






# Post-Closure Plan for CCR Surface Impoundments

Prepared for Interstate Power and Light Company  
Ottumwa Generating Station  
Ottumwa, IA

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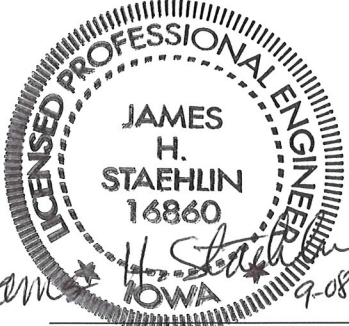
**Certification and Seal:**

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa:

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9-08-16



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## 1. INTRODUCTION & PURPOSE

Interstate Power and Light Company (IPL) – a wholly owned subsidiary of Alliant Energy – operates the single 726MW unit at Ottumwa Generating Station (OGS), located 9 miles northwest of Ottumwa, Iowa. This coal-burning facility operates two CCR surface impoundments: the Zero Liquid Discharge (ZLD) Pond and the Bottom Ash (BA) Pond. The location of the various impoundments is provided for reference in Figure 1.

To comply with the requirements of the USEPA Final CCR Rule (40 CFR §257.50 thru §257.107), Alliant Energy, on behalf of its subsidiary IPL, submits the following Post-Closure Plan detailing the steps to be undertaken during the required 30 year post-closure monitoring period in accordance with §257.104 of the CCR Rule.

This document provides the following required information:

- Description of the monitoring and maintenance activities,
- Contact information of responsible entity for closed CCR facility during post-closure care and,
- Description of the planned uses of the property during post-closure period



**Figure. 1: Overall layout at Ottumwa Generating Station**



OGS manages the Bottom Ash Pond as an existing CCR surface impoundment, since it still receives CCR and will continue doing so until cessation of CCR flows in late 2020. The Zero Liquid Discharge Pond is managed as an inactive CCR surface impoundment, since it has not received CCR on or after October 19, 2015 but may contain historic CCR.

The ZLD Pond is to be closed through removal of CCR, as described in the Closure Plan for this facility. Thus, the ZLD Pond is not subject to the post-closure care requirements pursuant to §257.104(a)(2) and is not discussed herein.

The Bottom Ash Pond will be closed by leaving the CCR in place and is therefore subject to the post-closure care requirements of §257.104. The remainder of this Plan applies only to the BA Pond.

## 2. DESCRIPTION OF MONITORING / MAINTENANCE ACTIVITIES

The following table outlines the maintenance and monitoring activities to be undertaken during the 30-year post-closure care period, as required by §257.104(d)(1)(i) of the CCR Rule.

Monitoring and Maintenance Activities	Frequency
Mow Vegetation	Semi-annually (minimum)
Visual Inspection by Plant Personnel	Monthly (minimum)
Visual Inspection and Report by Licensed Professional Engineer	As necessary
Repair of Vegetative Cover	As necessary
Repair of Final Cover System	Following observance of settlement, subsidence, erosion, or other events
Inspect Groundwater Monitoring System	Monthly
Repair of Groundwater Monitoring System	Following observance of an issue
Monitor the Groundwater	Semi-Annually

### 2.1 Mowing

The Station will perform regular mowing of the final cover system vegetation. Mowing will be performed on a semi-annual basis unless more frequent mowing is required to accommodate higher vegetation growth rates.

### 2.2 Visual Inspections by Owner / Operator

At a minimum, the Owner/Operator of the closed CCR unit shall visually inspect the closed impoundments on a monthly basis to identify any problem areas such as erosion, subsidence, settlement or other events. The monthly visual inspection will also include an inspection of the groundwater monitoring system to visually assess the condition of the protective casing and cover system.



If problems are observed with the vegetative cover, actions will be taken to reseed the area and maintain the erosion protection provided by the vegetation. Furthermore, should the monthly inspection identify issues concerning the final cover system or the groundwater monitoring system, actions will be taking to repair and maintain the final cover system in accordance with the original design.

### **2.3 Visual Inspection and Report by Certified Professional Engineer**

Should the visual inspections by plant personnel indicate potential concerns regarding the integrity of the final cover, a detailed inspection of the closed CCR unit will be performed by a licensed professional engineer. The professional engineer will visually inspect the surface and side slopes of the closed impoundments to identify any problem areas such as erosion, subsidence, settlement or other events. Repair measures will be implemented if deemed necessary.

### **2.4 Groundwater Monitoring**

The Owner / Operator will maintain the groundwater monitoring system and monitor groundwater quality in accordance with the requirements of §257.90 through §257.98. Groundwater monitoring will be performed on a semi-annual basis in accordance with §257.94(b).

## **3. CONTACT INFORMATION FOR POST-CLOSURE CARE**

As required by §257.104(d)(1)(ii) of the CCR Rule, the following contact information is provided if the need arises to discuss the contents or adequacy of this Post-Closure Plan with Station personnel:

Ottumwa Generating Station  
Attn: Plant Manager  
20775 Power Plant Rd.  
Ottumwa, IA 52501  
(641) 786-2903  
[CCRProgram@alliantenergy.com](mailto:CCRProgram@alliantenergy.com)

## **4. PROPERTY USE DURING POST-CLOSURE CARE PERIOD**

Per the requirements of §257.104(d)(1)(iii) of the CCR Rule, the intended use of the closed CCR facility at Ottumwa – as of the issue date of this Plan – is to remain an undisturbed vegetated area.

## **5. CERTIFICATIONS**

It is S&L's opinion that this written post- closure plan meets the requirements of §257.104(d).



## 6. REFERENCES

1. 40 CFR Part 257 – Environmental Protection Agency Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule, Federal Register, Vol. 80, No. 74.