

Our reference: 12635351-LTR-06

August 18, 2025

Mr. Brian Rath, P.E.  
Senior Environmental Engineer  
Solid Waste and Contaminated Sites Section  
Iowa Department of Natural Resources  
6200 Park Avenue, Suite 200  
Des Moines, Iowa 50321

**Operating Permit No. 70-SDP-16-04P Renewal Application  
Louisa Generating Station, Muscatine, Iowa**

Dear Mr. Rath:

This letter and accompanying documents complete the renewal application for Operating Permit 70-SDP-16-04P for MidAmerican Energy Company's (MidAmerican's) Louisa Generating Station (LGS) Coal Combustion Residue (CCR) Landfill in Muscatine, Iowa (Site). The current Operating Permit (2014 Permit) was issued November 19, 2015, and expires November 19, 2025. The permit is currently for the active, East Monofill. When originally issued the permit addressed the now closed west monofill (Closure Permit #70-SDP-17-04C). Some proposed edits to the West Monofill Operating Permit reflect the separation of these two permits.

No significant changes are proposed at this time; however, contact information for LGS personnel is updated in this renewal application. Revised documents are attached. Documents that did not require revision are identified with their Iowa Department of Natural Resources (IDNR) DocDNA Identification Number provided.

IDNR's Coal Combustion Residue Monofill Permit Application Form 50 is submitted as Attachment A to this letter. This letter includes the Executive Summary required by Form 50.

## **1. Executive Summary**

### **1.1 Summary of Modifications**

There were no modifications to the approved plans and specifications during the current permit cycle. Ten amendments were issued by the IDNR. The amendments are detailed in Section 1.3 of this executive summary.

### **1.2 Special Provisions**

Minor changes are proposed to the existing special conditions and are described below.

### 1.2.1 Special Provision 1

Special Provision #1 addresses the authorization to accept CCR. This provision should be edited to remove the third paragraph addressing an October 26, 2015 request for coal, coal fines, and soil mixed with coal fines or coal from Riverside Generating Station (RGS) should be eliminated. The paragraph addressing CCR from LGS and RGS should remain.

### 1.2.2 Special Provision 2

Special Provision #2 addresses development and operation of the Monofill in accordance with submitted documents. The referenced Development and Operation Plan (DOP) date should be revised to reflect this submittal.

### 1.2.3 Special Provision 3

Special Provision #3 requires surface water to be diverted around the fill area and surface drainage be provided at the toe of the working face. This special provision should remain unchanged.

### 1.2.4 Special Provision 4

Special Provision #4 requires all-weather accessibility to the Monofill during filling activities. Special Provision #4 should remain unchanged.

### 1.2.5 Special Provision 5

Special Provision #5 addresses the Hydrologic Monitoring System Plan (HMSP) associated with the closed West Monofill. Special Provision #5 should be updated to reflect the updated HMSP included in this Operating renewal Permit Application (Doc 90882, pages 475-558).

### 1.2.6 Special Provision 6

Special Provision #6 address the Toxicity Characteristic Leaching Procedure (TCLP) testing. Special Provision #6 should remain unchanged.

### 1.2.7 Special Provision 7

Special Provision #7 addresses the monitoring of methane gas. This provision should remain unchanged.

### 1.2.8 Special Provision 8

Special Provision #8 addresses scale requirements to support tonnage fee reporting. This provision should remain unchanged.

### 1.2.9 Special Provision 9

Special Provision #9 addresses the Emergency Response and Remedial Action Plan (ERRAP). Special Provision #9 should be updated to reflect the updated ERRAP included in this renewal application (Section 11/Attachment D).

### 1.2.10 Special Provision 10

Special Provision #10 currently addresses closure of the West Monofill. The Closure/Post Closure Plan (CPCP) was revised for the East Monofill plans with Doc 90882 pages 560-750. Special Provision #10 should be updated to reflect the revisions.

## **1.3 Permit Amendments**

Ten amendments were issued to the November 19, 2015 Operating Permit. The applicable portions of the amendments have been incorporated into this Permit Application and the new permit can be issued without any amendments.

