APPLICABILTY EXTENSION REPORT

HUTSONVILLE ENERGY CENTER
ASH POND A
HUTSONVILLE, ILLINOIS

Prepared for

AmerenEnergy Medina Valley Cogen, LLC

Prepared by

Geosyntec consultants

engineers | scientists | innovators

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

Project Number GLP8085

November 2024

INTRODUCTION

This Applicability Extension 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), revised May 2024. The revised CCR rule is the legacy coal combustion residuals (CCR) Rule ("Legacy Rule"). The purpose of the applicability extension report is to obtain additional time to identify whether the Legacy Rule is applicable to the closed Ash Pond A. This Report is due no later than 8 November 2024 and is submitted by Ameren Missouri, an affiliate of Medina Valley. Both Medina Valley and Ameren Missouri are subsidiaries of Ameren Corporation.

REPORT CONTENTS

The Report includes the following:

(A) The name and address of the person(s) owning and operating the potential legacy CCR surface impoundment with their business phone number and email address.

(B) The name associated with the potential legacy CCR surface impoundment.

(C) Information to identify the potential 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.

This Report presents the required available information in accordance with (A) through (C), above. It also includes a statement by the owner that available information does not provide a sufficient basis to determine, with certainty, that the inactive impoundment contained free liquids on or after October 19, 2015, as required by 40 CFR 257.100(f)(1)(iii)(*2*), as well as a field exploration work plan as required by 40 CFR 257.100(f)(1)(iii)(*3*).

AVAILABLE 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:

Owner:

AmerenEnergy Medina Valley Cogen, LLC

Name and address of authorized representative agent for AmerenEnergy Medina Valley Cogen, LLC:

Craig J. Giesmann, P.E., P.M.P.
Director, Environmental Services
AmerenEnergy Medina Valley Cogen, LLC
1901 Chouteau Avenue
St. Louis, MO 63103

Phone Number:
314-554-2955

Email address:
cgiesmann@ameren.com

(B) Name of the Legacy CCR Surface Impoundment

The name of the potential 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, facility address, and the latitude and longitude of the facility is presented in **Attachment 1**. This figure was developed by Ramboll and was extracted from their 2023 Groundwater Monitoring Annual Report for the Hutsonville site [1].

The address of the facility is:

15142 East 1900th Avenue
Crawford County
Hutsonville, IL 62433

OWNER STATEMENT

Section 40 CFR 257.100(f)(1)(iii)(*2*) requires a statement by the owner or operator that to the best of their knowledge or belief, existing and available information does not provide a sufficient basis to determine, with certainty, that the unit contained free liquids on or after October 19, 2015. This statement is provided in **Attachment 2**.

FIELD INVESTIGATION WORKPLAN

Section 40 CFR2 57.100(f)(1)(iii)(*3*) requires a written field investigation workplan that describes the approach the owner or operator intends to follow to determine whether the inactive impoundment contains free liquids. This written workplan is provided in **Attachment 3**.

OWNER CLOSING STATEMENT

Ameren has prepared this extension report in good faith in order to meet the requirements of 40 CFR 257.100 applicable to legacy CCR surface impoundments. Pleases note, that the CCR units at issue here were previously closed under active state of Illinois oversight. As a result, even if they are subsequently identified as legacy CCR surface impoundments through the field investigation presented herein, Ameren respectfully submits that these units should be exempt from EPA's CCR rule, as amended, and should not be required to re-close. Ameren understands that the retroactive effect of EPA's rule is under review by the United States Cour of Appeals for the District of Columbia Circuit in a series of consolidated cases titled, *City Utilities of Springfield, Missouri, v. EPA*, Case No. 24-1200, and Ameren respectfully reserves its legal position against retroactive application of the rule to the CCR units at issue here.

Attachments:
Attachment 1: Location Information
Attachment 2: Statement by Owner
Attachment 3: Field Investigation Workplan

REFERENCES

[1] Ramboll, "2023 Annual Report Former Hutsonville Power Station - Ash Pond A," 2024.

