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Coal Combustion Residuals
Annual CCR Unit Inspection Report
for Reporting Year 2025

Keystone-Conemaugh Projects, LLC
Conemaugh Station Ash/Refuse Disposal Site
Conemaugh Generating Station
New Florence, Pennsylvania

GAI Project Number: C151611.10

January 2026

KEYSTONE-CONEMAUGH PROJECTS KCPO

Prepared by: GAI Consultants, Inc.
Pittsburgh Office
385 East Waterfront Drive
Homestead, Pennsylvania 15120-5005

Prepared for: Keystone-Conemaugh Projects
Conemaugh Generating Station
1442 Power Plant Road
New Florence, Pennsylvania 15944

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1442 Power Plant Rd
New Florence, Pennsylvania 15944

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Taylor Boring
Technical Specialist II

James F. Shields

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James F. Shields, PE
Engineering Manager I

Professional Engineer's Certification

In accordance with §257.84(b) of the Rule, I hereby certify based on a review of available information within the facility's operating records and observations from my personal on-site inspection (including the photographs contained in Appendix A), that the Conemaugh Ash Disposal Site does not exhibit any appearances of actual/potential structural weakness that would be disruptive to the normal operations of the Stage II/III CCR Unit. The unit is being operated and maintained consistent with recognized and generally accepted good engineering standards and practices. The use of the words "certification" and/or "certify" in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Name of Professional Engineer: James F. Shields

Company: GAI Consultants

Signature:

Date: 1/19/2026

PE Registration State: Pennsylvania

PE Registration Number: PE-079511

Professional Engineer Seal:

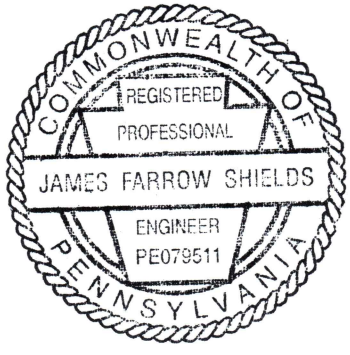

Table of Contents

1.0 Introduction

Title 40 Code of Federal Regulations (CFR) Part 257 addresses, in part, the management of Coal Combustion Residuals (CCR Rule, or Rule) in regulated units, including landfills. Specific to §257.84(b) of the Rule, existing and new CCR landfills must be inspected on an annual basis by a qualified professional engineer. For the Keystone-Conemaugh Projects, LLC - Conemaugh Generating Station, this inspection requirement applies to the existing Ash/Refuse Disposal Site (Ash Disposal Site). In support of this obligation, Mr. James Shields (a qualified professional engineer with GAI Consultants) conducted an on-site inspection of the Ash Disposal Site on November 6, 2025. The findings from this annual inspection are summarized in the remaining sections of this correspondence.

As required, this report will be placed in the Conemaugh facility's operating record per §257.105(g)(9), noticed to the State Director per §257.106(g)(7), and posted to the publicly accessible internet site per §257.107(g)(7). Placement of the prior annual inspection report into the facility's operating record was accomplished on January 29, 2025.

2.0 Background

The Ash Disposal Site consists of a valley fill located north of the Station proper and is operated/maintained in accordance with Pennsylvania Department of Environmental Protection (PADEP) Solid Waste Permit No. 300876. The Ash Disposal Site consists of three stages, including Stage I (closed), Stage II (currently active), and Stage III (currently active horizontal and vertical expansion).

Stage I occupies approximately 160 acres within the northernmost reaches of the valley and was brought online in 1970. Stage I was constructed as an unlined facility and was subsequently closed in 1987. Stage II (brought online in 1985) is presently maintained as the primary active disposal area, and utilizes a single liner comprised of a 50-mil polyvinyl chloride (PVC) geomembrane with an accompanying leachate collection and detection system. Stage II occupies approximately 120 acres, and its northern side overlies the outslope of the Stage I disposal area (piggy-backs over Stage I); it extends approximately 2,000 feet southward into the valley from its interface with Stage I.

Stage IIIA, which is the first phase of construction of Stage III, has a double-synthetic composite liner system that includes a non-woven cushion geotextile; 60-mil HDPE primary liner; geocomposite drainage net; 60-mil HDPE secondary liner; geosynthetic clay liner (GCL), and a 6" thick soil subbase. In April 2019, PADEP issued its approval and authorization to initiate disposal activities in Stage IIIA, which is also currently active.

Upon complete buildout[1], Stage III will occupy an area of approximately 110 acres. The northern side of Stage III will piggy-back over the Stage II disposal area and it will extend southward approximately 2,100 feet where its outslope will terminate approximately 600 feet north of the existing Ash Disposal Site Leachate Surge Pond. At such time when the permitted disposal capacity has been fully expended and final grades attained, any uncapped areas of the Ash Disposal Site will be capped and closed in accordance with the approved Closure Plan.

