# APPLICABILTY REPORT HUTSONVILLE ENERGY CENTER ASH POND A HUTSONVILLE, ILLINOIS

Prepared for

## AmerenEnergy Medina Valley Cogen, LLC

Prepared by



engineers | scientists | innovators

1 McBride and Son Center Drive, Suite 202 Chesterfield, Missouri 63005

Project Number GLP8085

May 2025

#### INTRODUCTION

This Applicability Report ("Report") has been prepared on behalf of AmerenEnergy Medina Valley Cogen, LLC (Medina Valley) to meet the requirements of 40 CFR. 257.100(f)(1)(i). The revised rule was promulgated in May 2024 as a revision to the federal CCR rule (40 CFR Part 257, Subpart D). The purpose of this Report is to identify a legacy CCR surface impoundment owned and operated by Medina Valley at the former Hutsonville Energy Center.

An Applicability Extension Report [2] was previously developed for Ash Pond A and submitted by Medina Valley in accordance with the requirements of 40 CFR 257(f)(1)(iii). A field investigation workplan was included within the Applicability Extension Report to address identified data gaps.

This Applicability Report was developed based upon findings from the field investigation that followed the field investigation workplan.

Information is also included regarding the completed closure of the legacy CCR surface impoundment Ash Pond A in accordance with 40 CFR 257(i)(8) and 257.102(d).

Text that quotes federal regulations or portions thereof are presented in *italic font*.

#### REPORT CONTENTS

§ 40 CFR 257.101(f)(1)(i)- Identifying Information

This Report includes the following as specified in 257.100(f)(1)(i):

- (A) The name and address of the person(s) owning and operating the legacy CCR surface impoundment with their business phone number and email address.
- (B) The name associated with the legacy CCR surface impoundment.
- (C) Information to identify the legacy CCR surface impoundment, including a figure of the facility and where the unit is located at the facility, facility address, and the latitude and longitude of the facility.
- (D) The identification number of the legacy CCR surface impoundment if one has been assigned by the state.
- (E) A description of the current site conditions, including the current use of the inactive facility.

The certification of the Applicability report by the owner in accordance with (f)(1)(ii) is included in **Attachment 3.** 

This Report has been completed under an extension to the Applicability Report [2] in accordance with (f)(1)(iii).

§ 40 CFR 257.100(i)- Completion of Closure Prior to November 8, 2024

This Report includes the following as specified in 257.100(i)(8):

Include in the applicability report information on the completed closure, along with supporting documentation to demonstrate that the closure meets the performance standards in  $\S$  257.102(d) or the standards specified in  $\S$  257.101(g);

Information regarding closure under § 257.102(d) are presented in this Report.

§ 257.102(d)- Closure Meets the Performance Standards when Leaving CCR in place

This Report includes the following information and supporting documentation to demonstrate compliance with the performance standards when leaving CCR in place as specified in 257.102(d), summarized below.

- (d) Closure performance standard when leaving CCR in place
  - (1) General performance standard.
  - (2) Drainage and stabilization of CCR units.
  - (3) Final cover system.

#### § 40 CFR 257.100(f)(1)(i)- IDENTIFYING INFORMATION

(A) Owner's Contact Information

The name and address of the person(s) owning and operating the legacy CCR surface impoundment with their business phone number and email address, is as follows:

Name and address:

Craig J. Giesmann, P.E., P.M.P. Director, Environmental Services Ameren 1901 Chouteau Avenue St. Louis, Missouri 63103

Phone Number:

Email address:

(B) Name of the Legacy CCR Surface Impoundment

The name of the legacy CCR surface impoundment is Ash Pond A.

(C) Legacy CCR Surface Impoundment Location Information

A figure that illustrates where the unit is located at the facility, and the latitude and longitude of the facility is presented in **Attachment 1**. This figure was developed by Ramboll and was obtained from their 2024 Groundwater Monitoring Annual Report for the Hutsonville site [1].

The address of the facility is: 15142 East 1900<sup>th</sup> Avenue

Crawford County

Hutsonville, IL 62433

(D) Illinois Environmental Protection Agency (IEPA) Identification Number

The IEPA Identification number is: W0330100003-01.

(E) Current Site Conditions and Use

A description of the current site conditions, including a description of the current use of the inactive facility, is presented in **Attachment 2**.

#### § 40 CFR 257.100(i)- COMPLETION OF CLOSURE PRIOR TO NOVEMBER 8, 2024

The relevant portion of this paragraph is to include specific information regarding compliance with the relevant performance standard in 257.100(i)(8). This information is presented herein.