### **1.3.1 Amendment #1**

The first amendment, issued November 10, 2016, allows a one-time acceptance of approximately 15,000 tons of coal, coal fines, and some soil for disposal from the Riverside Generating Station (RGS) coal pile clean-up project. The content of this amendment is no longer needed.

### **1.3.2 Amendment #2**

The second amendment, issued December 22, 2016, authorizes the sampling and analysis for total recoverable metals instead of dissolved metals. This is reflected in the current HMSP (Doc 90882, pages 475-558).

### **1.3.3 Amendment #3**

The third amendment issued July 25, 2017, 1) approves the Construction and Documentation Report for the Partial Final Monofill Capping Project as submitted by Foth Infrastructure & Environment, LLC (Foth), and incorporates it as part of the permit documents; and 2) authorizes initiation of the construction of the Phase 2 Partial Final Monofill Capping, also as submitted by Foth. This addresses the West Monofill and is not applicable to the East Monofill.

### **1.3.4 Amendment #4**

The fourth amendment, issued August 31, 2017, approves the Annual Water Quality Report Submittal Date-Amendment Request. This approval allows for the submission of the Annual Water Quality Report (AWQR) by January 31, annually, rather than November 30. This amendment should be incorporated into the new Operating Permit.

### **1.3.5 Amendment #5**

The fifth amendment, issued January 22, 2018, approves 1) the Permit modification Request for the lateral expansion of the CCR Monofill with the construction of the composite lined cells (Cell 1 through Cell 8); 2) The Petition for Waiver or Variance – Final Cover System; 3) The Construction and Documentation Report for the 2017 Partial Final Monofill Capping Project, all as submitted by Foth; and finally 4) the correspondence for the authorization to dispose of mill pyrites and small amounts of coal during periods of maintenance and cleaning out the coal mills, as submitted by MidAmerican. This amendment approves all as part of the permit document. This amendment is relevant and applicable as Cells 1 through 8 represent the East Monofill.

### **1.3.6 Amendment #6**

The sixth amendment, issued October 10, 2018, approves the Construction Quality Assurance Report – Cell 1 Liner and Leachate Lagoon, as submitted by Foth. This authorizes the use of Cell 1. This amendment is relevant and applicable.

### **1.3.7 Amendment #7**

The seventh amendment, issued April 29, 2019, approves the Construction Quality Control & Assurance Plan for the Construction of Cell 2 and Cell 3; and the Cells 2 and 3 Construction plans and specifications and

Construction Drawings, as submitted by Foth. This authorizes the construction of Cell 2 and Cell 3. This amendment is relevant and applicable.

#### **1.3.8 Amendment #8**

The eighth amendment, issued March 9, 2020, approves the Construction Quality Assurance Report – Cell 2 and Cell 3, as submitted by Foth. This authorizes the use of Cell 2 and Cell 3. This amendment is relevant and applicable.

#### **1.3.9 Amendment #9**

The ninth amendment, issued June 19, 2020, approves and authorizes the construction of the Phase 3 Final Monofill Capping, as submitted by Foth. This addresses the West Monofill and is not applicable to the East Monofill.

#### **1.3.10 Amendment #10**

The tenth amendment, issued May 2, 2025, approves the construction of Cell 4. This amendment is relevant and applicable.

### **1.4 Documentation and Certification for New Permit Amendment Requests**

No requests for new permit amendments are being made during this permit renewal permit application.

### **1.5 Documentation and Certification for New Variance Requests**

No requests for new variances are being made during this permit renewal permit application.

## **2. Map or Aerial Photograph**

Updated maps and aerial photographs of the Site's boundaries and features are provided as Figure 1.1 and Figure 1.2.

## **3. Organizational Chart**

An updated organization chart is provided as Attachment B.

## **4. Disposal Process Description**

The Design and Operations Plan (Doc 90882, pages 453–472) describes the disposal process at the Site.