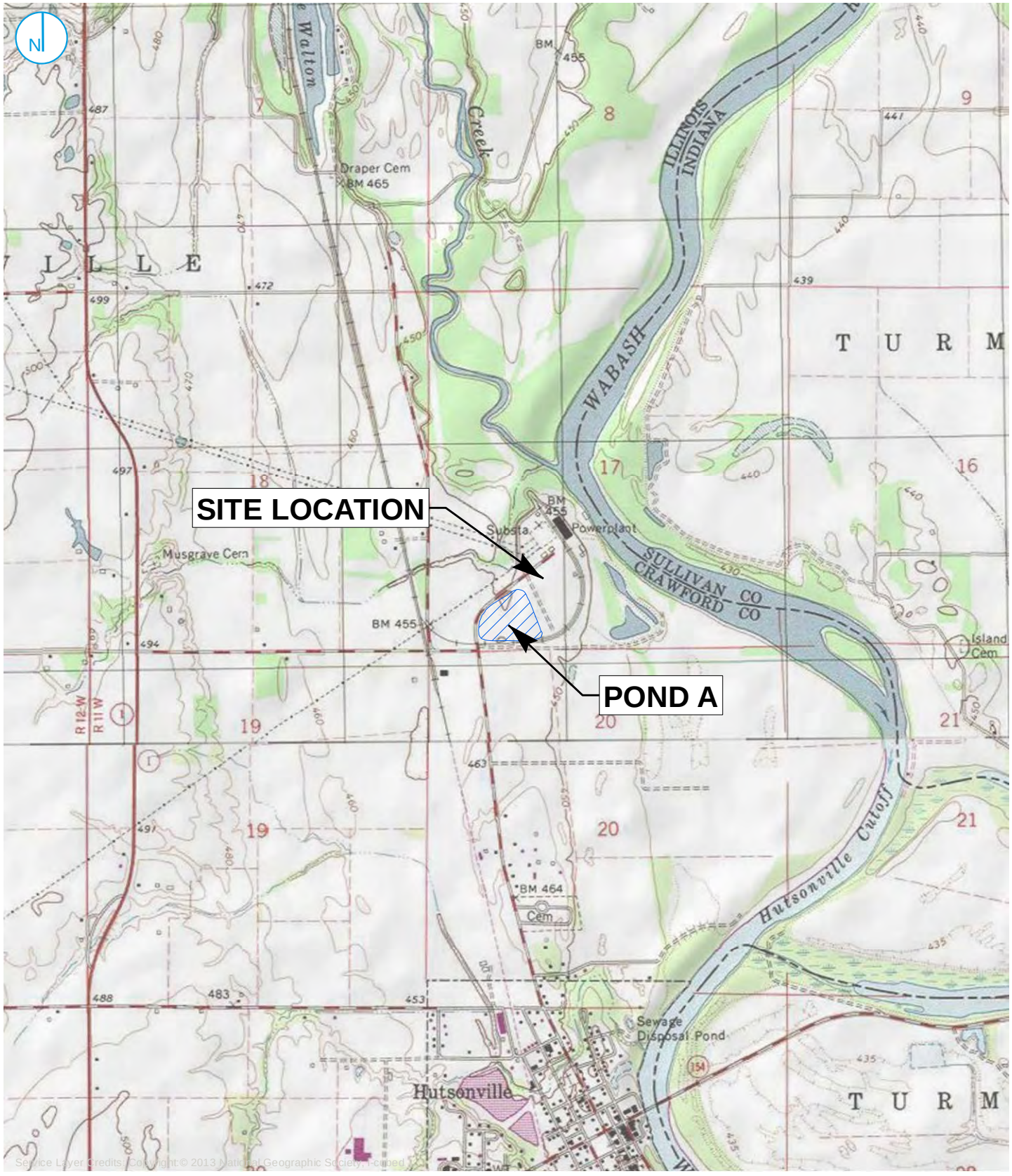
ATTACHMENT 1

APPLICABILITY EXTENSION REPORT

HUTSONVILLE ENERGY CENTER

ASH POND A

SITE LOCATION FIGURES



PROJECT: 72971 | DATED: 1/13/2021 | DESIGNER: galammc

Y:\Mapping\Projects\24\2420\MXDs\2020APA\Figure 1-1_Site Location Map Ash Pond D2.mxd

