueline S. Harmon

(signature)

Jacqueline S. Harmon, P.E.

Table of Contents

LIST OF APPENDICES

1.0 OVERVIEW

Stantec Consulting Services Inc. (Stantec) performed an annual inspection of the existing coal combustion residuals (CCR) surface impoundments at the Kyger Creek Generating Station in Cheshire, Ohio on October 29, 2024.

This annual dam and dike inspection is intended to fulfill the requirements of 40 CFR 257.83(b) for the *Disposal of Coal Combustion Residuals from Electric Utilities* rule (CCR Rule) signed by the U.S. Environmental Protection Agency (EPA) Administrator on December 19, 2014, and published in the Federal Register on April 17, 2015.

This report provides an existing conditions assessment with observations, photographs, maintenance recommendations, and conclusions. The weather conditions at the time of inspection consisted of clear sunny skies with temperatures ranging from 65 to 75 (Fahrenheit). Based on regional records, up to 0.2 inches of precipitation fell within the week prior to the inspection.

Stantec's team that performed the fieldwork included:

- Jacqueline Harmon, P.E., Principal, Project Manager
  29 years of experience in geotechnical engineering, including pump stations, levees, and CCR storage facility design, closure, and operation.

- Jim Swindler, P.E., Senior Geotechnical Engineer
  19 years of experience in geotechnical engineering, including levees/dams, infrastructure, and CCR storage facility design, closure, and operation.

Fieldwork was coordinated with Paul Hutchins, Kyger Creek Station's landfill environmental manager and Dick Shouldis, Kyger Creek Station's Civil Coordinator. Mr. Hutchins tracks the maintenance needs and activities through the weekly and monthly inspections. Jeremy Galloway and Zachary Hammond of Ohio Valley Electric Corporation's (OVEC) Environmental Affairs group accompanied Stantec's personnel during the inspection. Observations were briefly discussed with onsite personnel during and after completion of the field activities.

2.0 DESCRIPTION OF KYGER CREEK IMPOUNDMENTS

The Kyger Creek Generating Station is a coal-combustion generating station located in Cheshire, Gallia County, Ohio. It is owned and operated by OVEC. The Kyger Creek Station began operating in 1955. It has five generating units with a total capacity of 1,086 megawatts.

This annual assessment included two CCR surface impoundments: the Boiler Slag Pond (BSP) and the South Fly Ash Pond (SFAP).

2.1 BOILER SLAG POND

The BSP is part of the Bottom Ash Pond Complex, located about 1,300 feet southwest of the power plant between State Route 7 and the Ohio River. The complex is bounded by State Route 7 to the west, a substation and plant road to the north, the Ohio River to the east, and Kyger Creek to the south. A station overview is included in Appendix A.

The Bottom Ash Pond Complex perimeter embankment is approximately 5,800 feet in length with a splitter dike about 875 feet long, dividing the complex into the BSP and the Clearwater Pond. The top of the perimeter embankment is approximately elevation 582 feet with a maximum height of 27 feet relative to adjacent topography (Stantec 2016a). It is registered with the Ohio Department of Natural Resources (ODNR) as a Class II dam, ID No. 8721-014.

Recently completed construction has divided the BSP into the new low-volume wastewater treatment system (LVWTS) and the redefined BSP closure area. The LVWTS includes a primary and a secondary basin. A boiler slag handling system (BSHS) was constructed just north of the BSP footprint. Cross sections of the embankment show the upstream and downstream slopes are constructed at 2.5H:1V with a 10-foot-wide crest. In the area of the LVWTS, the top of the existing embankment was lowered to elevation 575 feet. Reference drawings are provided in Appendix B.

The old BSP outlet structure to the Clearwater Pond was removed. For the LVWTS, a 48-inch diameter high density polyethylene (HDPE) pipe was placed at about elevation 551.5 feet from the primary to the secondary basin. The secondary basin discharges to the Clearwater Pond through a 36-inch diameter HDPE pipe placed at about elevation 550.0 feet. The Clearwater Pond discharges through the existing 30-inch corrugated metal pipe (CMP) to the NPDES-permitted outfall into the Ohio River. Water levels within the remaining boiler slag pond closure area are maintained by pumping (Burns & McDonnell 2023).

The BSHS was installed as part of the facility's Effluent Limitation Guideline (ELG) compliance program. It became fully operational on March 24, 2023. Kyger Creek Station no longer sluices boiler slag directly to onsite ponds. Initial discharge from the LVWTS occurred on July 17, 2023 (OVEC 2023g, 2023h; OEPA 2023, 2022a, 2022b).

2.2 SOUTH FLY ASH POND

The SFAP is located about 500 feet west/northwest of the power plant. It is bounded to the east by State Route 7, the closed North Ash Pond to the north, a railroad line and plant road to the west, and a plant road and flue gas desulfurization (FGD) wastewater treatment plant to the south (Stantec 2016b). A station overview is included in Appendix A.

The SFAP perimeter embankment is approximately 6,750 feet in length and encompasses approximately 67.7 acres. The top of the dike is located at approximately elevation 590 feet with a maximum height of 40 feet relative to adjacent topography. Cross sections show the upstream slopes are constructed at 1.75H:1V

and the downstream slopes are 2.5H:1V with a 10-foot-wide crest (Stantec 2016b). It is registered with ODNR as a Class II dam, ID No. 8721-013.

The SFAP historically received process water for settling and storage of CCR. Sluicing of fly ash to the pond ceased in September 2022, reducing inflows from plant sumps, coal pile runoff, and other miscellaneous flows (AEPSC 2022). Flows were historically conveyed to the SFAP by a 42-inch by 39-inch concrete riser structure located in the southeastern corner. No flows were observed the day of the site visit.

As part of the ELG compliance construction for the LVWTS, piping was installed connecting the coal pile runoff pond and the LVWTS. The piping crosses State Route 7 and is installed in the eastern dike of the SFAP, crossing back to the station near the northern end of the eastern dike. See Appendix B for reference drawings. A segment of piping is also shown placed in the southern dike to the fly ash handling area.

Outflow to Kyger Creek is controlled through a 30-inch diameter CMP located on the southwestern side.

3.0 OBSERVATIONS

Dam and embankment inspections were conducted in general accordance with 257.83(b) 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 at a minimum included:

1. A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by 40 CFR 257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under 40 CFR 257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections),

2. A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures, and

3. 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.

3.1 BOILER SLAG POND

3.1.1 Changes in Geometry Since Last Inspection (257.83(b)(2)(i))

The geometry of the surface impoundment has remained essentially unchanged beyond the recent construction. Reference drawings are provided in Appendix B.

3.1.2 Instrumentation (257.83(b)(2)(ii))

Applied Geology and Environmental Science, Inc. (AGES) of Clinton, Pennsylvania manages the groundwater monitoring network at the Kyger Creek Station for OVEC. Piezometer data for the station was provided by AGES.

Sixteen piezometers/monitoring wells are associated with the BSP. Locations of the instruments are shown on excerpts from the respective reports in Appendix C (AGES 2020, 2016). The maximum recorded readings for each location since the previous inspection are shown in Table 1.

Table 1. BSP Maximum Piezometer Readings within the Past Year

Instrument	Installation Date	Maximum Reading (ft)	Date of Reading
KC-1015	8/31/2010	545.89	2/8/2024
KC-1016	9/8/2010	540.81	4/1/2024
KC-1017	8/30/2010	545.2	2/8/2024
KC-1018	9/7/2010	542.42	2/8/2024
KC-1021[1]	8/26/2010	--	--
KC-1022	9/1/2010	542.21	4/1/2024
KC-15-01	8/5/2015	545.31	1/10/2024
KC-15-02	8/7/2015	545.97	1/10/2024
KC-15-03	8/12/2015	547.27	1/10/2024
KC-15-04	8/12/2015	546.62	1/10/2024
KC-15-05a	8/24/2022	544.34	1/10/2024
KC-15-06	8/18/2015	540.16	1/10/2024
KC-15-07	8/11/2015	540.04	4/1/2024
KC-15-08	8/10/2015	542.85	1/10/2024
KC-19-27	4/5/2019	546.98	1/10/2024
KC-19-28	4/4/2019	546.4	1/10/2024
KC-19-29	4/3/2019	546.01	1/10/2024

Notes:

1. Piezometer KC-1021 could not be located during construction activities in 2023.

3.1.3 Impoundment Characteristics (257.83(b)(2)(iii, iv, v))

Table 2 summarizes the BSP impoundment characteristics since the previous annual inspection.