## **5. Equipment**

The equipment used in the operation of the Site will fit the following description:

- Tractor trailers consisting of side dumps, bottom dumps, and end dumps;
- Bull dozers; and
- Road graders.

## **6. Contingency Plan**

An independent contingency plan is not required for this Site. If access to the Site is lost, on-site trucks could be used to temporarily hold CCR material and facilitate transport to a municipal solid waste landfill.

## **7. Proof of Ownership**

No revision required, see Doc 90882, Appendix 2, pages 223-228 for a copy of the property deed.

## **8. HIR and HMSP**

The previous Hydrogeologic Investigation Report (HIR) dated June 2016 (Doc 86580) remains current. Boring logs for the five monitoring wells constructed after the submission of the HIR can be found in Doc 91961.

The previous HMSP (Doc 90882, pages 475-558) remains in effect.

## **9. Dust Control Plan**

A revised dust control plan for LGS, including the East Monofill, is provided as Attachment C.




## **10. Closure and Post-Closure Plan**

The previous Closure and Post-Closure Plan (Doc 90882, pages 560-750) remains in effect. Financial assurance reporting and cost estimates for closure and post-closure was most recently submitted March 25, 2025 (Doc 112754). Financial assurance reports are submitted annually by MidAmerican.

## 11. Emergency Response and Remedial Action Plan (ERRAP)

An updated ERRAP now contains accurate contact information and is provided as Attachment D.

## 12. Certification

	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.	
		
	Michael J. Alowitz, P.E.	Date
	License Number: 18160	
	My license renewal date: December 31, 2026	
	Pages or sheets covered by this seal: Permit Renewal Application	

If you have any questions, don't hesitate to contact us via the methods listed below.

Regards,



**Brooke Wasson**  
Scientist

+1 515 414-3942  
brooke.wasson@ghd.com

MA/lg/6



**Michael J. Alowitz, P.E.**  
Project Manager

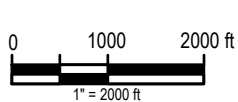
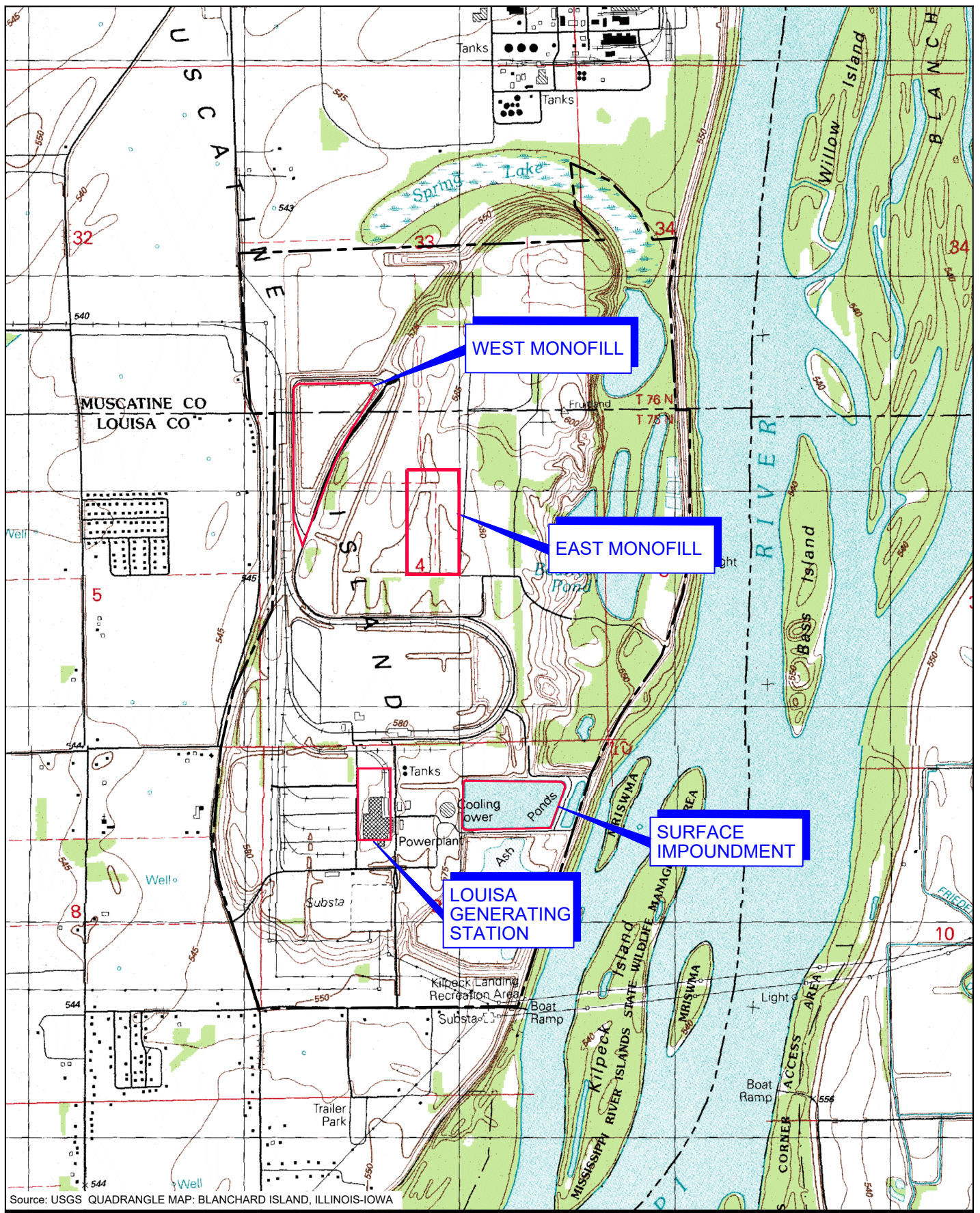
+1 515 414-3934  
michael.alowitz@ghd.com