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

0 1,000 2,000 Feet

SITE LOCATION MAP

2023 ANNUAL REPORT
FORMER HUTSONVILLE
POWER STATION - ASH POND A
AMEREN ENERGY MEDINA VALLEY COGEN, LLC
HUTSONVILLE, IL

FIGURE 1-1

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC
A RAMBOLL COMPANY

RAMBOLL

Y:\Mapping\Projects\241420\MXDs\2022APA\Figure 1-2_Monitoring Well Location Map.mxd

PROJECT: 169000XXXX | DATED: 1/24/2023 | DESIGNER: galamnc

- ASH POND D MONITORING WELL LOCATION
- NESTED ASH POND D MONITORING WELL LOCATION
- ASH POND A MONITORING WELL LOCATION
- NESTED ASH POND A MONITORING WELL LOCATION
- ABANDONED NESTED MONITORING WELL LOCATION
- PROPERTY LINE
- APPROXIMATE BOUNDARY OF CAPPED ASH POND
- GROUNDWATER COLLECTION TRENCH (BEGAN OPERATION APRIL 2015)
- LIMITS OF GROUNDWATER MANAGEMENT ZONE

0 150 300 Feet

MONITORING WELL LOCATION MAP

2023 ANNUAL REPORT
FORMER HUTSONVILLE POWER STATION - ASH POND A
AMEREN ENERGY MEDINA VALLEY COGEN, LLC
HUTSONVILLE, IL

FIGURE 1-2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC
A RAMBOLL COMPANY

RAMBOLL

ATTACHMENT 2

APPLICABILITY EXTENSION REPORT

HUTSONVILLE ENERGY CENTER

ASH POND A

STATEMENT BY OWNER

To obtain additional time to complete the potential legacy impoundment applicability report required under 40 CFR 257.100(f)(1), the owner or operator, or an authorized representative, of any potential legacy CCR surface impoundment must state that available information does not provide a sufficient basis to determine, with certainty, that the inactive potential legacy CCR surface impoundment contained free liquids on or after October 19, 2015. This is completed through the following statement in accordance with 40 CFR 257.100(f)(1)(iii)(*2*):

> *A statement by the owner or operator that to the best of their knowledge or belief, existing and available information does not provide a sufficient basis to determine that the unit contained free liquids on or after October 19, 2015.*

I certify 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. To the best of my knowledge, the existing information does not provide a sufficient basis to determine, with certainty, that the unit contained free liquids on or after October 19, 2015.

Craig J. Giesmann, P.E., P.M.P.
Director, Environmental Services

8 November 2024

ATTACHMENT 3

APPLICABILITY REPORT EXTENSION

HUTSONVILLE ENERGY CENTER

ASH POND A

FIELD INVESTIGATION WORKPLAN

1.0 INTRODUCTION

The purpose of this workplan is to conduct a field investigation to assess whether free liquids are present in the coal combustion residuals (CCR) present in the closed surface impoundment. The closed surface impoundment is the Pond A shown on the figure in **Attachment 1**.

2.0 WORK PLAN

The CCR Legacy Rule requires a Field Investigation Work Plan (Work Plan) to evaluate the presence of free liquids in the potential legacy pond. In accordance with 40 CFR 257.100(f)(1)(iii)(A)(3), the Work Plan is required to provide the following details[1]:

> *The details of a written field investigation work plan, including of the following:*

2.1 Approach to Characterize the CCR and Native Geologic Materials

> *(i) A detailed description of the approach to characterize the physical, topographic, geologic, hydrogeologic, and hydraulic properties of the CCR in the unit and native geologic materials beneath and surrounding the unit, and how those properties will be used to investigate for the presence of free liquids in the CCR unit.*

The CCR in Pond A and the native geologic materials beneath and surrounding the unit have been characterized in prior geotechnical investigations and documents prepared to support the implementation of closure [1] [2] [3]. No further characterization is necessary to investigate for the presence of free liquids in Pond A. Additional piezometers are proposed to determine the presence of free liquids through direct measurement.