Table 2. Summary of BSP Impoundment Characteristics

Characteristics[2]	2024 Values[1]
Approximate **Minimum** Depth (Elevation) of impounded water	0.0 ft. (540.5 ft.)
Approximate **Maximum** Depth (Elev.) of impounded water	1.7 ft. (538.8 ft.)[3]

Approximate **Current** Depth (Elev.) of impounded water	1.7 ft. (538.8 ft.)[3]
Approximate **Minimum** Depth (Elev.) of CCR	0.0 ft. (540.5 ft.)[4]
Approximate **Maximum** Depth (Elev.) of CCR	38.8 ft. (579.3 ft.)[4]
Approximate **Current** Depth (Elev.) of CCR	Varies (0 to 38.8 ft.)
Storage Capacity of impounding structure at the time of the inspection[5]	774,400 cy
Approximate volume of impounded water at the time of the inspection[6]	<1,000 cy
Approximate volume of CCR at the time of the inspection	486,500 cy

Notes:

1. All values in feet (ft) or cubic yards (cy). Elevation (Elev.) is shown in feet (NAVD88).
2. Excludes LVWTS area unless noted.
3. Located within an internal stormwater management channel.
4. Based on base elevation of 540.5 ft and including the LVWTS footprint (Stantec 2016a; AEPSC 2016b).
5. Assumes water impounding within the LVWTS and the remaining BSP footprint to the minimum crest elevation.
6. Based on base elevation of 540.5 ft and neglecting the LVWTS footprint.

The primary basin was designed for a normal pool elevation of 552.50 feet, creating a storage volume of 13.74 acre-feet (22,200 cy). The secondary basin was designed for a normal pool elevation of 551.50 feet, creating a storage volume of 50.56 acre-feet (81,600 cy) (Burns & McDonnell 2023).

3.1.4 Visual Inspection (257.83(b)(2)(vi))

The visual inspection of the BSP and appurtenant structures was conducted to identify actual or potential structural weaknesses or a condition disrupting or that has potential to disrupt the operation and safety of the impoundment. Specific items observed included upstream and downstream slopes, crest of the embankment dam and dike, and inlet and outlet structures. Appendix A includes a plan view and table with inspection points identified in the field. Appendix D includes a photographic log of the conditions.

The visual inspection began with observations of the perimeter embankment and splitter dike. In general, the upstream and downstream embankment slopes appear to be in good condition. The following observations were made:

- The exterior slopes are mowed, vegetated, and uniform along the northwest and southwest perimeter of the pond. The southeastern slope was obscured by higher vegetation limiting observations (Photos 1, 15, 19, and 23; Appendix D).
- Surface erosion and erosion rills are noted, particularly as the material changes from the road surfacing to the grassy slopes near the crest along the perimeter embankment (Points 2 through 7 and 15 through 17, Appendix A; Photos 2 through 7 and 15 through 17, Appendix D).
- Surface erosion is noted near the toe of the perimeter embankment on its southeast side (Point 1, Appendix A; Photo 1, Appendix D).

- Erosion rills were documented on both sides of the Splitter Dike near its crest and along the slopes of the dike (Points 11 and 13, Appendix A; Photos 11 and 13; Appendix D).
- Vegetation is thin and areas of exposed earth were noted in areas along the perimeter embankment (Points 5, 8, 18, 19, 21 through 25, Appendix A; Photos 5, 8, 18, 20, and 22; Appendix D).
- Animal burrows are observed in the perimeter embankment surrounding the pond (Points 9 and 10, Appendix A; Photos 9 and 10, Appendix D).
- Seepage was noted as the CCR dewatered within the BSP closure area. Flow was visible in three locations along the dike (Points 12 and 14, Appendix A; Photos 12 and 14, Appendix D).

The splitter dike has an established operational road with a boiler slag surface. Monitoring wells were noted during the site visit.

No operational flows were noted during the site visit into the boiler slag pond closure area. Ponded water was limited to an area at the toe of the LVWTS within the BSP closure area (Photos 12 and 14, Appendix D). A pump and hose were present at the southern end.

3.1.5 Changes that Affect Stability or Operation (257.83(b)(2)(vii))

Based on discussions with OVEC representatives and observations made during the field inspection, there are no changes to the BSP impoundment that would affect its stability or future operational needs.

3.2 SOUTH FLY ASH POND

3.2.1 Changes in Geometry Since Last Inspection (257.83(b)(2)(i))

The SFAP dike has remained relatively unchanged since the last inspection. Reference drawings are provided in Appendix B.

3.2.2 Instrumentation (257.83(b)(2)(ii))

Nineteen piezometers/monitoring wells are associated with the SFAP. Locations of the instruments are shown on excerpts from the respective reports in Appendix C (AGES 2020, 2016). Table 3 below summarizes the maximum reading since the last annual inspection.

Table 3. SFAP Maximum Piezometer Readings within the Past Year

Instrument	Installation Date	Maximum Reading (ft)	Date of Reading
KC-1003	8/19/2010	578.24	1/10/2024
KC-1004	8/26/2010	550.29	1/10/2024
KC-1007	8/17/2010	578.78	3/7/2024
KC-1008	8/24/2010	551.1	3/7/2024

KC-1011[1]	8/23/2010	--	--
KC-1012[2]	9/9/2010	--	--
KC-15-09	9/15/2015	541.62	1/10/2024
KC-15-10	9/16/2015	541.63	1/10/2024
KC-15-11	8/20/2015	541.71	5/20/2024
KC-15-12	9/17/2015	543.26	1/10/2024
KC-15-13	9/1/2015	541.65	6/5/2024
KC-15-14	8/20/2015	541.48	1/10/2024
KC-15-15	9/2/2015	541.68	1/10/2024
KC-15-16	9/3/2015	541.88	1/10/2024
KC-15-17	9/3/2015	544.89	6/5/2024
KC-15-18	8/25/2015	540.7	2/8/2024
KC-15-19a[3]	8/25/2022	542.00	1/10/2024
KC-15-20	8/27/2015	542.94	6/5/2024
KC-15-21	8/27/2015	542.8	1/10/2024
KC-15-22	9/10/2015	541.87	1/10/2024

Notes:

1. KC-1011 was damaged during construction activities and could not be sampled.
2. KC-1012 could not be located or sampled.
3. KC-15-19 noted as damaged/could not be sampled in June 2022. Replaced with well KC-15-19a August 2022 (AGES, 2023a).

3.2.3 Impoundment Characteristics (257.83(b)(2)(iii, iv, v))

The SFAP is an inactive CCR surface impoundment that that ceased wet disposal in 1986 (AEPSC 2016b). Table 4 summarizes the impoundment characteristics since the previous annual inspection.