### § 257.102(d)- CLOSURE PERFORMANCE STANDARD WHEN LEAVING CCR IN PLACE

257.102(d)(1) *General performance standard.* The owner or operator of a CCR unit must ensure that, at a minimum, the CCR unit is closed in a manner that will

257.102(d)(1)(i) Control, minimize, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground surface water or to the atmosphere;

Hutsonville Ash Pond A is closed with a final cover system and bottom liner that minimizes postclosure infiltration of liquids into the waste, releases of CCR, leachate, or run-off contact with CCRs to the ground surface water or to the atmosphere.

257.102(d)(1)(ii) Preclude the probability of future impoundment of water, sediment, or slurry;

Hutsonville Ash Pond A is currently closed with a final cover system that precludes the probability of future impoundment of water, sediment, or slurry. The cover slopes range from 5.0 to 5.4 %. Rainfall runoff is directed to letdown channels sloped at approximately 5% and off the cover.

257.102(d)(1)(iii) *Include measures that provide for major slope stability to prevent sloughing or the movement of the final cover system during the closure and post-closure care period.* 

The cover system has been designed and constructed to maintain major slope stability and prevent sloughing as described in the Closure Plan [3] and CQA Report [5].

257.102(d)(1)(iv) Minimize the need for further maintenance of the CCR unit; and

Hutsonville Ash Pond A is maintained through an inspection and maintenance program.

257.102(d)(1)(v) Be completed in the shortest amount of time consistent with recognized and generally good engineering practices.

Hutsonville Ash Pond A closure began in 2015 was closed in 2016; this is the shortest amount of time under recognized and generally good engineering practices at the time of closure.

257.102(d)(2) **Drainage and stabilization of CCR units.** The owner or operator of any CCR units must meet the requirements of paragraphs (d)(2)(i) and (ii) of this section prior to installing the final cover system required under paragraph (d)(3) of this section.

257.102(d)(2)(i) Free liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues.

All surface waters were removed and the remaining wastes were stabilized sufficient to support the final cover system at the time of closure.

257.102(d)(2)(ii) Remaining wastes must be stabilized sufficient to support the final cover system.

The remaining wastes were stabilized sufficient to support the final cover system at the time of closure.

257.102(d)(3) **Final cover system.** If a CCR unit is closed by leaving CCR in place, the owner or operator must install a final cover system that is designed to minimize infiltration and erosion and at a minimum, meets the requirements of paragraph (d)(3)(i) of this section, or the requirements of the alternative final cover system specified in paragraph (d)(3)(ii) of this section.

The owner installed an alternative final cover system in accordance with paragraph 257.102(d)(3)(ii) of this section. The closure plan was approved by the Illinois Environmental Protection Agency (IEPA) prior to construction by an approval letter on April 8, 2015 [4]. The IEPA also approved the construction by an approval letter on March 30, 2017 [6].

257.102(d)(3)(ii) The owner or operator may select an alternative final cover system design, provided the alternative final cover system is designed and constructed to meet the criteria in paragraphs (d)(3)(ii)(A) through (C) of this section. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this section.

The following demonstrates equivalent compliance with paragraphs 257.102(d)(3)(ii)(A), (B) and (C).

257.102(d)(3)(ii)(A) The design of the final cover system must include an infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (d)(3)(i)(A) and (B) of this section.

The alternative final cover system design was included in the written closure plan for Hutsonville Ash Pond A [3]. The alternate cover system of Hutsonville Pond A consists of a 40-mil HDPE cover liner overlain with a 3-foot layer of infiltration layer soil. Hutsonville Ash Pond A was constructed with an 80-mil HDPE bottom liner. The cover geomembrane has a permeability that is equal to the bottom liner and meets the requirement of 257.102(d)(3)(i)(A).

257.102(d)(3)(ii)(B) The design of the final cover system must include an erosion layer that provides equivalent protection from wind or water erosion as the erosion layer specified in paragraph (d)(3)(i)(C) of this section.

257.102(d)(3)(i)(C) states: The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth.

The alternative final cover system was designed in 2015 and installed in 2016. The alternate cover system includes a three-foot-thick erosion layer of earthen material above the cover geomembrane liner. It includes an upper six inches of vegetative growth soil that can sustain native plant growth. Vegetation has been maintained during post-closure and the erosion layer provides equivalent protection from wind or water erosion. The cover has been inspected quarterly from 2017 through 2024. There is no significant evidence of wind or water erosion, and it meets the requirements of (3)(ii)(B) and (3)(i)(C).

257.102(d)(3)(ii)(C) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

The final cover system was designed in 2015 and installed in 2016. It is comprised of a three-foot-thick soil layer with the upper six inches vegetated with grasses to meet this criterion. It has been inspected quarterly from 2017 through 2024. There has been no significant settling nor subsidence and ponding has been precluded.



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257.102(2)(3)(iii) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority that the design of the final cover system meets the requirements of this section.