The physical, topographic, geologic, hydrogeologic, and hydraulic properties investigated and reported previously will be utilized with the additional piezometer readings to assess the presence

[1] *Italicized font* indicates direct wording from the CCR Rule.

of free liquids in Pond A. The CCR in the closed Ash Pond A can generally be characterized as a mixture of fly ash and bottom ash.

Existing drawings document the vertical and lateral limits of the CCR in the CQA Report [3].

2.2 Methods and Tools

> *(ii) A detailed description of the methods and tools that will be employed to determine whether the unit contains free liquids, the rationale for choosing these methods and tools, how these methods and tools will be implemented, and at what level of spatial resolution at the CCR unit to identify and monitor for the presence of free liquids.*

Piezometers are the most effective method of measuring the presence of pore water. The installation of three temporary piezometers, placed to a depth of approximately two feet above the base of the pond will provide sufficient data to determine if free liquids are present. This will result in a spatial resolution of approximately one piezometer every four acres.

The following methods and tools will be followed:

- Existing drawings provide bottom elevations of the CCR; the piezometers will be installed no closer than two feet from the bottom of the CCR to avoid creating a downward conduit for free liquid, should free liquid exist.
- Piezometer locations will be selected where the CCR appears to be at the lowest elevations and the ground surface will be established at those locations by survey and staked with the elevation written on each stake. The depth of CCR will be indicated on each stake.
- The existing surface is comprised of three feet of soil with a vegetated surface overlying a high-density polyethylene (HDPE) cover liner. Soil will be removed in a two-foot by two-foot area down to the liner.
- The liner will be cut and removed in a one-foot diameter circle or square and will be repaired following completion of piezometer installation by a certified geomembrane contractor.
- The piezometers will be installed with a drilling rig using 4.25-inch diameter hollow stem auger equipment.
- Split barrel (“split spoon”) samples will be obtained every five feet in accordance with ASTM D1586.
- The piezometers are proposed to be a nominal two-inch diameter polyvinyl chloride (PVC) pipe casing with threaded joints. The piezometers are proposed to have a 5-ft-long screen with a 0.010-inch screen size and a No. 2 sand pack (approximately 20/40 mesh sand) placed in the annular spacing between the casing and borehole. A two-foot-thick bentonite plug will be placed above the sand pack and the annular space will be backfilled with auger cuttings or allowed to collapse up to within two feet of the liner. A minimum of two feet

below the liner will be grouted in place with a cement-bentonite grout. Soil will be placed above the liner to the ground surface and seeded.

- The liner will be repaired using a "boot". This will be done by a certified geomembrane contractor.
- The piezometers will be developed.
- A vented cap will be installed at the top of the piezometer casing.
- The piezometers shall be abandoned after sufficient data has been collected, as determined by the Qualified Professional Engineer.
- The liner and cover system shall be repaired.

A diagram of the proposed piezometer and a typical boot detail is shown on **Enclosure 1** of this workplan.

2.3 Groundwater Elevation Monitoring

> *(iii) A detailed description of how groundwater elevations will be determined, and at what level of spatial resolution, in relation to the sides and bottom of the CCR unit and how any intersection of the groundwater table with the CCR unit will be evaluated, and at what level of spatial resolution.*

Piezometers will be installed within the limits of Pond A to measure groundwater elevations at a spatial resolution of approximately one piezometer every four acres. The sides and bottom of the pond are well defined by the as-built drawings. The piezometers will provide pore water levels if free liquids are encountered. The free liquids would extend to the sides and base of the unit from the measurement level. The top of the piezometer elevations will be established by survey. These piezometers will be monitored weekly for one month to determine if free liquids are present within the CCR.