Table 4. Summary of SFAP Impoundment Characteristics

Characteristics[2,3]	2024 Values[1]
Approximate **Minimum** Depth (Elev.) of impounded water	0 ft. (584.1 ft.)
Approximate **Maximum** Depth (Elev.) of impounded water	24.1 ft. (560 ft.)
Approximate **Current** Depth (Elev.) of impounded water	Varies (0 to 24.1 ft.)
Approximate **Minimum** Depth (Elev.) of CCR	~10 ft. (560 ft.)
Approximate **Maximum** Depth (Elev.) of CCR	~ 45.7 ft. (585.7 ft.)
Approximate **Current** Depth (Elev.) of CCR	Varies (10-45.7 ft.)
Storage Capacity of impounding structure at the time of the inspection	4,033,300 cy
Approximate volume of impounded water at the time of the inspection	5,400 cy
Approximate volume of CCR at the time of the inspection	2,772,000 cy

Notes:

1. All values in feet (ft) or cubic yards (cy). Elevation (Elev.) is shown in feet (NAVD88).
2. Pool elevation 584.1 feet based on survey from April 2023.
3. Base elevation of the SFAP assumed elevation 550 feet from design drawings (Stantec 2016b; AEPSC 2016c).

3.2.4 Visual Inspection (257.83(b)(2)(vi))

The visual inspection of the SFAP and appurtenant structures was conducted to identify actual or potential structural weaknesses or a condition disrupting or that has potential to disrupt the operation and safety of the impoundment. Specific items observed included upstream and downstream slopes, crest of the embankment dam/dike, and inlet and outlet structures. Appendix A includes a plan view and table with inspection points identified in the field. Appendix D includes a photographic log of the conditions.

The following observations were made:

- In general, the downstream slopes appear to be in good condition with established, mowed grass and limited woody vegetation (Points 36 and 38, Appendix A; Photos 35 and 37, Appendix D). The southeastern slope was obscured by higher vegetation limiting observations.
- Historic sluice lines are located along the southern and eastern dikes.
- A uniform depression in the upper one-quarter to one-third of the northwest slope was documented along the length of that slope (Points 27 through 31, Appendix A; Photos 26 through 30, Appendix D).
- No operational flow was evident at the time of the inspection at the inlet to the SFAP at the southeastern corner.
- Surficial erosion and bare spots are observed at multiple locations along the exterior slope of the perimeter embankments (Points 26, 33, 34, 41, and 42, Appendix A; Photos 25, 32, 33, 40, and 41, Appendix D).
- Animal burrows are observed in the perimeter embankment surrounding the pond at two locations (Points 32 and 45, Appendix A; Photos 31 and 44, Appendix D).
- The ground surface metal cover to a piezometer at the toe of the perimeter embankment at the west corner has been damaged, exposing the piezometer to moisture from the ground surface (Point 35, Appendix A; Photo 34, Appendix D).
- Small-diameter surficial depressions are noted along the southeast exterior embankment (Points 37 and 39, Appendix A; Photos 36 and 38, Appendix D). An outward bow in the slope is also observed among these depressions (Point 40, Appendix A; Photo 39, Appendix D).

- The tie-in of the piping along the southeast side of the pond into the embankment does not show signs of inconsistency or instability (Points 43 and 44, Appendix A; Photos 42 and 43, Appendix D).
- The Splitter Dike embankment, composed of ash, shows no signs of rutting, erosion or instability (Point 46, Appendix A; Photo 45, Appendix D).
- Sloughing of soil is present near the toe at the west corner of the exterior embankment (Point 47, Appendix A; Photo 46, Appendix D).

3.2.5 Changes that Affect Stability or Operation (257.83(b)(2)(vii))

Based on discussions with OVEC representatives and observations made during the field inspection, there are no changes to the SFAP impoundment that would affect its stability or future operational needs. Locations where piping enters and exits the embankment dike should be included in monitoring activities to note any changes.

4.0 SUMMARY OF FINDINGS

The following recommendations regarding maintenance, monitoring, and deficiencies are offered for the Kyger Creek Station's two CCR surface impoundments.

4.1 MAINTENANCE

4.1.1 Boiler Slag Pond

Operational Issues:

- Maintain the vegetation along the interior and exterior slopes of the BSP. Address the erosion on the exterior slope as needed to maintain the integrity of the ponds.
- Continue to conduct field surveys to measure current topography and compare to design geometry. Regrade surface to conform to design if needed. Further engineering evaluation of slope stability may be warranted, if deformations, steepened slopes, or sloughing indicate potential for significant instabilities.
- Monitor the seepage within the pond during construction activities. If the seepage persists and grows in volume, additional dewatering measure may be required.

Maintenance Issues:

- Regrade and repair erosion gullies as noted. Reseed barren areas noted on the exterior slope and establish uniform vegetation coverage in areas of need.
- Backfill the documented animal burrows with compacted native soils or a mud-pack of soil and cement, ensuring all voids are filled and the entrance(s) are properly sealed.

4.1.2 South Fly Ash Pond

Operational Issues:

- Maintain the vegetation along the interior and exterior slopes of the SFAP. Address the erosion on the exterior slope as needed to maintain the integrity of the ponds.
- Continue to conduct field surveys to measure current topography and compare to design geometry. Regrade surface to conform to design if needed. Further engineering evaluation of slope stability may be warranted, if deformations, steepened slopes, or sloughing indicate potential for significant instabilities.
- Monitor the seepage blankets and exterior slopes on perimeter embankments for wet areas, soft spots, or signs of instability. In addition, continue to monitor the area were the LVWTS piping enters and exits the SFAP embankment for signs of seepage around the piping.

Maintenance Issues:

- Regrade and repair erosion gullies as noted. Reseed barren areas noted on the exterior slope and establish uniform vegetation coverage in areas of need.
- Backfill the documented animal burrows with compacted native soils or a mud-pack of soil and cement, ensuring all voids are filled and the entrance(s) are properly sealed.
- Repair the sloughing surface on the west corner of the pond near the toe. Additionally, determine the cause of the small depressions on the southeast exterior sloe and repair them as needed. Additional riprap rock in these areas may be necessary to protect the slope.

4.2 MONITORING

EPA regulations require weekly and monthly inspections of the CCR surface impoundments facility, which are performed by qualified plant personnel. These inspections include observations for actual or potential structural weaknesses or other conditions that may disrupt the operation or safety of the CCR unit. The discharge from outlets of hydraulic structures under the base of the surface impoundment or through the dike of the CCR unit is observed for abnormal discoloration or discharge of debris or sediment. Available 2024 weekly and monthly inspection reports were provided by plant personnel for review (OVEC 2024a through 2024e).

Per 40 CFR 257.83(a)(iii), instrumentation should be monitored at least every 30 days by a qualified person. AGES performs a monthly inspection/inventory of the instrumentation at the BSP and SFAP. Daily field activity updates are provided to OVEC and Stantec at a frequency less than 30 days, documenting instrument condition and sampling events (AGES 2024b).

Annual inspections by a qualified professional engineer are required under the EPA regulations. The dam and dike inspections for 2015 through 2022 were performed by American Electric Power Service Corporation (AEPSC) (AEPSC 2015, 2016a, 2017 through 2022). Copies are available on OVEC's publicly accessible CCR website (OVEC 2023f). Stantec performed the 2023 inspection (Stantec 2024).

Special or more frequent monitoring of the facilities other than that already being performed should not be necessary unless conditions change.

4.3 DEFICIENCIES

No structural deficiencies in the dam/dike structures were observed during the 2024 annual inspection.

5.0 REFERENCES

American Electric Power Service Corporation. (2022). 2022 Annual Dam and Dike Inspection Report. Bottom Ash Pond Complex. South Fly Ash Pond. Kyger Creek Plant. Ohio Valley Electric Corporation (OVEC). Gallia County, Ohio. October 26. GERS-22-030.

American Electric Power Service Corporation. (2021). 2021 Annual Dam and Dike Inspection Report. Bottom Ash Pond Complex. South Fly Ash Pond. Kyger Creek Plant. Ohio Valley Electric Corporation (OVEC). Gallia County, Ohio. November 19. GERS-21-074.

American Electric Power Service Corporation. (2020). 2020 Annual Dam and Dike Inspection Report. Bottom Ash Pond Complex. South Fly Ash Pond. Kyger Creek Plant. Ohio Valley Electric Corporation (OVEC). Gallia County, Ohio. October 23. GERS-20-030.

