

**CLOSURE PLAN
EAST AND WEST ASH BASINS
WAUKEGAN STATION
OCTOBER 2016**

Pursuant to 40 CFR §257.102(b), Geosyntec Consultants prepared this Closure Plan for the East and West Ash Basins at the Waukegan Station (Site), operated by Midwest Generation, LLC. (Midwest Generation), in Waukegan, Illinois (Figure 1). This Closure Plan was developed to describe the steps necessary to close the coal combustion residual (CCR) units at any point during their active life in a manner that is consistent with recognized and generally accepted good engineering practices. Ms. Jane Soule, P.E., of Geosyntec Consultants, prepared this Closure Plan. Mr. Robert White reviewed this plan in accordance with Geosyntec's senior review policy.

The following addresses the information required by §257.102(b).

1. Narrative of Closure - §257.102(b)(1)(i)

The East and West Ash Basins will be closed through removal of CCR, and the closures will be performed in accordance with §257.102(c). CCR will be removed as described in the following section.

2. CCR Removal and Decontamination – §257.102(b)(1)(ii)

The same general process will be used to remove CCR from the East Ash Basin and the West Ash Basins. First, water contained in the basins will be drained using the existing outlet structures. Portable pumps may be used once the pool level is below the invert elevation of the outlet structures to pump water into the outlet structures. Next, heavy equipment will move CCR from one side of the basin to the other to further dewater the CCR solids. Once the material is dry enough to handle, CCR will be loaded into trucks and transported to a beneficial use facility or a permitted disposal facility. If the units will not be transitioned to store non-CCR process waters, the liner systems will be removed and transported to a permitted disposal facility. Otherwise, the liner systems will be properly decontaminated. Appurtenant structures such as inlet troughs, outlet structures, and piping will also be properly decontaminated or removed and transported to a permitted disposal facility depending on potential reuse opportunities for the structures identified at the time of closure. Decontamination procedures for the liner or appurtenant structures may consist of pressure washing, scrubbing, flushing, or other generally accepted decontamination procedures. In accordance with §257.102(c), CCR removal and decontamination will be complete when constituent concentrations throughout the CCR unit and

areas that may have been affected by releases from these units have been removed and groundwater monitoring concentrations do not exceed the groundwater protection standard established pursuant to §257.95(h) for constituents listed in Appendix IV for two consecutive sampling events using the statistical procedures in §257.93(g). Decontamination may include removal of all CCR materials above the geomembrane liner to facilitate inspection of the liner for evidence of damage that may indicate a potential release of CCR. If evidence of a release is identified during closure, materials impacted by the release will be removed or remediated, as appropriate. Existing embankments may be breached to limit collection of stormwater if consistent with future proposed land use.

3. Final Cover Requirements – §257.102(b)(1)(iii)

CCR will be removed from the East and West Ash Basins in accordance with §257.102(c); therefore, no final cover system will be constructed for closure.

4. Maximum CCR Inventory - §257.102(b)(1)(iv)

Detailed records of the maximum inventory of CCR ever onsite and stored in the East and West Ash Basins are not available. For the purposes of this closure plan, the maximum CCR inventory for each basin was estimated to be the maximum quantity of CCR that could be reasonably stored in the basins. The table below presents the estimated maximum CCR inventory for the East and West Ash Basins.

Basin	Estimated Maximum Quantity of CCR (cubic yards)
West Ash Basin	137,200
East Ash Basin	127,600

5. Maximum Area Requiring Final Cover – §257.102(b)(1)(v)

CCR will be removed from the East and West Ash Basins in accordance with §257.102(c); therefore, no final cover system will be constructed for closure.

6. Closure Schedule – §257.102(b)(1)(vi)

Closure of the East and West Ash Basins is anticipated to begin in 2035 and be complete within five years of the commencement of closure in accordance with §257.102(f)(1)(ii). Prior to initiation of closure, a notice of intent to close will be prepared in accordance with §257.102(g).

Closure will assume to have been initiated when waste placement has ceased and any of the following actions are completed:

- Taken any steps to implement this written closure plan;
- Submitted a completed application for any required agency permit or permit modification; or
- Taken any steps to comply with any agency standards that are a prerequisite to initiating closure.

Closure design documents will be prepared to support applications for required local, state, and federal permits. Closure construction design documents may include construction drawings for closure, technical specifications, and adequate CCR removal confirmation procedures. The permits required for closure construction will be evaluated at the time of closure, but are anticipated to include permits from the Illinois Environmental Protection Agency (IEPA), Illinois Department of Natural Resources (IDNR), and Lake County. A preliminary schedule of anticipated closure activities and associated dates is included below.

Closure Activity	Year
Preparation of Closure Construction Design Documents	2033
Obtain Permits	2035
Last Receipt of CCR	2035
Begin Dewatering	2035
Removal of CCR	2035-2040
Decontamination of Appurtenant Structures	2035-2040
Completion of Closure	2040

In accordance with §257.102(e), closure activities will commence when one or more of the following conditions has occurred:

- No later than 30 days after the date on which the CCR unit received the known final receipt of CCR or non-CCR waste;
- No later than 30 days after the removal of the known final volume of CCR for the purpose of beneficial use;
- Within two years of the last receipt of waste for a unit that has not received CCR or non-CCR waste; or

- Within two years of the last removal of CCR material for the purposes of beneficial use.