Water level indicators typically measure depth to groundwater to the nearest hundredth of a foot. Typically, groundwater levels and/or depths are then rounded and reported to the nearest tenth of a foot.

2.4 Stormwater Evaluation

> *(iv) A plan for evaluating stormwater flow over the surface of the unit, stormwater drainage from the unit, and stormwater infiltration into the unit and how those processes may result in the formation of free liquids in the CCR unit. This plan must include a current topographic map showing surface water flow and any pertinent natural or manmade features present relevant to stormwater drainage, infiltration and related processes.*

As-built topographic plan sheets are provided as **Enclosure 2** to this plan with markups showing the potential flow of stormwater flow over the surface of the closed unit. Stormwater conveyance

berms and ditches were constructed as part of closure construction activities. These berms and ditches convey the stormwater off the capped surface and then off the site. The unit is capped with a HPDE liner and three feet of soil. Infiltration of surface water through the HDPE liner into the CCR prior to being conveyed off the unit is unlikely due to the low permeability design of the cap system. The cover of Pond A and surrounding conveyance ditches will be inspected for evidence of erosion.

2.5 Estimated Timeline

> *(v) An estimated timeline to complete the workplan and make a determination if the CCR unit contains free liquids.*

It is estimated that this field investigation work plan, including the installation of proposed piezometers and subsequent monitoring events of the proposed piezometers, will be completed in less than six months from the date of this extension report. Estimated task lengths are provided below:

- Procure piezometer installation contractor: one and one/half months
- Procure geomembrane contractor: one and one/half months
- Survey location of piezometer: one week, maximum
- Install piezometers and HPDE geomembrane boot: one week, maximum
- Monitoring: weekly for one month
- Removal/abandonment of piezometer and cover repair: one week maximum

2.6 Assessment of the Presence of Free Liquids

> *(vi) A narrative discussion of how the results from implementing the workplan will determine whether the unit contains free liquids specified.*

Implementing this work plan will give the owner or operator data showing the depths to pore water within the unit, if pore water is present, which will indicate that free liquids are present. If pore water is not observed during the implementation of this work plan, free liquids are likely not present within the unit and the unit is not considered a legacy surface impoundment.

The Legacy Rule section 40 CFR 257.101(g) states: *If the owner or operator determines that the unit contains free liquids during implementation of the written field investigation workplan, the owner or operator must cease operating under these extension provisions and prepare the applicability report required by paragraph (f)(1) of this section within 14 days of determining that the unit contains free liquids.*

If free liquids are determined to be present, an applicability report will be submitted as required. Because Pond A is already closed, no change in operations is necessary.

2.7 Anticipated Workplan Problems and Mitigations

(vii) A narrative discussion describing any anticipated problems that may be encountered during implementation of the workplan and what actions will be taken to resolve the problems, and anticipated timeframes necessary for such a contingency.

Anticipated problems that may arise from the execution of this workplan as well as their proposed mitigations are as follows:

1. Delays with contracting a drilling firm for the proposed installation of piezometers could lead to delays in the implementation of the work plan.
    a. Proposed mitigation is to have working agreements in place with drilling firms that perform installation of piezometers in ash on a routine basis.
    b. Multiple drilling firms shall be contacted in case a preferred firm is unable to complete the installation in a timely manner.
2. Delays with contracting a certified geomembrane contractor could lead to delays in the implementation of the work plan.
    a. Proposed mitigation is to have working agreements in place with geomembrane firms that perform geomembrane installations and repairs on a routine basis.
    b. Multiple firms shall be contacted in case a preferred firm is unable to complete the installation in a timely manner.
3. Cold weather conditions could delay the start of the field investigation or prolong the duration of the field investigation.
4. It may be determined that weekly monitoring of the piezometers for a single month may not be sufficient to determine the presence of free liquids and monitoring may need to be extended.

2.8 Qualified Professional Engineer Certification

(viii) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer stating that the field investigation work plan meets the requirements of paragraph (f)(1)(iii)(A)(3) 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 257.100(f)(1)(iii)(A)(3)(viii), to the best of my knowledge, information, and belief, that the information contained in this plan has been prepared in accordance with the accepted practice of engineering and meets the requirements of Section 40 CFR 257.100(f)(1)(iii)(A)(3).