American Electric Power Service Corporation. (2019). 2019 Annual Dam and Dike Inspection Report. Bottom Ash Pond Complex. South Fly Ash Pond. Kyger Creek Plant. Ohio Valley Electric Corporation (OVEC). Gallia County, Ohio. October 28. GERS-19-028.

American Electric Power Service Corporation. (2018). 2018 Annual Dam and Dike Inspection Report. Bottom Ash Pond Complex. South Fly Ash Pond. Kyger Creek Plant. Ohio Valley Electric Corporation (OVEC). Gallia County, Ohio. September 26. GERS-18-045.

American Electric Power Service Corporation. (2017). 2017 Annual Dam and Dike Inspection Report. Bottom Ash Pond Complex. South Fly Ash Pond. Kyger Creek Plant. Ohio Valley Electric Corporation (OVEC). Gallia County, Ohio. August 16. GERS-17-025.

American Electric Power Service Corporation. (2016a). 2016 Annual Dam and Dike Inspection Report. Bottom Ash Pond Complex. South Fly Ash Pond. Kyger Creek Plant. Ohio Valley Electric Corporation (OVEC). Gallia County, Ohio. November 11. GERS-16-152.

American Electric Power Service Corporation. (2016b). History of Construction. CFR 257.73(c)(1). Boiler Slag Pond. Kyger Creek Station. Cheshire, Ohio. Ohio Valley Electric Corporation. October. GERS-16-137.

American Electric Power Service Corporation. (2016c). History of Construction. CFR 257.73(c)(1). South Fly Ash Pond. Kyger Creek Station. Cheshire, Ohio. Ohio Valley Electric Corporation. October. GERS-16-138.

American Electric Power Service Corporation. (2015). 2015 Dam and Dike Inspection Report. Bottom Ash Complex. South Fly Ash Pond. GERS-15-020. Kyger Creek Station. Gallipolis, Ohio. Geotechnical Engineering. Columbus, Ohio. November 5.

Applied Geology and Environmental Science, Inc. (AGES) (2024a). Coal Combustion Residuals Regulation. 2023 Groundwater Monitoring and Corrective Action Report. Ohio Valley Electric Corporation. Kyger Creek Station. Cheshire, Ohio. January.

Applied Geology and Environmental Science, Inc. (AGES) (2024b). Daily Field Activities Update. Kyger Creek, Cheshire, Ohio. Ohio Valley Electric Corporation. Project No. 2023041. January through December.

Applied Geology and Environmental Science, Inc. (AGES) (2023). Coal Combustion Residuals Regulation. 2022 Groundwater Monitoring and Corrective Action Report. Ohio Valley Electric Corporation. Kyger Creek Station. Cheshire, Ohio. January.

Applied Geology and Environmental Science, Inc. (AGES) (2020). Coal Combustion Residuals Regulation. Assessment of Corrective Measures Report. Boiler Slag Pond (BSP). Ohio Valley Electric Corporation. Kyger Creek Station. Cheshire, Ohio. Revision 1.0. November.

Applied Geology and Environmental Science, Inc. (AGES) (2016). Coal Combustion Residuals Regulation. Monitoring Well Installation Report. Ohio Valley Electric Corporation. Kyger Creek Station. Cheshire, Gallia County, Ohio. August.

Burns & McDonnell (2023). Kyger Creek Generating Station. Bottom Ash Pond (LVWTS Basins) – Dam Modification Report. File #8721-014. Ohio Valley Electric Corporation. CCR/ELG Compliance Project. Project No. 126371. Revision 4. January 31.

Burns & McDonnell (2022). CCR/ELG Project. Contract 8125. BSHS-LVWTS Modifications and Site Finishing. OVEC/IKEC. Kyger Creek Generating Station. Cheshire, Ohio. 2021. Project No. 126371. Revision 2. June 27. Issued for Construction.

Ohio Environmental Protection Agency (2024). eDocument Search (https://edocpub.epa.ohio.gov/publicportal/edochome.aspx).

Ohio Environmental Protection Agency (2022a). Letter from Division of Surface Water. Re: Ohio Valley Electric Corp., Kyger Creek. Permit-Long Term. Approval. Surface Water Permit to Install. Gallia. DSWPTI1439236. eDocument ID 1720855. January 28. Wastewater Redirect.

Ohio Environmental Protection Agency (2022b). Letter from Division of Surface Water. Re: Ohio Valley Electric Corp., Kyger Creek. Permit-Long Term. Approval. Surface Water Permit to Install. Gallia. DSWPTI1470917. eDocument ID 1708686. January 10. Wastewater Redirect Piping.

Ohio Valley Electric Corporation (2024a). Kyger Creek Plant. Monthly Photograph Presentation. South Fly Ash Pond. Bottom Ash Pond. Clearwater Pond. January 2024 through September 2024.

Ohio Valley Electric Corporation (2024b). "Kyger Creek Station. Dam/Dike Observation Checklist." Fly Ash Pond, Bottom Ash Pond. Clear Water Pond. January 2024 through September 2024 monthly reports.

Ohio Valley Electric Corporation (2024c). "7-Day Inspection Checklist. Kyger Creek Plant. Boiler Slag/Bottom Ash Pond." Weekly reports for January 4, 2024 to October 24, 2024.

Ohio Valley Electric Corporation (2024d). "7-Day Inspection Checklist. Kyger Creek Plant. Clearwater Pond." Weekly reports for January 4, 2024 to October 24, 2024.

Ohio Valley Electric Corporation (2024e). "7-Day Inspection Checklist. Kyger Creek Plant. Fly Ash Pond." Weekly reports for January 4, 2024 to October 24, 2024.

Ohio Valley Electric Corporation (2024f). CCR Rule Compliance Data and Information. Kyger Creek Station. (https://www.ovec.com/CCRKyger.php). Accessed October 23.

Ohio Valley Electric Corporation (2023a). Letter to Jack Knapp, Division of Surface Water, Ohio Department of Environmental Protection Agency, Southeast District Office from John Markley, OVEC. Notification per Kyger Creek NPDES Permit, Part II, Section AA(3), Lined Low Volume Waste Treatment (LVWTS) System Operational Status. June 7. eDocument ID 2386086.

Ohio Valley Electric Corporation (2023b). Letter to Jack Knapp, Division of Surface Water, Ohio Department of Environmental Protection Agency, Southeast District Office from J. Michael Brown, OVEC. Ohio Valley Electric Corporation. Kyger Creek Station. NPDES Permit No. 0IB00005*TD. Initial Discharge from Low Volume Waste Treatment System Notification. July 25. eDocument ID 2497428.

Stantec Consulting Services Inc. (2023a). Notification of Intent to Close – CCR Surface Impoundment. EPA CCR Rule: 40 CFR §257.102(g). Boiler Slag Pond (CCR Unit). OVEC Kyger Creek Station. October 12.

Stantec Consulting Services Inc. (2023b). Notification of Intent to Close – CCR Surface Impoundment. EPA CCR Rule: 40 CFR §257.102(g). South Fly Ash Pond (CCR Unit). OVEC Kyger Creek Station. October 12.

Stantec Consulting Services Inc. (2023c). 2023 CCR Rule – Surface Impoundments Kyger Creek Dam/Dike Inspections. Kyger Creek Generating Station. Cheshire, Ohio. January 19.

Stantec Consulting Services Inc. (2016a). Initial Structural Stability Assessment. Kyger Creek Station. Boiler Slag Pond. Cheshire, Gallia County, Ohio. October 17.

Stantec Consulting Services Inc. (2016b). Initial Structural Stability Assessment. Kyger Creek Station. South Fly Ash Pond. Cheshire, Gallia County, Ohio. October 17.