With respect to the Ash Disposal Site, GAI's evaluation has focused on the following items as outlined in §257.84(b)(1)(i-ii):

- 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; and
- A visual inspection of the CCR unit to identify signs of distress or malfunction.

[1] Buildout activities beyond Stage IIIA are currently suspended.

Specific to GAI's preparation of the annual inspection report, and per §257.84(b)(2)(i-iv), the following aspects have been addressed:

- Any changes in geometry of the structure since the previous annual inspection;
- The approximate volume of CCR contained in the unit at the time of the inspection;
- 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
- Any other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection.

3.0 Operating Records Review

Principal items reviewed as part of this year's inspection included, but were not limited to: Design Drawings, Periodic Landfill Inspection Reports that have been completed since the 2024 Annual Inspection, 2024 Annual Landfill Operations Report, and the Solid Waste Permit No. 300876.

3.1 Environmental Control System Overview

3.1.1 Bottom Liner System

- The bottom liner system of the Stage II landfill area is a 50-mil PVC geomembrane.
- The bottom liner system of the Stage IIIA landfill area is a composite liner, comprised from the top to bottom:
  - Non-woven cushion geotextile
  - Primary 60-mil high-density polyethylene (HDPE) liner
  - Geocomposite Drainage Net (Geonet) for leak detection
  - Secondary 60-mil HDPE liner
  - Geosynthetic Clay Liner (GCL)
  - Six-inch thick soil subbase

3.1.2 Leachate Collection System

- The leachate collection systems of Stages II and III use gravity flow through the bottom ash material to a contact water drainage channel, which in turn drains to the Disposal Site Surge Pond. From the pond, leachate is routed to the Leachate Wastewater Treatment Plant (WWTP), with treated effluent managed in accordance with the Station's National Pollutant Discharge Elimination System (NPDES) Permit.

3.1.3 Stormwater Management

- "Non-contact" stormwater run-off from the closed Stage I area is managed in accordance with the current NPDES permit. Stormwater run-off from the Stage I area is discharged into a stormwater channel separate from the "contact" stormwater of the Stage II area.
- "Contact" stormwater falling on currently active areas of Stages II and III (Stage IIIA) is combined with leachate in the collection system and is conveyed to the Surge Pond south of the disposal site.

3.1.4 Cover System

- Stage I disposal area is capped and has established vegetative cover.
- Portions of the Stage II disposal area currently have an intermediate cover in place with established vegetation. These areas include the side slopes and plateau areas adjacent to Stage I.
- Stage II disposal area is currently in the process of being closed, in phases. A closure cap in accordance with §257.102 is being installed. The first phase, second phase, and third phases were completed in 2023, 2024, and 2025, respectively.

3.2 Summary of Landfill Construction

Since the last site inspection, disposal of CCR is being placed in Stage II and IIIA disposal areas. No liner construction occurred during 2025. Closure capping in the Stage II disposal area has been installed in the temporarily closed areas of Stage II.

3.3 Review of Prior Inspections

Periodic inspections: A review of periodic inspections has concluded that no significant deficiencies occurred at the facility that required remedial actions. On March 3rd, a non-groundwater impact CCR release was discovered, was investigated by the Pennsylvania Department of Environmental Protection, and repaired by March 10th. A report summarizing the findings and repairs is posted to the Station's CCR Rule website at http://ccr.keyconops.com/.

Previous Annual Inspection Report: The previous annual inspection report does not note deficiencies or releases, actual or potential structural weaknesses, or concern to the stability of the landfill. Environmental control systems were found to be in good operating condition and functioning as intended. Recommendations from the prior report (related to landfill operations and maintenance) were found to have been implemented.

3.4 CCR Disposal

Based on information provided in the Annual Operations Report, the total in-place disposal quantity of CCR materials as of December 2024 was estimated at 69,192,578 tons. At the end of December 2025, approximately 109,314 tons of additional materials have been disposed. The approximate total CCR disposal quantity at the end of 2025 is 69,301,892 tons.

4.0 Site Inspection

The site inspection was performed on November 6, 2025 by Mr. Shields and Ms. Boring, and during which time efforts were focused on identification of standard geotechnical signs of distress or malfunction. Specific aspects such as slumping at the toe of slope, tensile cracking, abnormal or excessive erosion on the side slopes, slope bulging, and groundwater/surface water seepage or ponding were assessed. If present, these readily visible signs are potential indicators of structural weakness of the CCR Landfill unit.

4.1 Visual Signs of Distress or Malfunction

No visual signs of distress or malfunction were observed during the inspection. Stormwater drainage features, slope appearance and stability, leachate conveyance mechanisms, and overall site conditions were assessed. Closed portions of the landfill exhibited well established vegetative cover.

