

UPDATED CCR CLOSURE PLAN

Bottom Ash Ponds

*Former Monticello Steam Electric Station
Titus County, Texas*

Prepared for:
GOLDEN EAGLE DEVELOPMENT LLC

Prepared by:
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January 2021

On behalf of Golden Eagle Development, LLC (Golden Eagle), ATON, LLC (ATON) has prepared this Updated Coal Combustion Residue (CCR) Closure Plan (30 TAC 352.1221/40 CFR 257.102(b)) for the Bottom Ash Ponds (BAPs) at the Monticello Steam Electric Station (MOSES) (Figure 1). This plan is an update to the closure plan submitted in October 2016 by Luminant Generation Company, LLC (PBW, 2016). The 2016 closure plan design proposed to close one of the BAPs by CCR removal and cap the other two ponds. Per this updated plan all three BAPs will be closed by removal.

1.0 BOTTOM ASH PONDS

The site contains three BAPs subject to CCR closure requirements, Northeast Ash Water Retention Pond (WMU 11), West Ash Settling Pond (WMU 12), and Southwest Ash Settling Pond (WMU 22) that comprise of approximately 19-acres (Figure 2). The adjacent Stormwater Collection Pond (WMU 9) is not subject to CCR regulations. The BAPs were built in 1974; however, they were relined in 1990 with 3-foot clay liners.

The BAPs received recovered overflow from bottom ash dewatering bins and other MOSES process wastewater sources. The ponds also acted as a surge basin for various water streams in the ash-water system. Recovered sluice water, process waters and storm water runoff from the MOSES ash-water system were pumped to each pond through a series of above grade pipes on the east end. The BAPs also served as settling basins to remove residual bottom ash and fines from recovered sluice water associated with the dewatering bins. Water was pumped from the SW Pond, as needed, and returned for reuse in the bottom ash system. When sufficient ash had accumulated in either the NE or West Ponds, the recovered sluice water was diverted to the other pond. Ash was then removed from the first pond and transported via train car to the G Ash Area. Based on the design of the BAPs, minimal accumulation of solids occurred within the SW Pond.

2.0 BOTTOM ASH PONDS CLOSURE - CLOSURE BY REMOVAL OF CCR

2.1 Closure by Removal

The purpose of this Updated CCR Closure Plan is to describe the steps required to close the BAPs at MOSES consistent with recognized and generally accepted good engineering practices. Closure of the BAPS will be designed to reduce the need for long-term maintenance and control the post-closure release of constituents into environmental pathways. The BAPS will be closed through the removal of CCR, and the closure will be performed pursuant to 40 CFR 257.102(c).

The ash material from the BAPs will be dewatered of free liquids via pumping to the North Operating Pond (WMU 007) starting with the SW Pond. Following removal of free liquids, the bottom ash material from the ponds will be excavated and hauled to the B-Area Landfill (WMU 002) for beneficial structure fill starting with the SW Pond. Water and bottom ash will then be removed from the NE Pond and West Pond, respectively. The embankments and bottom clay liner will also be removed following the bottom ash and used as B-Area fill. Pipelines that are above be removed from the around the

impoundments. Underground pipelines entering the impoundments will be excavated and removed or closed in place as necessary for future grading.

After removal of the liner and embankments a grid-based confirmation sampling plan will be developed and implemented to characterize concentrations of CCR indicator constituents listed in Appendix IV of the CCR rule. A sufficient number of samples will be collected (minimum of 20) to allow for statistical evaluation of the characterization data to ensure areas potentially affected by releases from the CCR unit are removed. Upon closure completion, certification from a qualified Texas professional engineer will be provided verifying that closure has been completed in accordance with the closure plan. Following closure certification, the area will be graded to the southwest toward Lake Monticello via an existing surface water culvert that is currently permitted stormwater Outfall 001. Interior surface grading will provide a 3 to 5 percent slope for drainage relief from the footprint of the former impoundments to ensure (to the maximum extent feasible) that post-closure run-off is conveyed off the former impoundment area. The Stormwater Collection Pond will be closed per Texas Risk Reduction Rule (TRRP) 30 TAC 350.

2.2 Closure Schedule

- Mobilization and dewatering - January 2021
- Bottom Ash Removal – SW Pond - February 2021
- Bottom Ash Removal – NE Pond - March 2020
- Bottom Ash Removal – West Pond - April 2020
- Liner and Embankment Removal - June 2021
- BAP Closure – July 2021
- BAP Area Re-Grading - August 2021

3.0 POST-CLOSURE MONITORING & MAINTENACE

Golden Eagle currently conducts groundwater sampling in the BAP area on a semi-annual basis for Detection Monitoring in accordance with 40 CFR 257.94. Pursuant to 40 CFR 257.102(c), closure will be complete when groundwater monitoring concentrations do not exceed the applicable groundwater protection standard established. The groundwater monitoring of the BAPs will be reviewed and further discussed in a post-closure report.

4.0 CERTIFICATION STATEMENT

This closure plan and all attachments were prepared by ATON LLC under my direction and supervision. This closure plans meets the requirements of 30 TAC 352.1221/40 CFR 257.102 and been prepared in a manner consistent with recognized and generally accepted good engineering practices.