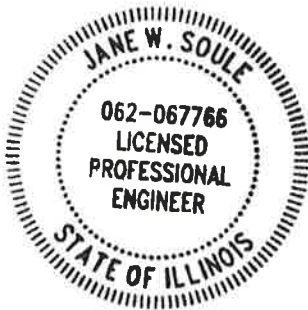
In accordance with §257.102(h), notification of closure of a CCR unit will be made within 30 days of the completion of closure of the CCR unit. The notification will include certification from a qualified professional engineer, as required by §257.102(f)(3).

7. Closure Plan Amendments – §257.102(b)(3)

This Closure Plan will be amended in accordance with §257.102(b)(3) if a change in the operation of the East or West Ash Basins would substantially affect the content of this Closure Plan or if unanticipated events necessitate revision of the plan. If a change in operation requires amendment to the Closure Plan, the plan will be amended no later than 60 days prior to the change in operation being implemented. If an unexpected event occurs that requires amendment of the Closure Plan, the plan will be amended within 60 days of the unexpected event or within 30 days of the unexpected event if the event occurs after closure activities have commenced. Amendments to this Closure Plan will be certified by a professional engineer registered in the State of Illinois in accordance with §257.102(b)(4).

8. Certification – §257.102(b)(4)

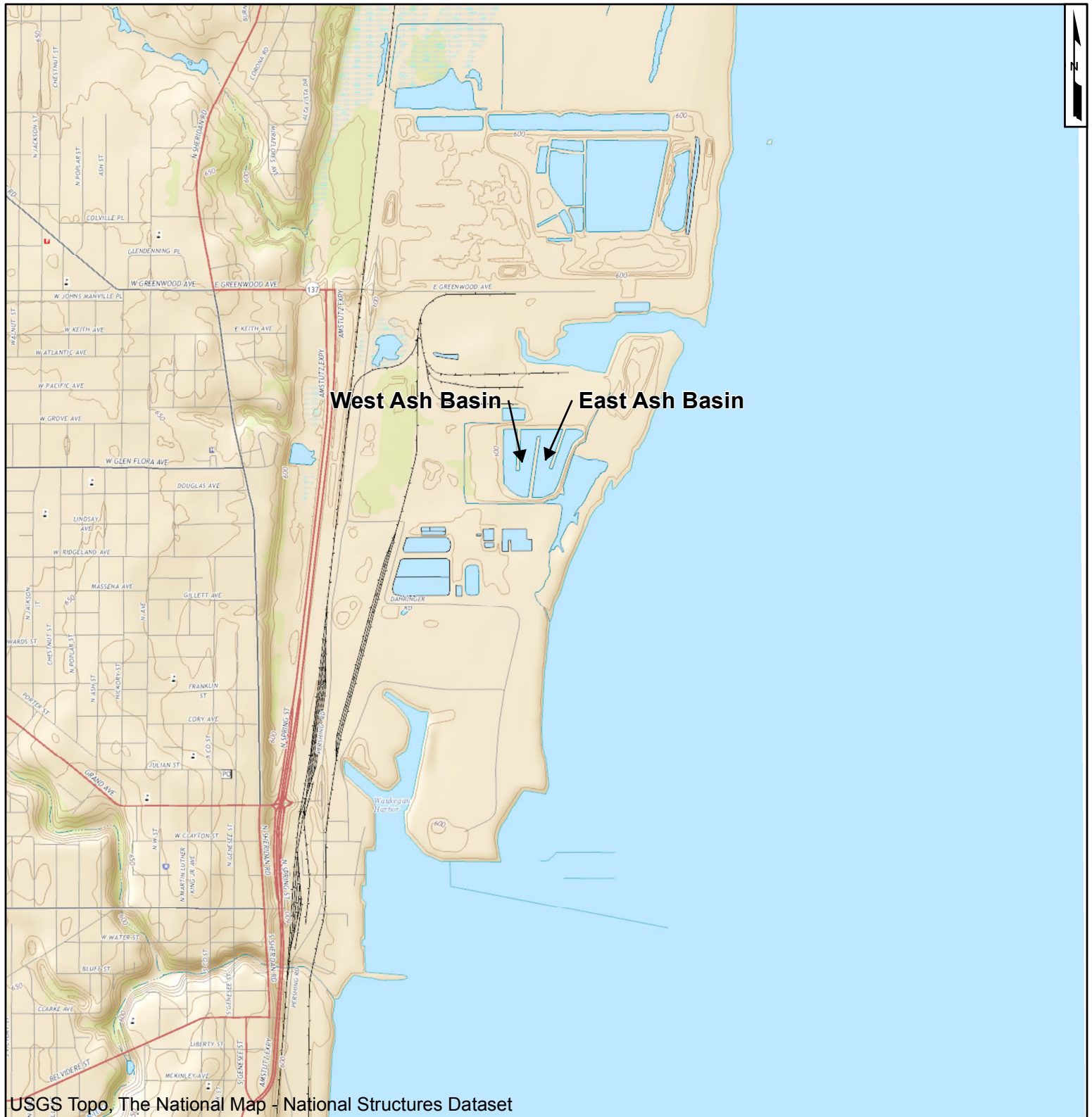
This Closure Plan has been prepared to meet the requirements of 40 CFR §257.102(b) and was prepared under the direction of Ms. Jane Soule, P.E.



A handwritten signature of Jane W. Soule in blue ink, written over a horizontal line.

Jane W. Soule, P.E.

Illinois Professional Engineer No. 062-067766
Expiration Date: 11/30/2017



<p>2,000 1,000 0 2,000 Feet</p>	
<p>Site Location East and West Ash Basins Waukegan Station Waukegan, Illinois</p>	
<p>Geosyntec consultants</p>	
<p>Figure 1</p>	<p>San Diego October 2016</p>

K:\GIS\Waukegan\Site\Location.mxd, J.Gordon