

POST CLOSURE PLAN

CFR 257.104(D)

Fly Ash Pond
John E Amos Plant
Winfield, West Virginia

October, 2017
(REVISED January 2022)

Prepared for: Appalachian Power Company

Prepared by: Geotechnical Engineering Services

American Electric Power Service Corporation

1 Riverside Plaza

Columbus, OH 43215



POST CLOSURE PLAN
CFR 257.104(d)
FLY ASH POND
JOHN E AMOS PLANT

PREPARED BY

Gary F. Zych

DATE 1/31/2022

Gary F. Zych, P.E.

REVIEWED BY

Brian G. Palmer

DATE 02/01/2022

Brian G. Palmer, P.E.

APPROVED BY

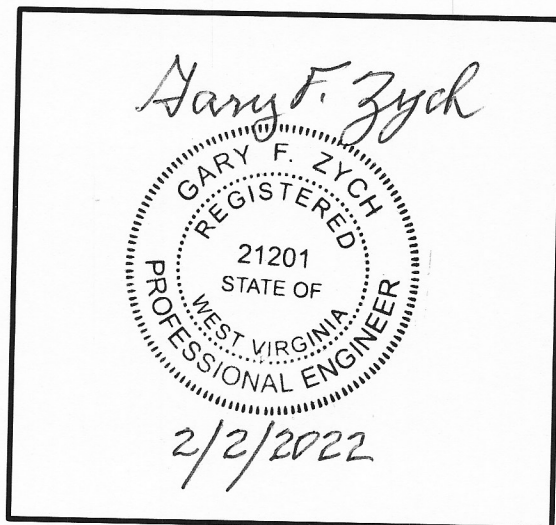
Gary F. Zych

DATE

2/2/2022

Gary F. Zych, P.E.

Manager - AEPSC Geotechnical Engineering



I certify to the best of my knowledge, information, and belief that the information contained in this post closure plan meets the requirements of 40 CFR § 257.104

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Revision January 2022:

Editorial changes to the inspection requirements.

Added contact information now that the CCR unit is in the Post Closure Care period.

Added the effective start date of the Post Closure Care period.

1.0 OBJECTIVE

This report was prepared by AEP- Geotechnical Engineering Services (GES) section to fulfill requirements of CFR 257.104(d) for Post Closure Plan of CCR units.

2.0 DESCRIPTION OF THE CCR UNIT

The John E Amos plant is located in Putnam County, West Virginia. It is owned and operated by Appalachian Power Company (APCO). The facility operates two surface impoundments as part of the operations for storing CCR. This Post Closure Care Plan is for the Fly Ash Pond.

The Fly Ash Pond is a surface impoundment constructed for the permanent disposal of fly ash. The impoundment was formed by constructing the fly ash dam. The dam is a cross valley dam on Scary Creek, a tributary to the Kanawha River. The dam is 220 feet high and has side slopes of 2.5 to 3H:1V on the upstream slope, and 2.0 to 2.5H:1V on the downstream slope.

3.0 DESCRIPTION OF POST CLOSURE PLAN 257.104(d)(1)(i)

[A description of the monitoring and maintenance activities required in paragraph (b) of this section for the CCR unit, and the frequency at which these activities will be performed.]

The fly ash pond has been closed by closure in place. The post closure care period will be 30 years. The post closure care period began on January 10, 2018 based on the Notice of Closure Completion included at the end of this Plan.

3.1 SECTION 257.104(B)(1)

[Maintaining the integrity and effectiveness of the final cover system including making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover.]

Inspections are performed for the items noted below. The inspection frequencies of the dam and spillway structures will be scheduled monthly, as per West Virginia Department of Environmental Department Dam Safety regulations, to properly detect any issues so that repairs can be performed before significant harm occurs. Inspections related to the cover system will be conducted on a quarterly basis.

- Fly ash dam: The dam will be inspected for slides, settlement, subsidence, seepage, displacement, and condition of the riprap cover
- Spillway channel: The spillway channel will be inspected for slides, displacement, and erosion.
- Cover: The final cover of the pond area will be inspected for erosion and for the condition of the vegetated cover, i.e., gaps in vegetation or presence of undesirable trees or brush. The area will be inspected for any ponding of surface water runoff.
- Surface Drainage System: The surface drainage system, including channels, culverts, slope drains, etc., will be inspected for erosion, integrity of channel lining, ponding, and accumulated sediment.

Maintenance during the post-closure care period will be performed as discussed below, based upon the facility inspections described above.

- Security Control Devices: Any portions of the roadway barricades which might be damaged will be repaired or replaced as necessary.
- Erosion Damage Repair: Any areas exhibiting erosion will be repaired by replacing and compacting the material in-kind to design grade/specifications, and reseeding the area to the specifications. Applications of additional fertilizer, selective herbicides, rodent control measures, etc. will be implemented as necessary. In the selection of fertilizers and herbicides, ensure their use will not impact the groundwater negatively. Follow-up monitoring of the repaired area will be conducted to ascertain the integrity of the repair.
- Settlement, Subsidence, Displacement: Any areas at the closed site exhibiting evidence of settlement, subsidence, or displacement will be examined to determine the cause of the movement. If backfilling or placing additional fill material is needed to maintain the integrity of the closed structure, it will be performed in accordance with the site/closure specifications, including seeding. If the condition reoccurs or persists, or if the severity of the condition initially is judged to warrant it, a detailed investigation of the cause will be performed and remedial action will be performed. Similarly, any areas of the dam exhibiting sliding, displacement, or seepage will be investigated. Repairs will be made as necessary. Follow-up monitoring of the area will be performed to ascertain that the problem has been corrected.
- Closure Cap Surface: Any areas that show signs of ponding water or flat contours will be examined and rectified.
- Surface Water Drainage System: The channel linings are designed to withstand the design velocities. Maintenance of the surface water drainage system will consist of removing sediment and/or undesirable vegetation from the surface water runoff control system (channels and culverts) as required. Eroded areas will be repaired by back-filling and reseeding according to the specifications. Damage to culverts will be repaired; structure replacement will be performed if needed.
- Seepage: Seepage from the dam will be inspected, investigated, monitored, or repaired as deemed necessary.