APPENDIX A

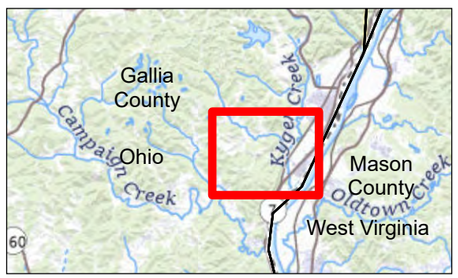
Figures

OVEC/IKEC
Ohio Valley Electric Corporation / Indiana-Kentucky Electric Corporation

Stantec

0 1,000 2,000 Feet
1:14,400 (At original document size of 11x17)

Notes
1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Base features - OSIP
3. Ortho-Imagery does not represent current conditions.



Project Location
Kyger Creek Station
Gallia County, OH

173410748
Prepared by ANP on 2025-01-14
Technical Review by JS on 2025-01-14
Independent Review by JSH on 2025-01-14

Client/Project
Ohio Valley Electric Corporation
Kyger Creek Station

Figure No.
1

Title
2024 Annual CCR Facility Inspections - Station Overview

OVEC/IKEC
Ohio Valley Electric Corporation / Indiana-Kentucky Electric Corporation

Stantec

Legend

1 → **Photo Location**

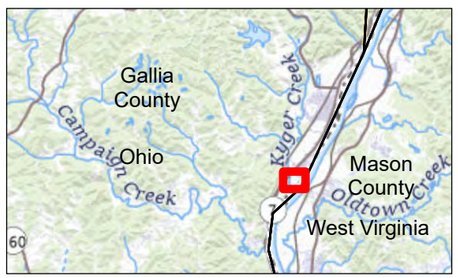
2024 Inspection Locations

0 200 400 Feet

1:3,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Base features - OSIP III - 2020.
3. Ortho-Imagery represents conditions as of July 2023.



Project Location
Kyger Creek Station
Gallia County, OH

175532013
Prepared by ANP on 1/9/2025 12:56 PM
Technical Review by MDK on 1/9/2025 12:56 PM
Independent Review by JSH on 1/9/2025 12:56 PM

Client/Project
Ohio Valley Electric Corporation
Boiler Slag Pond

Figure No.
2

Title
2024 Annual CCR Surface Impoundment Inspection

OVEC/IKEC
Ohio Valley Electric Corporation · Indiana-Kentucky Electric Corporation

Stantec

Legend

1 → **Photo Location**

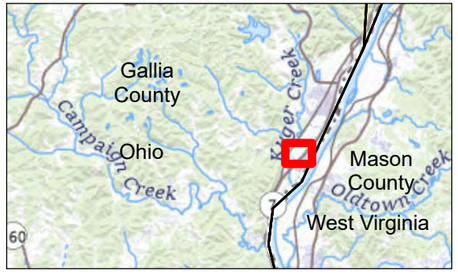
2024 Inspection Locations

0 200 400 Feet

1:3,600 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Base features - OSIP III - 2020.
3. Ortho-Imagery represents conditions as of July 2023.



Project Location
Kyger Creek Station
Gallia County, OH

173410748
Prepared by ANP on 1/15/2025 4:37 PM
Technical Review by JS on 1/15/2025 4:37 PM
Independent Review by JSH on 1/15/2025 4:37 PM

Client/Project
Ohio Valley Electric Corporation
South Fly Ash Pond

Figure No.
3

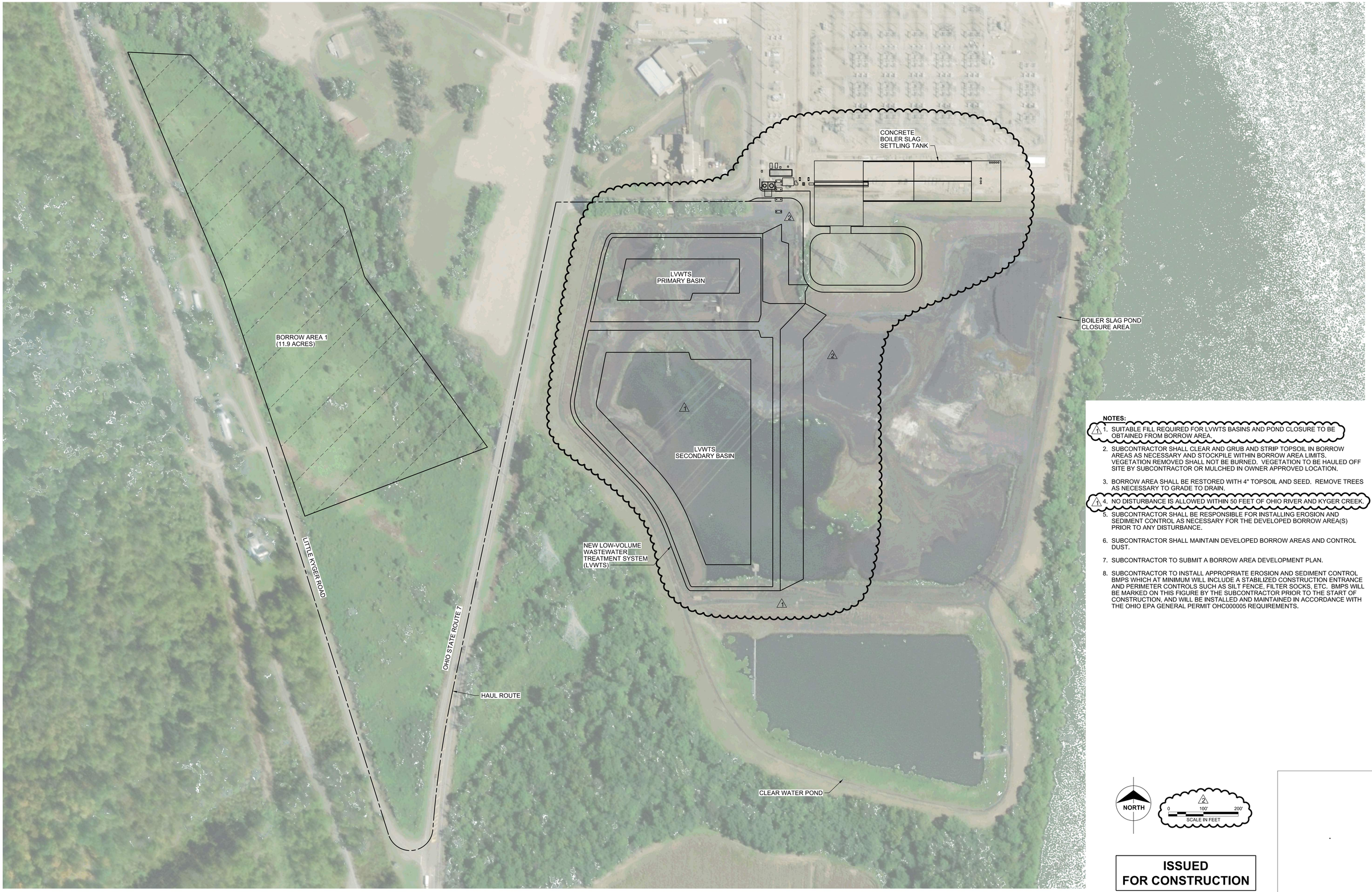
Title
2024 Annual CCR Surface Impoundment Inspection

GPS Data Points **Kyger Creek CCR Surface Impoundments**
2024 Annual Inspection **Gallia County, Ohio**