Attachments: Figure 1.1 – Site Location Map  
Figure 1.2 – Site Map and Monitoring Network  
Attachment A – Industrial Monofill Permit Application Form 50  
Attachment B – Organization Chart  
Attachment C – Dust Control Plan  
Attachment D – Emergency Response and Remedial Action Plan

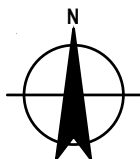
Copy to: Jamie Murphy, MidAmerican  
Becky Jolly, IDNR

# Figures





Coordinate System:  
NAD83 State PPlane  
Iowa South Feet



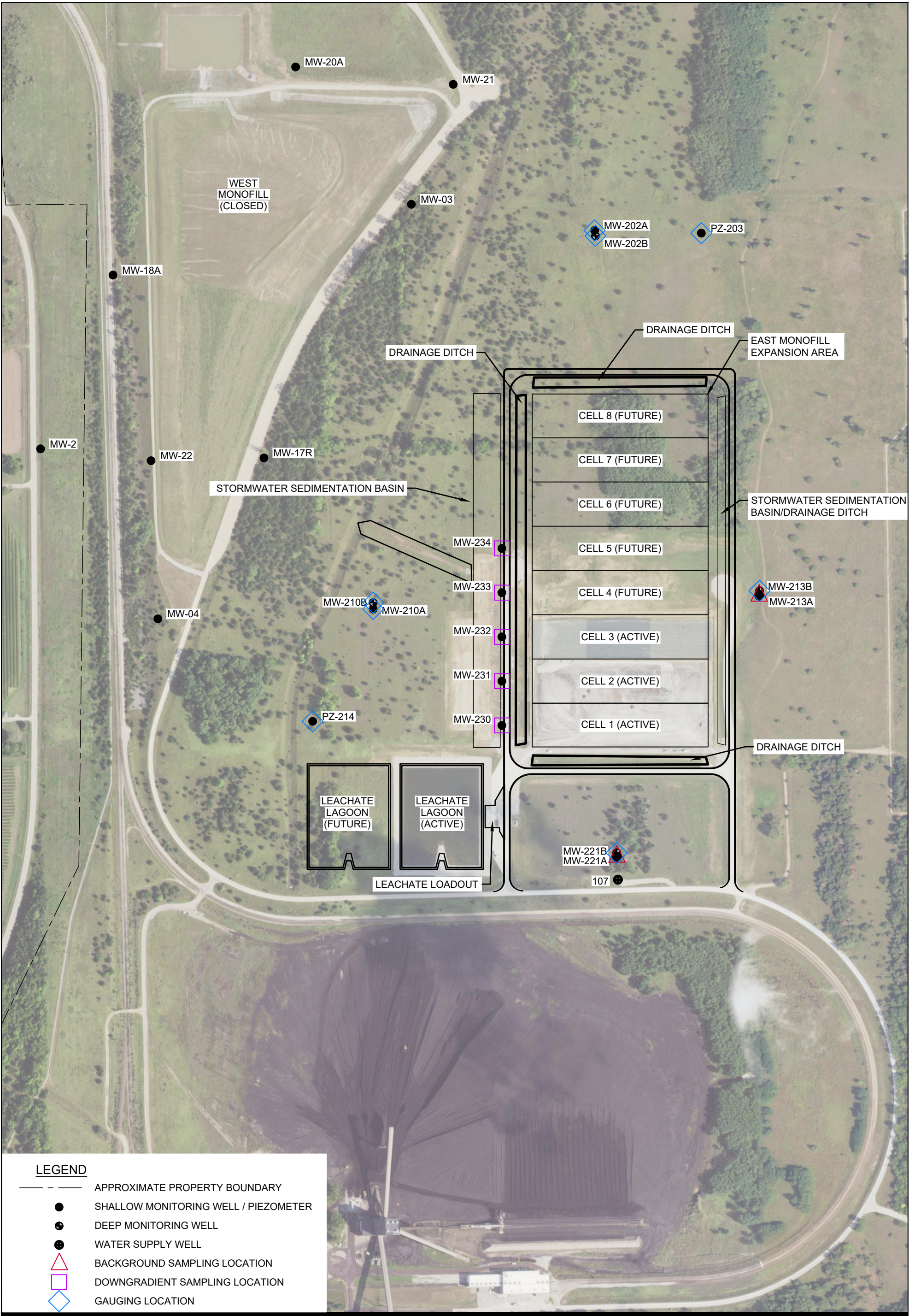
MIDAMERICAN ENERGY COMPANY  
LOUISA GENERATING STATION  
EAST MONOFILL  
MUSCATINE, IOWA

SITE LOCATION MAP

Project No. 12575233  
Date May 2024

FIGURE 1.1



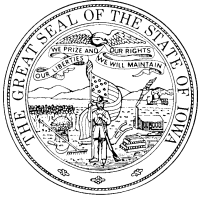




# Attachments

# **Attachment A**

**Industrial Monofill Permit Application  
Form 50**



IOWA DEPARTMENT OF NATURAL RESOURCES

Coal Combustion Residue Monofill

PERMIT APPLICATION FORM 50



- ☐ New Permit
- ☐ Permit Renewal (permit number) \_\_\_\_\_ - SDP - \_\_\_\_\_ - CCR
- ☐ Closure Permit

**SECTION 1: PERMIT APPLICATION REQUIREMENTS**

**Owner of site**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ Fax: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Certified Operator Responsible for Operation at Facility**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ Fax: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Permit Applicant**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ Fax: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Design Engineer (PE)**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ Fax: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ E-mail: \_\_\_\_\_

Iowa Engineer License #: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

**Responsible Official for the Facility**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ Fax: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Agency and Responsible Official of Agency Served (if any)**

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ Fax: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Facility**

Name: \_\_\_\_\_

Address: \_\_\_\_\_ City, State, Zip: \_\_\_\_\_

Legal Description: \_\_\_\_\_

Type, source, and expected volume or weight of waste to be handled per day, per week, or year:



## **SECTION 2: PERMIT APPLICATION SUPPORTING DOCUMENTATION**

### **PLANS AND SPECIFICATIONS**

Checking the appropriate boxes below certifies that the documents submitted in conjunction with this application form are complete and in compliance with the applicable chapters of the Iowa Administrative Code. While some of the documents below may have been submitted previously, updated copies of each are required to be provided with each permit renewal application, unless a prior document remains current and is identified by the Doc ID#, Section, and Page.