3.2 SECTION 257.104(B)(3)

[Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of §§257.90 through 257.98.]

The groundwater monitoring system will be inspected for the general integrity of the wells, well casings and well protective casings. Any damaged portions of the monitoring wells and/or their protective casings will be replaced in-kind.

Monitoring the groundwater will be in accordance with the groundwater monitoring plan for this facility and in accordance with the requirements of §§257.90 through 257.98.

4.0 POST-CLOSURE CONTACT 257.104 (d)(1)(ii)

[The name, address, telephone number and email address of the person or office to contact about the facility during the post-closure care period.]

Name: David Miller – AEP Service Corp.
Address: One Riverside Plaza
Telephone: 614-716-2281
Email: damiller@aep.com

5.0 POST-CLOSURE PLANNED USE 257.104 (d)(1)(iii)

[A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other component of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements in this subpart...]

The post-closure use of the property will be undisturbed vacant land space. The only activities occurring on the closed CCR unit will be related to the Post-Closure care activities.



American Electric Power
1 Riverside Plaza
Columbus, OH 43215
aep.com

January 10, 2018

Mr. Austin Caperton, Cabinet Secretary
West Virginia DEP – Executive Office
601 57th Street SE
Charleston, WV 25304

Subject: Amos Power Plant
Coal Combustion Residual Rule
Little Scary Creek Surface Impoundment (Fly Ash Pond)
40 CFR §257.102(f)(3) Closure Completion PE Certification
40 CFR §257.102(h) Placement of Completion of §257.102(f)(3) in Operating Record
40 CFR §257.105(i)(8) Completion of §257.102(h) Placed in Operating Record
40 CFR §257.106(i)(8) Notification to State Director of Completion of §257.105(i)(8)
40 CFR §257.107(i)(8) Notification of Completion of §257.105(i)(8) Placed on Publicly Accessible Site

Dear Cabinet Secretary Caperton:

The Federal Coal Combustion Residual Rule requires the following:

- §257.102(f)(3) A Certification from a qualified Professional Engineer that the closure of a CCR Unit was completed in accordance with the Closure Plan.
- §257.102(h) Completion of a notification that the closure completion certification has been completed and placed in the operating record.
- §257.105(i)(8) Placement of the closure completion certification in the operating record.
- §257.106(i)(8) Notification to the State Director that the closure completion certification has been placed in the operating record.
- §257.107(i)(8) Placement of the notification of closure completion certification on the CCR Rule Compliance Data and Information Website.

Attached you will find the Certification that the Phase 1 through 3 activities to complete the closure of the John E. Amos Plant Fly Ash Pond were completed in accordance with the closure plan. This letter is to inform you that closure was completed and certified on December 14th, 2017 and we have placed the above information in the respective locations. The public CCR Rule Compliance Data and Information internet site is available at the following link: <http://www.aep.com/about/codeofconduct/ccrrule/>.

If there are any questions please contact me at (614) 716 – 2252, or by email at bekepchar@aep.com.

BOUNDLESS ENERGY

Sincerely,

A handwritten signature in black ink that reads "Benjamin E. Kepchar". The signature is written in a cursive style with a large initial 'B'.


Benjamin E. Kepchar
Land Environment & Remediation Services

cc: Mr. Scott Mandirola, WVDEP
Mr. Justin Painter, WVDEP
Mr. Bill Sentman, WVDEP
Mr. Jon Webster, Amos Plant

Attachments

6.0 CERTIFICATION

Based on the construction testing and observation performed by Terracon Consultants, Inc. personnel; and the information provided by AEP, and R. B. Jergens Contractors, Inc.(Contractor), I hereby certify that the Fly Ash Pond Closure – Phase I Construction, completed in 2015, at Amos Plant Fly Ash Pond has been completed and to the best of my knowledge is in substantial accordance with the construction documents.


Mohammad S. Rany, P.E.
Certifying Engineer
E-19070



6.0 CERTIFICATION

Based on the construction testing and observation performed by Terracon Consultants, Inc. personnel; and the information provided by AEP, and R. B. Jergens Contractors, Inc.(Contractor), I hereby certify that the Fly Ash Pond Closure – Phase II Construction, completed in 2016, at Amos Plant Fly Ash Pond has been completed and to the best of my knowledge is in substantial accordance with the construction documents.

Mohammad S. Finy, P.E.
Certifying Engineer
E-19070



6.0 CERTIFICATION

Based on the construction testing and observation performed by Terracon Consultants, Inc. personnel; and the information provided by AEP, and R. B. Jergens Contractors, Inc.(Contractor), I hereby certify that the Fly Ash Pond Closure – Phase III Construction, completed in 2017, at Amos Plant Fly Ash Pond has been completed and to the best of my knowledge is in substantial accordance with the construction documents.

M.S.
Mohammed S. Raafiq
Certifying Engineer
E-19070