Point ID No.	Photo ID No(s).	Comment	Latitude	Longitude	Location
1	1	Southeast exterior slope - erosion gulley at the toe	38.910840	-82.129626	BSP
2	2	Southeast exterior slope - erosion gulley at the crest	38.910684	-82.129751	BSP
3	3	Southeast exterior slope - erosion gulley at the crest	38.910299	-82.130147	BSP
4	4	Southeast exterior slope - erosion gulley at the crest	38.910247	-82.130203	BSP
5	5	Southeast exterior slope - erosion gulley/bare area at the crest	38.909788	-82.130694	BSP
6	6	Southeast exterior slope - erosion gulley at the crest	38.909335	-82.131241	BSP
7	7	Southeast exterior slope - erosion gulley at the crest	38.909206	-82.131388	BSP
8	8	Southeast exterior slope - bare spot	38.908831	-82.131794	BSP
9	9	Southeast exterior slope - animal burrow	38.908782	-82.132067	BSP
10	10	South exterior slope - animal burrow	38.908735	-82.132189	BSP
11	11	Southwest exterior slope - erosion gulley at the crest	38.909626	-82.134208	BSP
12	12	South corner - dike elevation	38.909480	-82.133854	LVWTS Secondary Basin
13	13	Southwest exterior slope - erosion gulley at the crest	38.909578	-82.134097	BSP
14	14	Southwest exterior slope - dike elevation	38.910221	-82.133624	BSP
15	15	West exterior slope - erosion gulley at the crest	38.910102	-82.134933	BSP
16	16	West exterior slope - erosion gulley at the crest	38.910457	-82.134871	BSP
17	17	West exterior slope - erosion gulley at the crest	38.910965	-82.134891	LVWTS Secondary Basin
18	18	West exterior slope - bare spot on slope	38.911235	-82.134967	LVWTS Secondary Basin
19	18	West exterior slope - bare spot on slope	38.911377	-82.134985	LVWTS Secondary Basin
20	19	West exterior slope	38.911304	-82.134970	LVWTS Secondary Basin
21	20	West exterior slope - bare spot on slope	38.911672	-82.135070	LVWTS Secondary Basin
22	21	West exterior slope - depression	38.911782	-82.135037	LVWTS Secondary Basin
23	22	West exterior slope - bare spot on slope	38.911952	-82.134862	LVWTS Secondary Basin
24	23	West exterior slope	38.912660	-82.134002	LVWTS Secondary Basin
25	24	West exterior slope - bare spot on slope	38.912862	-82.133744	LVWTS Secondary Basin
26	25	Northwest exterior slope - bare spot near the crest	38.921404	-82.131949	SFAP
27	26	Northwest exterior slope - depression	38.921289	-82.132063	SFAP
28	27	Northwest exterior slope - edge of riprap protection	38.921143	-82.132174	SFAP
29	28	Northwest exterior slope - depression in slope in lower half	38.920101	-82.133087	SFAP
30	29	Northwest exterior slope - depression in slope in lower half	38.919864	-82.133292	SFAP
31	30	Northwest exterior slope - depression in slope in lower half	38.919688	-82.133463	SFAP
32	31	Northwest exterior slope - animal burrow near the toe	38.919317	-82.133831	SFAP
33	32	Northwest exterior slope - bare spot on slope	38.918350	-82.134492	SFAP
34	33	West exterior slope - bare spot on slope	38.917915	-82.134536	SFAP
35	34	West exterior slope - damaged well lid on instrumentation	38.917657	-82.134384	SFAP
36	35	Southeast exterior slope	38.916654	-82.130185	SFAP
37	36	Southeast exterior slope - depression	38.916845	-82.129944	SFAP
38	37	Southeast exterior slope	38.917156	-82.129562	SFAP
39	38	Southeast exterior slope - depression	38.917309	-82.129377	SFAP
40	39	Southeast exterior slope - bow in the slope	38.917738	-82.128861	SFAP
41	40	Southeast exterior slope - erosion gulley near the crest	38.918099	-82.128419	SFAP
42	41	Southeast exterior slope - erosion gulley near the crest	38.918294	-82.128180	SFAP
43	42	Southeast exterior slope - slope tie in	38.919258	-82.126983	SFAP
44	43	Southeast exterior slope - slope tie in	38.919323	-82.126937	SFAP
45	44	Northeast exterior slope - animal burrow at toe	38.919824	-82.126323	SFAP
46	45	Northeast slope - divider dike cover	38.920956	-82.127992	SFAP
47	46	Southwest exterior slope- slough on slope	38.917489	-82.134553	SFAP

APPENDIX B

Reference Drawings



NOTES:

1. SUITABLE FILL REQUIRED FOR LVWTS BASINS AND POND CLOSURE TO BE OBTAINED FROM BORROW AREA.
2. SUBCONTRACTOR SHALL CLEAR AND GRUB AND STRIP TOPSOIL IN BORROW AREAS AS NECESSARY AND STOCKPILE WITHIN BORROW AREA LIMITS. VEGETATION REMOVED SHALL NOT BE BURNED. VEGETATION TO BE HAULED OFF SITE BY SUBCONTRACTOR OR MULCHED IN OWNER APPROVED LOCATION.
3. BORROW AREA SHALL BE RESTORED WITH 4" TOPSOIL AND SEED. REMOVE TREES AS NECESSARY TO GRADE TO DRAIN.
4. NO DISTURBANCE IS ALLOWED WITHIN 50 FEET OF OHIO RIVER AND KYGER CREEK.
5. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING EROSION AND SEDIMENT CONTROL AS NECESSARY FOR THE DEVELOPED BORROW AREA(S) PRIOR TO ANY DISTURBANCE.
6. SUBCONTRACTOR SHALL MAINTAIN DEVELOPED BORROW AREAS AND CONTROL DUST.
7. SUBCONTRACTOR TO SUBMIT A BORROW AREA DEVELOPMENT PLAN.
8. SUBCONTRACTOR TO INSTALL APPROPRIATE EROSION AND SEDIMENT CONTROL BMPS WHICH AT MINIMUM WILL INCLUDE A STABILIZED CONSTRUCTION ENTRANCE AND PERIMETER CONTROLS SUCH AS SILT FENCE, FILTER SOCKS, ETC. BMPS WILL BE MARKED ON THIS FIGURE BY THE SUBCONTRACTOR PRIOR TO THE START OF CONSTRUCTION, AND WILL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE OHIO EPA GENERAL PERMIT OHC000005 REQUIREMENTS.

NORTH

SCALE IN FEET
0 100' 200'

ISSUED FOR CONSTRUCTION

Scale For Microfilming
Millimeters
Inches

no.	date	by	ckd	description
2	06/27/22	NJF	DGK	ISSUED FOR CONSTRUCTION
1	01/14/22	AMM	DGK	REVISED PER ODNR COMMENTS
0	12/06/21	AMM	DGK	INITIAL ISSUE

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co, Inc.
Certificate of Authority No. 01557

designed N. FORD | detailed J. RIDDER

OVEC/IKEC
Ohio Valley Electric Corporation / Indiana-Kentucky Electric Corporation

