

Ash Ponds Closure

## **Post-Closure Care Plan**

Hutsonville Power Station  
AmerenEnergy Medina Valley Cogen, L.L.C.  
Crawford County, Illinois

September 8, 2014



## Table of Contents

<b>1. Introduction .....</b>	<b>3</b>
<b>2. Post-Closure Maintenance Program .....</b>	<b>3</b>
2.1 Site Inspections.....	3
2.2 Erosion Control Maintenance.....	3
2.3 Drainage Channel Maintenance .....	3
2.4 Final Cover Maintenance .....	3
2.5 Vegetation Repair .....	4
2.6 Geosynthetic Liner .....	4
2.7 Vegetation Mowing .....	4
2.8 Miscellaneous Repairs.....	4
<b>3. Groundwater Monitoring System .....</b>	<b>4</b>
<b>4. Groundwater Monitoring Program .....</b>	<b>4</b>
<b>5. Annual Statistical Analysis .....</b>	<b>4</b>
<b>6. Groundwater Management Zone (GMZ).....</b>	<b>4</b>
<b>7. Mitigation of Statistically Significant Increasing Concentrations .....</b>	<b>4</b>
<b>8. Licensed Professional Signature/Seal.....</b>	<b>5</b>
<b>9. References .....</b>	<b>5</b>

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## **1. Introduction**

The Post-Closure Care Plan (Plan) for the AmerenEnergy Medina Valley Cogen, L.L.C. Hutsonville Power Station (Site) water treatment devices known as Ash Pond A, Ash Pond B, Ash Pond C and the Bottom Ash Sluice Pond, presented herein, are to be closed in compliance with the requirements of Title 35 Illinois Administrative Code, Part 620 (35 IAC 620), and elements of this Plan have been prepared to generally conform with the Ash Pond D site-specific rule at 35 IAC 840, and where judged appropriate, elements of the proposed 35 IAC 841 rules, currently under development (Illinois PCB, 2013). Concurrently submitted supporting documents are cited within this Plan and listed in Section 9 of this report.

## **2. Post-Closure Maintenance Program**

Post-closure activities will continue for a minimum of ten years following the completed closure activities, as defined in the Closure Plan (Hanson and NRT, 2014a) and acceptance of the Site's closure by the Illinois Environmental Protection Agency (EPA). The post-closure maintenance program will include the following:

### **2.1 Site Inspections**

Inspection of the facility will be conducted on a quarterly basis until completion of the post-closure period. Site inspections must also be performed after storm events. For purposes of this Plan, an "Inspection Storm Event", for purposes of this Plan, is defined as a 25-year, 24-hour event (Huff & Angel, 1989), or approximately 5.37 inches of precipitation.

Termination of the site inspections will occur after Illinois EPA approval of the certified Post-Closure Care Report, as discussed herein.

Written record of the inspection(s) will be made and retained at the Site or the Site operator's office. The inspector will assess the condition and need for repair of final cover and vegetation, as well as fencing, monitoring points, and surface water control features.

### **2.2 Erosion Control Maintenance**

During the post-closure care period, repairs and maintenance, including repair of rills and gullies will be undertaken if ponding is observed, or gullies 6-inches or deeper have formed, or if vegetative or vector problems arise. Areas that have been identified by the inspector as particularly susceptible to erosion will be re-contoured and reseeded as necessary.

### **2.3 Drainage Channel Maintenance**

All eroded and scoured drainage channels will be repaired, and the lining material replaced, if necessary. All vegetated areas and associated structures will be inspected as part of the site inspection.

### **2.4 Final Cover Maintenance**

Residual settlement and erosion may require minor final cover repairs. If ponding occurs or depressions appear, the areas will be repaired in order to maintain the integrity of the final cover. Areas of settlement will be repaired with additional cover soils, as required, to maintain drainage.

## **2.5 Vegetation Repair**

Areas repaired as noted above will require re-establishment of vegetative cover. Areas of sparse or failed vegetation in-excess of 100 square feet (ft<sup>2</sup>) will be re-vegetated.