4.2 Review of Environmental Control Systems

Stage II and IIIA disposal area stormwater channels, leachate collection, intermediate cover areas, and capped areas (Stage II only) are functioning as intended. The channels throughout the site appeared to be in functioning condition. Minor sediment build up was noted at the entrance to several culvert

locations but sediment build up was within normal operating standards and maintenance is not required at this time. With no evidence to the contrary, the bottom liner systems for the Stage II and IIIA disposal areas are believed to be in good operating condition and functioning as intended.

4.3 Review of Previously Recommended Actions

There were no deficiencies or releases identified during the 2024 annual inspection that required the owner or operator to perform corrective actions per §257.84(b)(5). Recommendations were limited to the continued operation and maintenance of the facility and maintaining access to closed portions of the landfill for inspection purposes. These recommendations were found to have been followed, based on site conditions and the review of weekly inspection logs.

5.0 Conclusions

5.1 Changes in Geometry

Closure capping in the Stage II disposal area has reduced the temporarily closed areas of Stage II but has not changed the geometry of the actively opened disposal areas in Stage II and Stage III. There have been no significant changes in geometry of the disposal site since the last inspection. CCR material placement has progressed in vertical elevation within the active Stage II and Stage IIIA disposal areas throughout the year.

5.2 In-Place CCR Disposal Quantities

The total CCR disposal quantity at the end of 2025 is approximately 69,301,892 tons.

5.3 Appearance of an Actual or Potential Structural Weakness of the CCR Unit

At the time of inspection, there were no signs of distress or malfunction that would indicate actual or potential structural weakness at the Ash Disposal Site.

5.4 Changes that may Affect the Stability or Operation of the CCR Unit

There have been no changes to the inspected areas of the Ash Disposal Site that pose a threat or concern to the stability of the landfill.

5.5 Other Items of Concern

No items of concern are noted.

6.0 Recommendations

1. Continue operation and maintenance in the active areas as currently performed.
2. Perform maintenance on the channels to clear sediment build up when necessary to maintain channel functionality.
3. Ensure adequate access to the closed portions of the landfill to maintain the ability to perform weekly visual site structural inspections.
4. Saplings identified along the inner edge of the Stage III collection channel should be removed as they may affect the anchor trench of the liner system in this area.
5. Downed tree across channel on the western side of the haul road should be removed to prevent obstruction of the channel.

FIGURE 1
Photo Location Map

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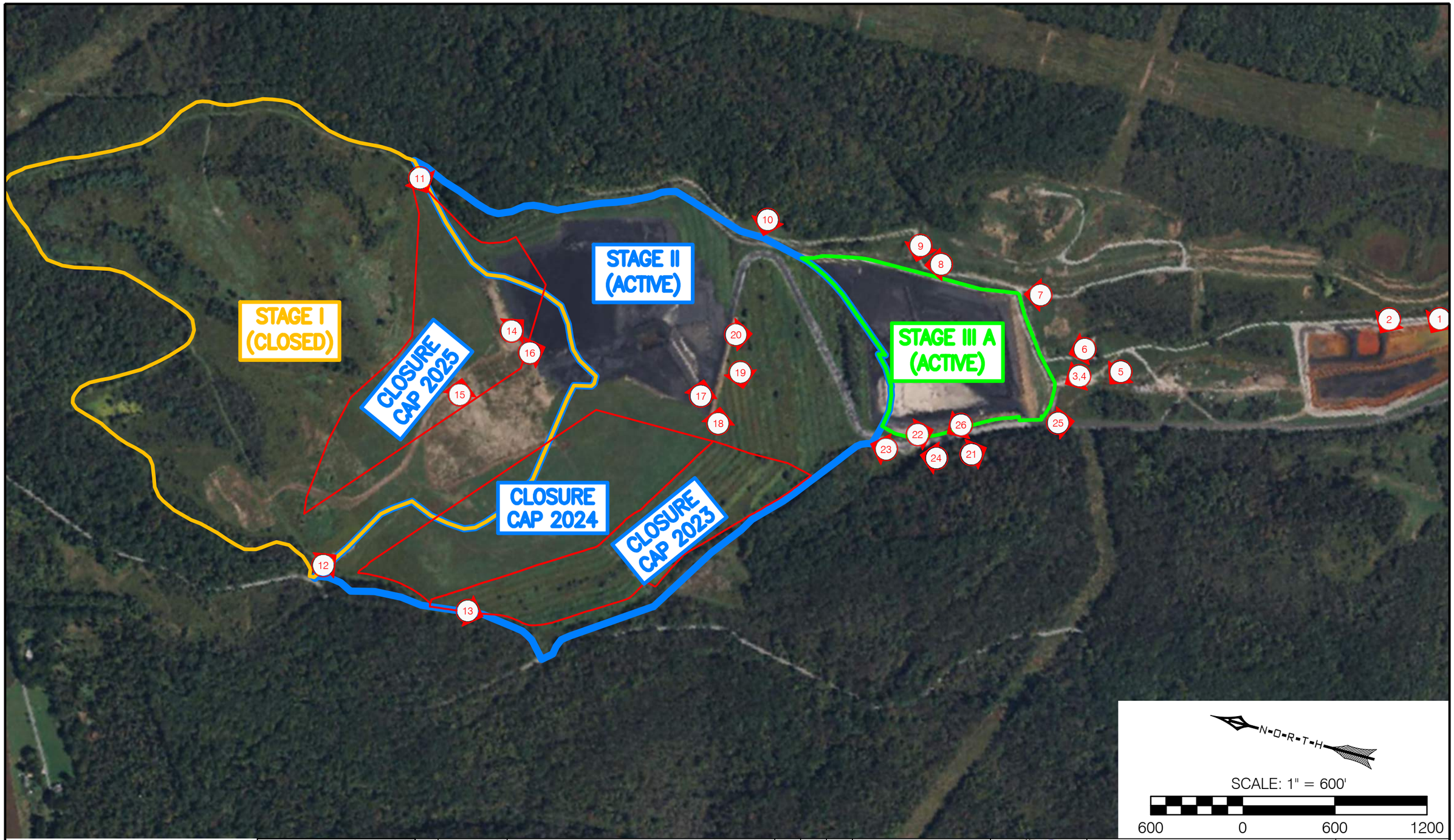