KYGER CREEK GENERATING STATION CCR/ELG PROJECT

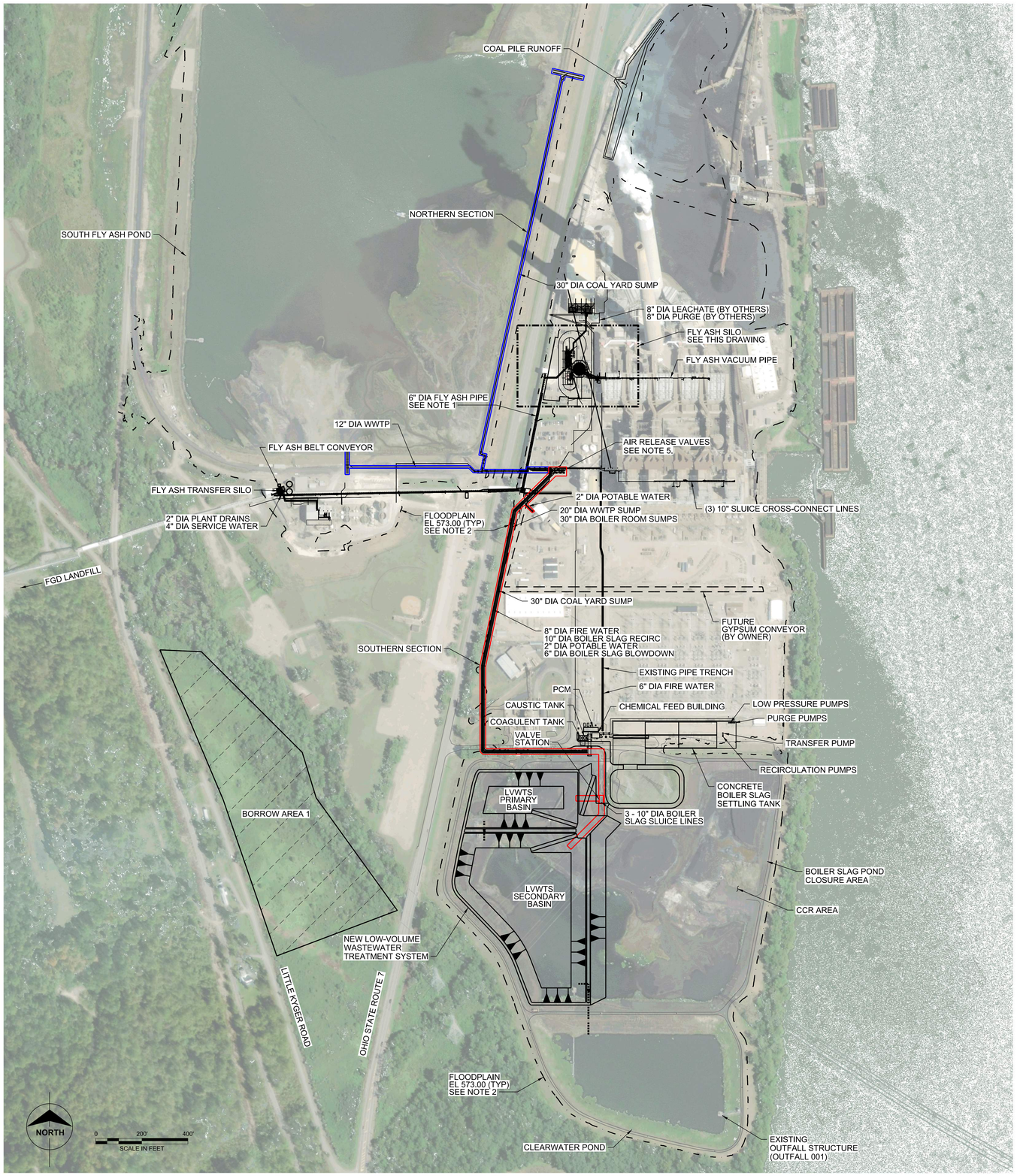
GALLIA COUNTY, OHIO

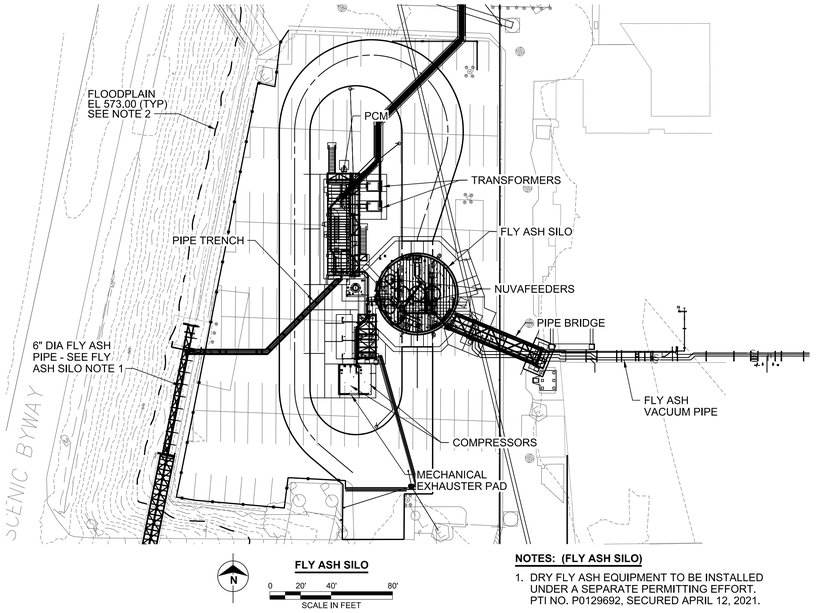
BORROW PLAN

project 126371 | contract 8125
drawing **CG401** | rev. — **2**
sheet of sheets
file 126371CG401.DGN

Z:\Clients\ENR\OVEC\126371_KygerAshConv\2_Design\Civil\Dwgs\Contract 8125 - BSHS-LVWTS Modifications and Site Finishing\126371CG401.dgn

6/27/2022





FLY ASH SILO

NOTES: (FLY ASH SILO)

1. DRY FLY ASH EQUIPMENT TO BE INSTALLED UNDER A SEPARATE PERMITTING EFFORT. PTI NO. P0129692, SECURED APRIL 12, 2021.

NOTES:

1. FLY ASH CONVEYING PIPE HUNG / SUPPORTED ON EXISTING GYPSUM CONVEYOR.
2. FLOODPLAIN ELEVATION BASED ON 573.00 CONTOUR OF PLANT ELEVATION DATUM. FLOODPLAIN VARIES BETWEEN EL 571.60 AND EL 571.80 IN NAVD88.
3. SITE PLAN INCLUDES SCOPE FROM MULTIPLE CONTRACTS.
4. LOW VOLUME WASTEWATER STREAMS - RELOCATION KEY: (VALUES ARE AVERAGE FLOW)

30" HDPE BOILER ROOM SUMP:	7014 GPM
30" HDPE COAL YARD SUMP LINE:	131 GPM
6" CS PRECIPITATOR SUMP LINE:	13 GPM
3" CS BOILER SLAG RECYCLE TANK PURGE LINE:	159 GPM
20" HDPE WASTEWATER TREATMENT PLANT SUMP LINE:	204 GPM
2" HDPE FLY ASH TRANSFER SILO SUMP:	20 GPM

5. AIR RELEASE VALVES AUTOMATICALLY OPEN DURING SYSTEM STARTUP AND OCCASIONALLY DURING NORMAL OPERATION TO ALLOW ENTRAPPED AIR TO ESCAPE THE PROCESS PIPING. DURING THIS OCCASIONAL RELEASE, A NEGLIGIBLE AMOUNT OF PROCESS WATER MAY EXCAPE THE VALVE AND BE RELEASED TO GRADE.

ISSUED FOR CONSTRUCTION

no.	date	by	ckd	description
9	04/29/22	NJF	DGK	ISSUED FOR CONSTRUCTION
8	03/16/22	SRH	DGK	REVISED LOCATION OF BOILER SLAG SETTLING TANK, CHEMICAL TREATMENT EQUIPMENT, AND LVWTS BASINS - ISSUED FOR PERMITTING
7	01/05/22	AMM	DGK	ISSUED FOR PERMITTING
6	12/06/21	AMM	DGK	ISSUED FOR BID
5	10/11/21	MEB	DGK	ISSUED FOR CONSTRUCTION
10	06/27/22	NJF	DGK	ISSUED FOR CONSTRUCTION

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co, Inc.
Certificate of Authority No. 01557

designed D. KROGER | detailed J. RIDDER

OVEC IKEC
Ohio Valley Electric Corporation / Indiana-Kentucky Electric Corporation

KYGER CREEK GENERATING STATION
CCR/ELG PROJECT

GALLIA COUNTY, OHIO

SITE PLAN

project 126371 | contract MULTIPLE

drawing **CS001** — rev. **10**

sheet of sheets

file 126371CS001.DGN

Z:\Clients\ENR\OVEC\126371_KygerAshConv\2_Design\Civil\Dwgs\General Drawings\126371CS001.dgn

6/27/2022

Millimeters
Inches
Scale For Microfilming

APPENDIX C

Instrumentation

AGES (2020)