#### **Required Plans and Specifications**

☐ Executive Summary

An executive summary shall address the following:

- Summary of modifications, if any, to the approved plans and specifications that occurred during the current permit cycle.
- Summary of each special provision of the current permit to determine if it is to remain the same, be revised or be removed.
- Summary of each permit amendment, if any, that occurred during the current permit cycle to determine if it shall be included with the renewed permit, be revised or be removed.
- Provide documentation and certification as required for new permit amendment requests, if any.
- Provide documentation and certification as required for new variance requests from Iowa Administrative Code requirements, if any.

☐ Site requirements in accordance with Iowa Administrative Code 567 subrule [103.1\(1\)](#).

**No Revision Required** - See Doc ID#, Section, and Page: \_\_\_\_\_

☐ Permit application requirements in accordance with subrule [103.1\(2\)](#).

**No Revision Required** - See Doc ID#, Section, and Page: \_\_\_\_\_ HIR #86580

☐ Design criteria requirements in accordance with subrule [103.1\(3\)](#).

**No Revision Required** - See Doc ID#, Section, and Page: \_\_\_\_\_ 323, run on/run off 325-451

☐ Operating requirements in accordance with subrule [103.1\(4\)](#).

**No Revision Required** - See Doc ID#, Section, and Page: \_\_\_\_\_ 475-558

☐ Closure/Postclosure requirements in accordance with subrule [103.1\(5\)](#).

**No Revision Required** - See Doc ID#, Section, and Page: \_\_\_\_\_

☐ Emergency response and remedial action plan requirements in accordance with rule [103.2\(455B\)](#).

**No Revision Required** - See Doc ID#, Section, and Page: \_\_\_\_\_

☐ Financial assurance requirements in accordance with rule [103.3\(455B\)](#).

**No Revision Required** - See Doc ID#, Section, and Page: \_\_\_\_\_

If the department finds the permit application information to be incomplete, the department shall notify the applicant of that fact and of the specific deficiencies. If the applicant fails to correct the noted deficiencies within 30 days, the department may reject the application and return the application materials to the applicant. The applicant may reapply without prejudice.

### **SECTION 3: APPLICANT SIGNATURE**

Signature of Permit Applicant: Todd Horchem Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Applications for sanitary disposal projects must be accompanied by the plans, specifications and additional information required by the applicable solid waste rules under Iowa Administrative Code.