Adam J. Kaiser, PE



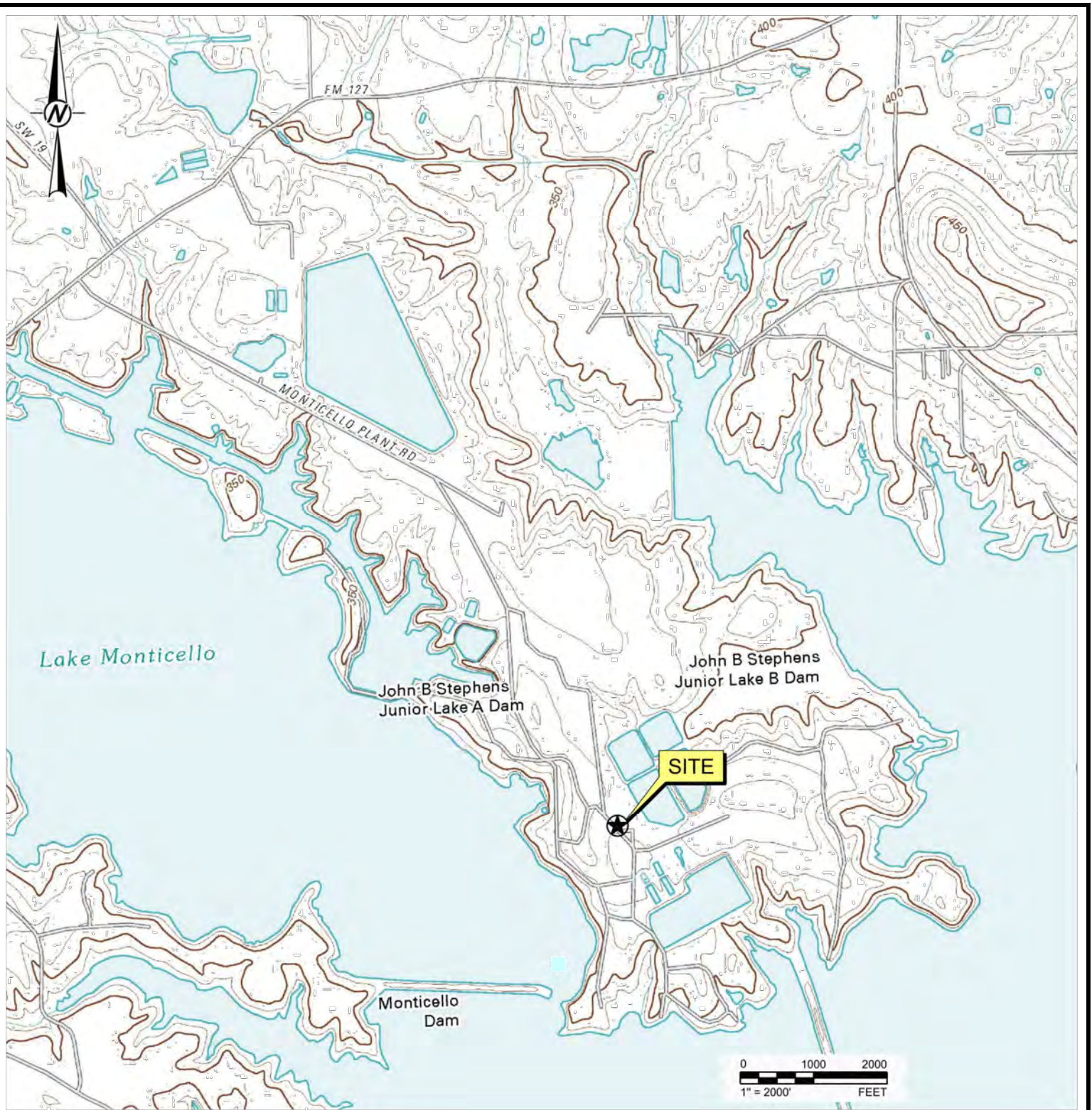
1/9/2021

5.0 REFERENCES

Golder, 2020. *Annual Groundwater Monitoring Report, Monticello Steam Electric Station*. July 10.

Pastor, Behling & Wheeler, LLC (PBW), 2016. *CCR Closure Plan, Monticello Steam Electric Station, Bottom Ash Ponds*. October.

Pastor, Behling & Wheeler, LLC (PBW), 2016. *CCR Post-Closure Plan, Monticello Steam Electric Station, Bottom Ash Ponds*. October.



REFERENCE(S)
 BASE MAP TAKEN FROM WWW.TNRIS.GOV, MONTICELLO, TX 7.5 MIN. USGS QUADRANGLE
 DATED 2010.



QUADRANGLE LOCATIONS

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Figure 1
 Site Location Map
 Former MOSES Site

Chkd:	AK
Drawn:	EFC
Page:	
Date:	9/30/2020
Scale:	As Shown



Source: Google Earth

Date: 2020

Figure 2

NOT TO SCALE



ATON

Site Name:

**Monticello Steam Engine
Electric Station
Mount Pleasant, Texas**

Project:

SWR 30081