I, Thomas Ward, being a Registered Professional Engineer in good standing in the State of Illinois, do hereby certify in accordance with Section 40 CFR 257.102(d)(3)(iii), to the best of my knowledge, information, and belief, that the design of the final cover system meets the requirements of 40 CFR 257.102(d)(3).

Thomas Ward, P.E.

Printed Name

Signature

Date

<u>062.069043</u> Illinois 3

Illinois 30 November 2025

Registration Number State Expiration Date



#### **CERTIFICATION**

40 CFR 257.100(f)(1)(ii)(A) requires certification from the owner or operator that the information reviewed was true, accurate and complete. This certification is provided in **Attachment 3**.

Sincerely,

 $Thomas\ Ward,\ P.E.\ {}_{(IL,\ MO,\ KY,\ IA,\ AL,\ OH,\ IN,\ TN)}$ 

BWW-

Senior Engineer

John Seymour, P.E. (IL) Senior Principal

Attachments:

Attachment 1: Location Information

Attachment 2: Description of Current Site Conditions and Use

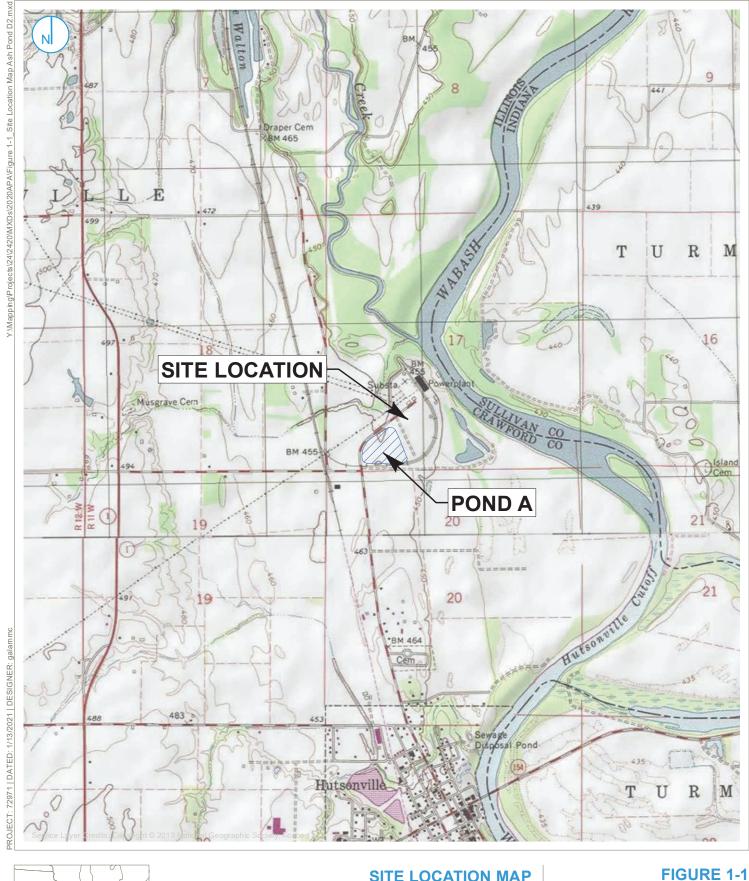
Attachment 3: Certification by Owner

#### REFERENCES

- [1] Ramboll, "2024 Groundwater Monitoring Annual Report Former Hutsonville Power Station Ash Pond A," Ramboll, Chicago, 2025.
- [2] Geosyntec Consultants, Inc., "Applicability Extension Report, Hutsonville Energy Center, Ash Pond A, Hutsonville, Illinois," AmerenEnergy Medina Valley Cogen, LLC, St. Louis, 2024.
- [3] Hanson Professional Services "Closure Plan: Ash Ponds A, B, C & Bottom Ash Pond, Hustonville Power Station" Hanson Professional Services, Springfield, 2015.
- [4] Illinois Environmental Protection Agency, "Hutsonville Pond A Closure Plan Approval Letter," William E. Buscher, P.G., 2015.
- [5] Geotechnology, Inc., "Construction Quality Assurance Report, Closure of Ash Pond A, Ash Pond B, Ash Pond C, and Bottom Ash Pond, Hutsonville Power Station, 15142 East 1900 Aveneue, Crawford County, Illinois," Geotechnology, Inc., St. Louis, 2016.
- [6] Illinois Environmental Protection Agency, "Contstruction Quality Assurance Report: Closure of Ash Pond A, Ash Pond B, Ash Pond C, and Bottom Ash Pond Hutsonville Power Station Approval Letter," William E. Buscher, P.G., 2017.