Thomas Ward, P.E.
Printed Name

11/8/24

Signature Date

062.069043 Illinois 30 November 2025
Registration Number State Expiration Date

Affix Seal

REFERENCES

[1] Hanson & Natural Resource Technology (NRT), "Ash Ponds Closure - Closure Plan," 2014.

[2] Hanson & Natural Resource Technology (NRT), "Ash Ponds Closure Hydrogeologic Site Investigation," 2014.

[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," 2016.

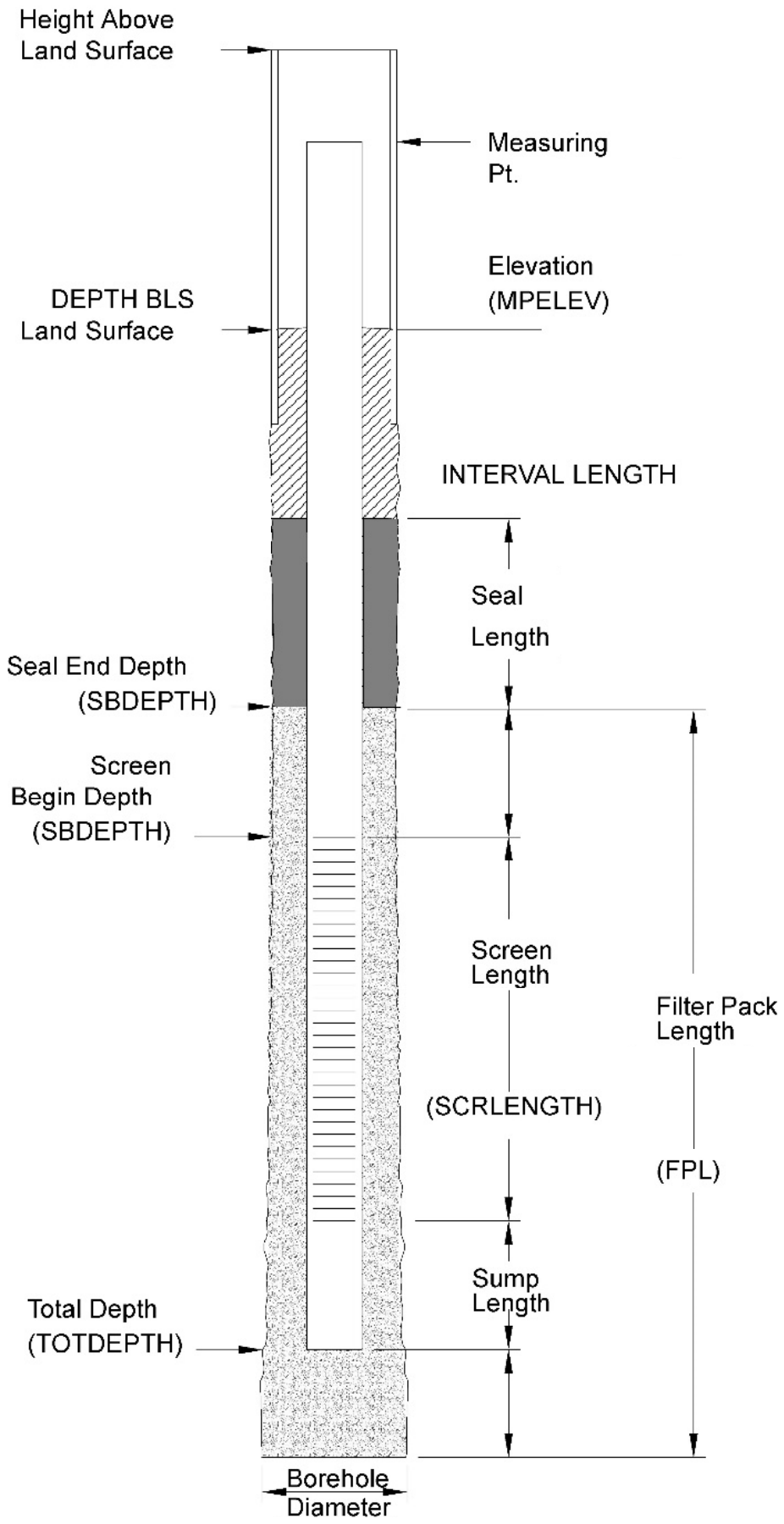
ENCLOSURE 1

FIELD INVESTIGATION WORKPLAN

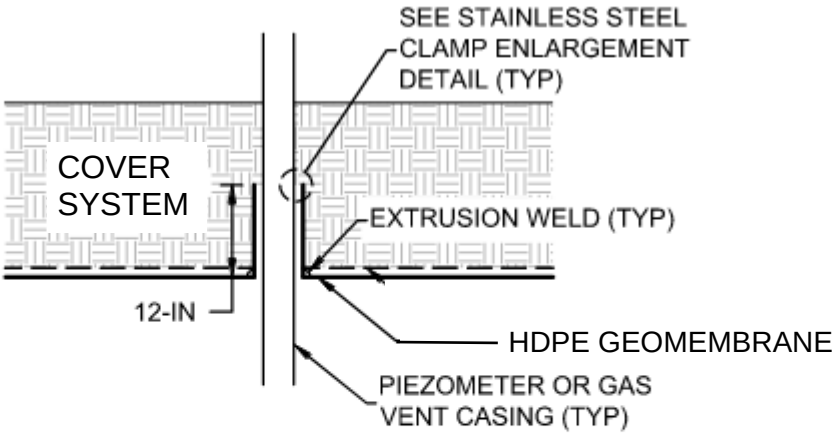
HUTSONVILLE ENERGY CENTER

ASH POND A

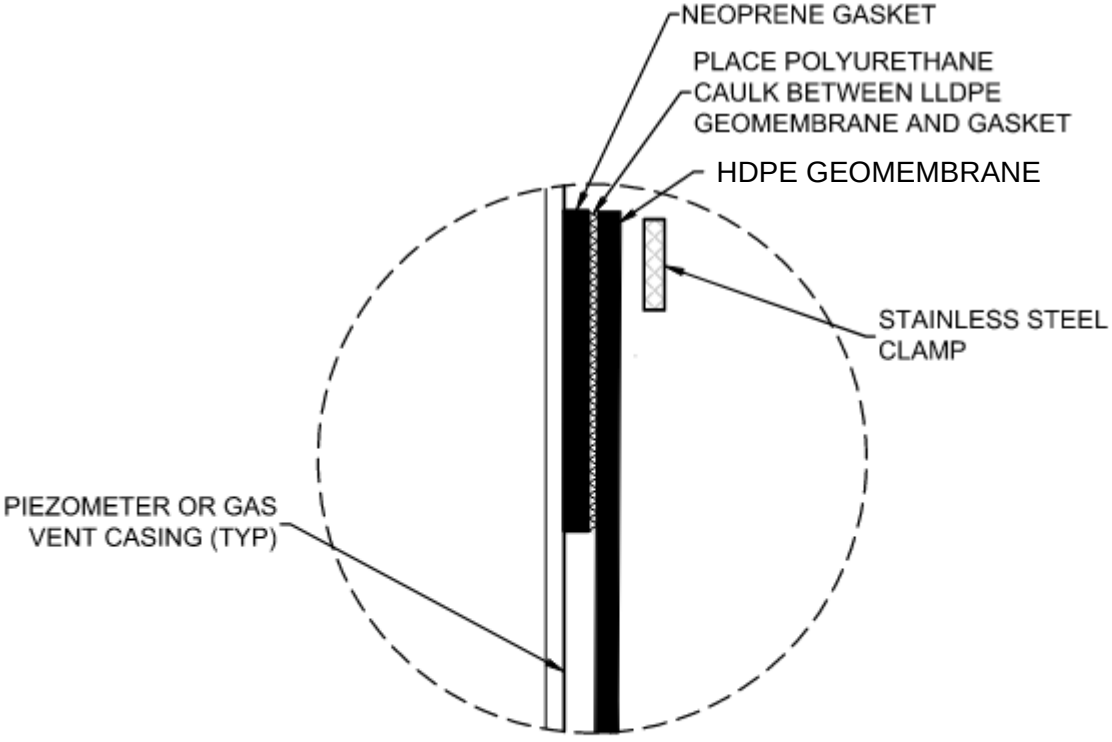
TYPICAL PIEZOMETER AND PIEZOMETER BOOT DETAILS