## **2.6 Geosynthetic Liner**

During the post-closure time period all rips, tears, punctures, or other damage to the geosynthetic liner system will be repaired. Construction Quality Assurance (CQA) methods in accordance with the project CQA Plan (Hanson 2014a) will be followed during the repair process.

## **2.7 Vegetation Mowing**

The vegetation will be mowed annually. During mowing and site inspections, if any woody growth is found in the vegetative areas it will be removed promptly.

## **2.8 Miscellaneous Repairs**

Minor repairs may be required to ensure the integrity and proper function of fencing, surface water drainage structures, monitoring points, and groundwater monitoring wells. Repairs will be made as warranted.

## **3. Groundwater Monitoring System**

See Section 2 in the Groundwater Monitoring Plan Report (Hanson 2014b). A list of monitoring wells/piezometers are shown in Figure 1 and further identified in Table 2 of the Hanson (2014b) report. A monitoring system maintenance plan is included at the end of Section 2.2 of the Hanson (2014b) report.

## **4. Groundwater Monitoring Program**

Requirements for the Groundwater Monitoring Program may be found in Section 3 and Appendix C of the Groundwater Monitoring Plan (Hanson 2014b). Quality Assurance requirements may be found in Section 6 of the Hanson (2014b) report.

## **5. Annual Statistical Analysis**

The statistical methodology for the annual review may be found in Appendix A of the Groundwater Monitoring Plan (Hanson 2014b).

## **6. Groundwater Management Zone (GMZ)**

A proposal for a Groundwater Management Zone pursuant to 35 IAC 620.250 for the Site is included in the Groundwater Management Zone Application (Hanson and NRT, 2014b).

## **7. Mitigation of Statistically Significant Increasing Concentrations**

See Section 7.2 in the Groundwater Monitoring Plan (Hanson 2014b) list the steps to demonstrate compliance with the pertinent regulations.

## 8. Licensed Professional Signature/Seal

I hereby affirm that all information and design contained in this Post-Closure Care Plan is true and accurate to the best of my knowledge and belief in accordance with good engineering practice.

Steven M. Bishoff, P.E.  
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Seal:



Expires 11/30/2015

Signature: \_\_\_\_\_

Date: 9-9-2017

## 9. References

- Hanson, 2014a. "Ash Pond Closure, Hutsonville Power Station, Construction Quality Assurance Plan, AmerenEnergy Medina Valley Cogen, L.L.C., Crawford County, Illinois". Hanson Professional Services Inc., Springfield, IL.
- Hanson, 2014b. "Ash Pond Closure, Hutsonville Power Station, Groundwater Monitoring Plan, AmerenEnergy Medina Valley Cogen, L.L.C., Crawford County, Illinois". Hanson Professional Services Inc., Springfield, IL.
- Hanson, 2014c. "Ash Pond Closure, Hutsonville Power Station, Plans and Specifications, AmerenEnergy Medina Valley Cogen, L.L.C., Crawford County, Illinois". Hanson Professional Services Inc., Springfield, IL.
- Hanson and NRT, 2014a. "Ash Pond Closure, Hutsonville Power Station, Closure Plan, AmerenEnergy Medina Valley Cogen, L.L.C., Crawford County, Illinois". Hanson Professional Services Inc., Springfield, IL and Natural Resource Technology, Inc., Milwaukee, WI.
- Hanson and NRT, 2014b. "Ash Pond Closure, Hutsonville Power Station, Groundwater Management Zone Application, AmerenEnergy Medina Valley Cogen, L.L.C., Crawford County, Illinois". Hanson Professional Services Inc., Springfield, IL and Natural Resource Technology, Inc., Milwaukee, WI.
- Huff, F.A. and J.R. Angel, 1989. "Frequency Distributions and Hydroclimatic Characteristics of Heavy Rainstorms in Illinois, Bulletin 70. Illinois State Water Survey, Champaign, IL, 177 pp.
- Illinois PCB, 2013. Rulemaking R2014-10 "Coal Combustion Waste Surface Impoundments at Power Generating Facilities: Proposed New 35 Ill. Adm. Code Part 841 – Statement of Reason". Illinois Pollution Control Board, Springfield, IL, 305 pp + Appendices.