N

OHIO ROUTE 7

KC-15-01

KC-15-02

KC-15-03

BOILER SLAG POND

KC-15-04

KC-15-05

KC-19-27

KC-15-08

KC-15-07

KC-15-06

CLEARWATER POND

KC-19-28

KYGER CREEK

OHIO RIVER

KC-19-29

LEGEND:

EXISTING CCR PROGRAM MONITORING WELL

NEW CCR PROGRAM MONITORING WELL

200' 0' 200' 400'

SCALE: 1"= 200'

DRAWN BY	JM
DATE	
CHECKED BY	
JOB NO.	2019109-1-KYGER
DWG FILE	2019 ACM_KYGER_Fig 5-1_BSP_MWs&SBs.dwg
DRAWING SCALE	1"=200'

AGES
Applied Geology And Environmental Science, Inc.
2402 Hookstown Grade Road, Suite 200
Clinton, PA 15026
412.264.6453

OHIO VALLEY ELECTRIC COMPANY

KYGER CREEK STATION
CHESHIRE, GALLIA COUNTY, OHIO
BOILER SLAG POND
EXISTING AND NEW MONITORING WELL LOCATIONS

DRAWING NAME: FIGURE 5-1

REV. 0

Plot: 11/25/2020 13:28 _PROGRAM-KYGER OVEC\Kyger Creek-CCR Program\CAD\2019 Assessment of Corrective Measures\2019 ACM_KYGER_Fig 5-1_BSP_MWs&SBs.dwg

AGES (2016)

N

KYGER CREEK

RAILROAD TRACKS

DRAINAGE DITCH

NORTH FLY ASH POND

KC-15-13

KC-15-12

KC-15-14

D

SFAP-B-1 / KC-15-11

KC-15-15

KC-15-16

SOUTH FLY ASH POND

KC-15-10

KC-15-17

KC-15-09

SFAP-B-2 / KC-15-18

OHIO ROUTE 7

D'

KC-15-22

KC-15-21

KC-15-19

KC-15-20

POWER PLANT

OHIO RIVER

300' 0' 300' 600'

SCALE: 1"= 300'

LEGEND:

SOIL BORING /MONITORING WELL LOCATION

MONITORING WELL LOCATION

DRAWN BY	JM
DATE	
CHECKED BY	
JOB NO.	2015079-KYGER
DWG FILE	KYGER MW INSTALL_PONDS+MWs b11.dwg
DRAWING SCALE	1"=300'

AGES
Applied Geology And Environmental Science, Inc.
2402 Hookstown Grade Road, Suite 200
Clinton, PA 15026
412.264.6453

OHIO VALLEY ELECTRIC COMPANY

KYGER CREEK STATION
CHESHIRE, GALLIA COUNTY, OHIO
SOUTH FLY ASH POND
SOIL BORING AND
GROUNDWATER MONITORING WELL LOCATIONS

DRAWING NAME: FIGURE 7

REV.: 0

Plot: 08/15/2016 15:10 \Kyger Creek-CCR Program\CAD\WELL INSTALLATION\PONDS_2015 b11\KYGER MW INSTALL_PONDS+MWs b11.dwg\FLY ASH POND

APPENDIX D

Photographic Log

PHOTOGRAPHIC LOG

Boiler Slag Pond (BSP)

Photo 1, Point 1
Boiler Slag Pond – Southeast Exterior Slope – Erosion gulley near the toe.

Photo 2, Point 2
Boiler Slag Pond – Southeast Exterior Slope – Erosion gulley near the crest.

Photo 3, Point 3
Boiler Slag Pond – Southeast Exterior Slope – Erosion gulley near the crest.

Photo 4, Point 4
Boiler Slag Pond – Southeast Exterior Slope – Erosion gulley near the crest.

Photo 5, Point 5
Boiler Slag Pond – Southeast Exterior Slope – Erosion gulley and bare area near the crest.

Photo 6, Point 6
Boiler Slag Pond – Southeast Exterior Slope – Erosion gulley and bare area near the crest.

Photo 7, Point 7
Boiler Slag Pond – Southeast Exterior Slope – Erosion gulley near the crest.

Photo 8, Point 8
Boiler Slag Pond – Southeast Exterior Slope – Bare spot near the toe.

Photo 9, Point 9
Boiler Slag Pond – Southeast Exterior Slope – Animal burrow near the toe.

Photo 10, Point 10
Boiler Slag Pond – Southeast Exterior Slope – Animal burrow near the toe.

Photo 11, Point 11
Boiler Slag Pond – Southwest Divider Dike – Erosion gulley and rutting in exterior slope.

Photo 12, Point 12
LVWTS Secondary Basin – Interior dike elevation.

Photo 13, Point 13
Boiler Slag Pond – Southwest Divider Dike – Erosion gulley at the crest.

Photo 14, Point 14
Boiler Slag Pond – Southwest Divider Dike – Divider dike elevation looking at LVWTS basins.

Photo 15, Point 15
Boiler Slag Pond – West Exterior Slope – Erosion gulley near the crest.

Photo 16, Point 16
Boiler Slag Pond – West Exterior Slope – Erosion gulley near the crest.

Photo 17, Point 17
LVWTS Secondary Basin – West Exterior Slope – Erosion gulley near the crest.

Photo 18, Point 18
LVWTS Secondary Basin – West Exterior Slope – Bare spot near the crest.

Photo 19, Point 18
LVWTS – West Exterior Slope – Looking north.

Photo 20, Point 19
LVWTS – West Exterior Slope – Bare spot near the crest.

Photo 21, Point 20
LVWTS – West Exterior Slope – Depression in the slope near the toe.

Photo 22, Point 21
LVWTS – West Exterior Slope – Bare spot near the crest.

Photo 23, Point 22
LVWTS – West Exterior Slope – Looking north at Primary Basin.

Photo 24, Point 23
LVWTS – West Exterior Slope- Bare spot near the toe.

PHOTOGRAPHIC LOG

South Fly Ash Pond (SFAP)

Photo 25, Point 24
Northwest Exterior Slope – Bare spot near the crest.

Photo 26, Point 25
Northwest Exterior Slope – Depression in lower half of slope.

Photo 27, Point 26
Northwest Exterior Slope – Edge of riprap protection

Photo 28, Point 27
Northwest Exterior Slope – Depression in lower half of slope.

Photo 29, Point 28
Northwest Exterior Slope – Depression in lower half of slope.

Photo 30, Point 29
Northwest Exterior Slope – Depression in lower half of slope.

Photo 31, Point 30
Northwest Exterior Slope – Animal burrow near the toe.

Photo 32, Point 31
Northwest Exterior Slope – Bare spot on the slope near mid-height.

Photo 33, Point 32
West Exterior Slope – Bare spot on slope near the crest.

Photo 34, Point 33
West Exterior Slope – Damaged well lid on instrumentation.

Photo 35, Point 34
Southeast Exterior Slope – Looking northwest.

Photo 36, Point 35
Southeast Exterior Slope – Depression at mid-height of the slope.

Photo 37, Point 36
Southeast Exterior Slope – Looking northeast.

Photo 38, Point 37
Southeast Exterior Slope – Depression in slope near the toe.

Photo 39, Point 38
Southeast Exterior Slope – Bow in the slope at mid-height.

Photo 40, Point 39
Southeast Exterior Slope –
Erosion gulley near the crest.

Photo 41, Point 40
Southeast Exterior Slope –
Erosion gulley near the crest.

Photo 42, Point 41
Southeast Exterior Slope –
Slope tie-in location.

Photo 43, Point 42
Southeast Exterior Slope – Slope tie-in on northeast side.

Photo 44, Point 43
Northeast Exterior Slope – Animal burrow near the toe.

Photo 45, Point 44
Northeast Slope – Divider Dike cover.

Photo 46, Point 45
Southwest Exterior Slope – Slough on slope.