MAP REFERENCE:

MAP OBTAINED FROM 2023 MICROSOFT CORPORATION 2023 MAXAR CNES (2023) DISTRIBUTION AIRBUS DS MICROSOFT BING

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NO.	DATE	REVISIONS	BY	CHK	APP

DATE: 11/11/2025
BY: KAPEL
CHK: TBORING
APP: JSHIELDS
SIZE: B 11X17
DISCIPLINE:
SCALE: AS SHOWN

KeyCon

CONEMAUGH

FIGURE 1 - PHOTO LOCATION MAP
CONEMAUGH DISPOSAL SITE

DRAWING NO.

SHEET:

REV:

FILE: C151611-10-000-001

GAI FILE PATH: Z:\ENERGY\2015\C151611.10 - KEYCON CON 24-25 CCR COMP\CAD\ACAD\PRODUCTION DWGS\ANNUAL REPORT 2025-PHOTO LOCATION MAP\C151611-10-000-001.DWG PLOTTED BY: TAYLOR BORING DATE: 1/19/2026

APPENDIX A
Photographs

Photograph 1. Surge Pond, immediately north of disposal site treatment plant; view northwest.

Photograph 2. Disposal Site Surge Pond; view northwest.

Photograph 3. Stage IIIA Stilling Basin, Leachate collection piping and v-notch weir (left), Leachate detection pipe and v-notch weir (right).

Photograph 4. Stage IIIA toe collection channels and leachate and leak detection flows from stilling basin (right); view north.

Photograph 5. Stage IIIA toe collection channel and flows from subgrade drainpipes (with signs) from Stages II/III; view northwest.

Photograph 6. Stage IIIA slope of southern facing benches; view north.

Photograph 7. Stage IIIA Collection Channel along first bench on east side of Stage IIIA; view northeast.

Photograph 8. Stage IIIA Collection Channel; no erosion rills present in the northeast corner of Stage IIIA.

Photograph 9. Saplings along Stage IIIA Collection Chanel to be removed; view west.

Photograph 10. Haul road to Stage II; view west.

Photograph 11. The recently capped and vegetated northeastern side of Stage II; view southwest.

Photograph 12. Stage II northwest top surface drainage channel; view southeast.

Photograph 13. Capped Western benches of Stage II.

Photograph 14. Northern portion of the active Stage II area; view east. Placement of recently disposed fly ash.

Photograph 15. Recently capped top area of Stage II; view northeast.

Photograph 16. Southern portion of Stage II; view south.

Photograph 17. Southern benches of Stage II, view east.

Photograph 18. Stage II active disposal area (left), haul road (center), and haul road drainage channel (right); view east.

Photograph 19. Southern slope benches of Stage II; view west.

Photograph 20. Stage II southern benches (foreground) and active Stage IIIA (background); view south.

Photograph 21. Downed tree in channel west of haul road; view south.

Photograph 22. Haul road collection channel, view south. In the photo, Stage IIIA is to the left (east) and the paved haul road is to the right (west).

Photograph 23. Channel along the Stage II haul road; view northeast.

Photograph 24. West Diversion Channel and Culvert 8 with minor sediment build up, adjacent to Stage IIIA, along the Stage II haul road; view north.

Photograph 25. Haul road south of Stage IIIA; view south.

Photograph 26. Haul road collection channel and culvert with sediment build up; view north.