#### **ATTACHMENT 1**

# LEGACY SURFACE IMPOUNDMENT APPLICABILITY REPORT HUTSONVILLE ENERGY CENTER – POND A SITE PLAN





Map Scale: 1:1:24,000; Map Center: 87°39'45"W 39°7'53"N

1,000 2,000 → Feet

#### SITE LOCATION MAP

2024 ANNUAL REPORT FORMER HUTSONVILLE

**POWER STATION - ASH POND A** AMEREN ENERGY MEDINA VALLEY COGEN, LLC HUTSONVILLE, IL

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC A RAMBOLL COMPANY





RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC A RAMBOLL COMPANY

FIGURE 1-2

MONITORING WELL LOCATION MAP

2024 ANNUAL REPORT
FORMER HUTSONVILLE POWER STATION - ASH POND A
AMEREN ENERGY MEDINA VALLEY COGEN, LLC
HUTSONVILLE, IL

GROUNDWATER COLLECTION
TRENCH (BEGAN OPERATION APRIL 2015) T = 1APPROXIMATE BOUNDARY OF
CAPPED ASH POND

- PROPERTY LINE

NESTED ASH POND A MONITORING WELL LOCATION

ABANDONED NESTED MONITORING

WELL LOCATION

NESTED ASH POND D MONITORING WELL LOCATION
ASH POND A MONITORING WELL LOCATION ASH POND D MONITORING WELL LOCATION

•

150

LIMITS OF GROUNDWATER MANAGEMENT ZONE

CAPPED ASH POND D FORMER BOTTOM FORMER BOTTOM ASH POND FORMER AS FORMER ASH POND B FORMER COAL STORAGE YARD CAPPED ASH POND A

#### **ATTACHMENT 2**

#### LEGACY SURFACE IMPOUNDMENT APPLICABILITY REPORT

#### **HUTSONVILLE ENERGY CENTER – POND A**

#### **CURRENT CONDITIONS AND USE**

#### **CURRENT CONDITIONS**

AmerenEnergy Medina Valley Cogen, LLC (Medina Valley) Company's Hutsonville Energy Center (the Facility) is a retired (inactive) electric power generating facility with a coal fired unit located approximately one and a half miles north of the Village of Hutsonville, Crawford County, Illinois. Ash Pond A lies near the banks of the Wabash River and is bordered to the west and south by farmland; to the north by wooded areas; and to east by the Wabash River.

Ash Pond A was operational from 1986 until the plant ceased generation in December 2011. Fly ash from the operating units was collected and sluiced to Ash Pond A as part of its historical operations [2]. The IEPA has assigned an identification number to Ash Pond A. The IEPA Identification number is: W0330100003-01

The pond was constructed with an 80-mil high density polyethylene (HPDE) liner and CCRs were sluiced to the pond and were permitted to settle out and supernatant liquids were decanted [2].

Ash Pond A was closed over the course of 2015 and 2016 and is capped with a soil and geomembrane liner cover system [3]. Ash Pond A closure was completed in accordance with the IEPA approved Closure Plan and completed closure activities were approved by IEPA in March 2017 [4] [5]. Rainfall stormwater runoff from Ash Pond A is diverted to vegetated and concrete lined ditches and discharges through a permitted NPDES outfall to the Wabash River.

#### **CURRENT USE**

Hutsonville Pond A was closed in October 2016 [3]. The Site is currently inactive and not being utilized for another purpose.

#### REFERENCES

- [1] Ramboll, "2024 Groundwater Monitoring Annual Report Former Hutsonville Power Station Ash Pond A," Ramboll, Chicago, 2025.
- [2] Hanson Professional Services, "Closure Plan: Ash Ponds A, B, C & Bottom Ash Pond Hutsonville Power Station (Rev 1)," Hanson Professional Services, Springfield, 2015.

- [3] Geotechnology, Inc., "Construction Quality Assurance Report, Closure of Ash Pond A, Ash Pond B, Ash Pond C, and Bottom Ash Pond, Hutsonville Power Station, 15142 East 1900 Aveneue, Crawford County, Illinois," Geotechnology, Inc., St. Louis, 2016.
- [4] Illinois Environmental Protection Agency, "Hutsonville Pond A Closure Plan Approval Letter," William E. Buscher, P.G., 2015.
- [5] Illinois Environmental Protection Agency, "Construction Quality Assurance Report: Ash Pond A, Ash Pond B, Ash Pond C and Bottom Ash Pond Approval Letter," William E. Buscher, P.G., 2017.

#### **ATTACHMENT 3**

#### LEGACY SURFACE IMPOUNDMENT APPLICABILITY REPORT

#### **HUTSONVILLE ENERGY CENTER – POND A**

#### **CERTIFICATION BY OWNER**

The owner or operator, or an authorized representative, of any legacy CCR surface impoundment must sign and certify the applicability report required by 40 CFR 257.100(f)(1)(ii)(A) with the following statement:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

I do so certify.

Craig Giesmann, P.E., P.M.P.

8 May 2025