TYPICAL PIEZOMETER DETAIL
SCALE: NTS



TYPICAL PIEZOMETER BOOT DETAIL
SCALE: NTS



STAINLESS STEEL CLAMP ENLARGEMENT DETAIL

ENCLOSURE 2

FIELD INVESTIGATION WORKPLAN

HUTSONVILLE ENERGY CENTER

ASH POND A

STORMWATER FLOW TOPOGRAPHIC MAP

GENERAL SURVEY NOTES:

Original pre-construction topographic information shown was taken from a photogrammetric data provided by Continental Mapping Consultants as flown April, 2010 including contours on ground surfaces.

Original pre-construction contours within ponds were determined by bottom of pond elevations established by the surveyor, and supplemented with surveys provided by Lamac Engineering in April 2014.

As-built contours were taken from a combination of photogrammetric data flown on August 9, 2016 and ground survey on August 29, 2016.

Boundary information was taken from information provided to the surveyor by Ameren from a survey prepared February 1984 shown on sheet K-547.

The adopted coordinate system used for this survey was taken from the above mentioned survey of 1984.

The benchmark used was taken from the above mentioned survey of 1984 located near the main power plant shown as elevation 454.14'.

SYMBOLS & ABBREVIATIONS

PP	POWER POLE W/GUY WIRE	ASPH	ASPHALT
PP	POWER POLE	BLDG	BUILDING
	STREET SIGN	CLF	CHAIN LINK FENCE
	CAP VENT	CONC	CONCRETE
OU	OVERHEAD UTILITY LINE	ELEV	ELEVATION
UE	UNDERGROUND ELECTRIC	FL	FLOW LINE
	AERIAL TOPOGRAPHIC SPOT ELEVATION	MH	MANHOLE
	FIELD SPOT ELEVATIONS (INCLUDING BOTTOM OF POND)	RCP	REINFORCED CONCRETE PIPE
		VCP	VITRIFIED CLAY PIPE

ANNOTATED BY GEOSYNTEC ON OCTOBER 2024 TO INDICATE THE APPROXIMATE FLOW LINES OF SURFACE STORMWATER

APPROXIMATE SURFACE STORMWATER FLOW LINE

MARK UP DRAWING NO.	REV.
–	–
SHEET NO. ---	

DRAWING RECORD

REV.	DATE	PROJECT NO.	AMEREN SUPV ENGR	DRAFTING DRFTR	DRAFTING CHK'D	DRAFTING SUPV	ENGR APPROVAL AMEREN	ENGR APPROVAL OTHER	DESCRIPTION
0	10.20.2014	J04PT	–	DBH	SMB	SMB	–	–	ISSUED FOR PERMITTING - NOT FOR CONSTRUCTION
1	04.07.2015	J04PT	–	DBH	SMB	SMB	–	–	ISSUED FOR CONSTRUCTION
2	09.20.2016			MKW					AS BUILT

SCALE	–
UNIT NO.	–
DWG. SIZE	24 X 36
SUB CLASS	–

FINAL CONDITIONS MAP

AS-BUILT PLANS FOR THE CLOSURE OF ASH PONDS A, B, C AND BOTTOM ASH PONDS

SITE: HUTSONVILLE POWER STATION

Ameren MISSOURI

DRAWING NO.	REV.
S-XXX-001A	1
SHEET NO. 001	