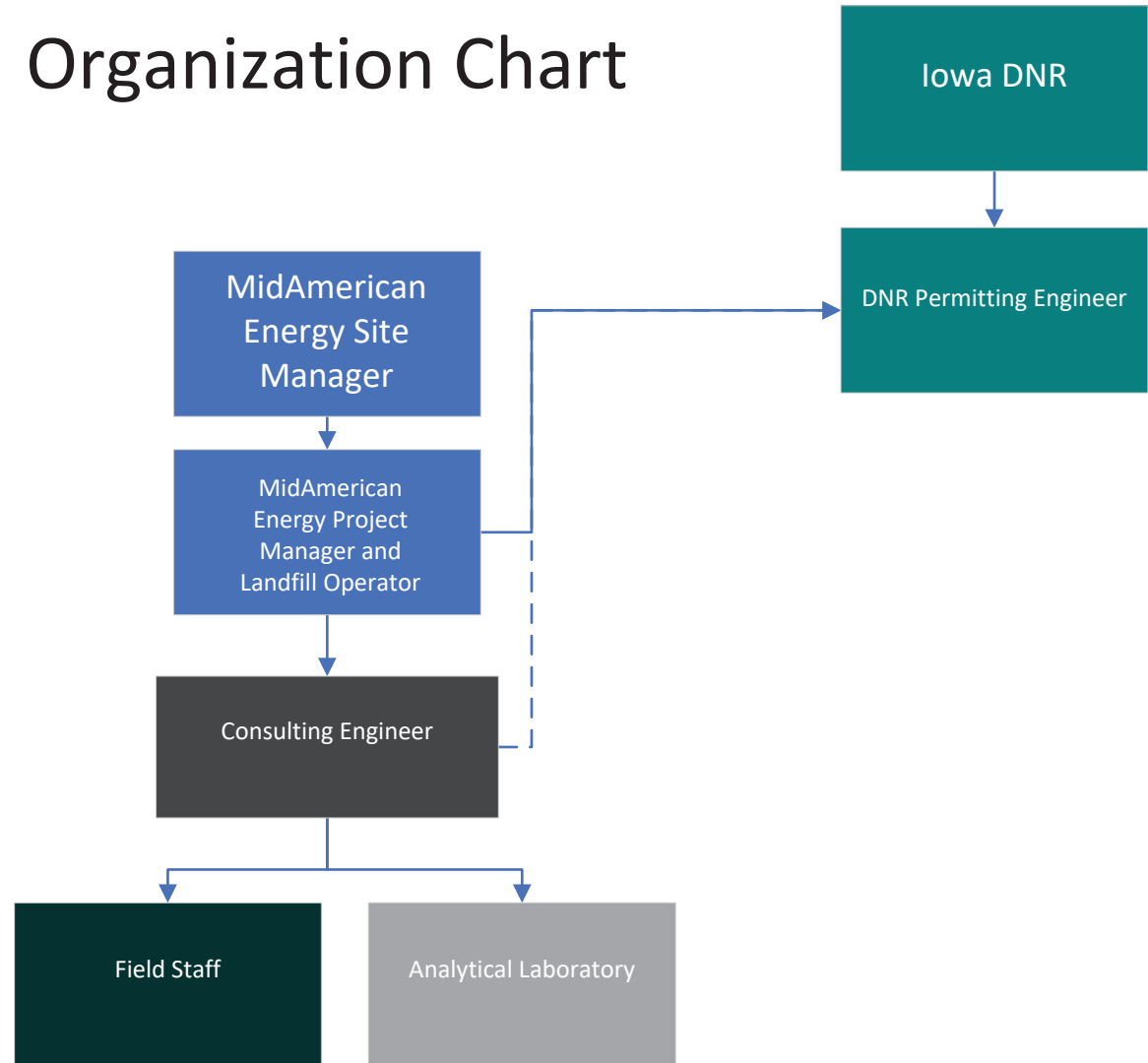
Send completed applications with attached information to the DNR project officer via email or file sharing platform.

For questions concerning this application contact Brian Rath at 515-537-4051, [brian.rath@dnr.iowa.gov](mailto:brian.rath@dnr.iowa.gov)

# **Attachment B**

## **Organization Chart**

# Louisa Generating Station Organization Chart



# **Attachment C**

## **Dust Control Plan**



# **Fugitive Dust Control Plan**

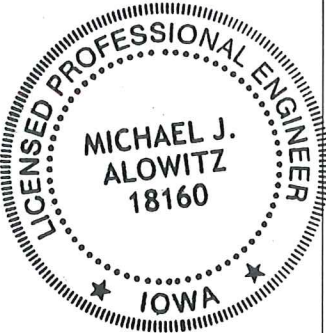


**Revision D**  
**Louisa Generating Station**

MidAmerican Energy Company  
April 01, 2025

# Certification

CCR Fugitive Dust Control Plan  
Revision D, Louisa Generating Station  
MidAmerican Energy Company  
Permit No. #70-SDP-06-82P

I certify this Fugitive Dust Control Plan meets the requirements of 40 CFR §257.90(e).

	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.	
	 Michael J. Alowitz, P.E.	 Date
	License Number: 18160	
	My license renewal date is: December 31, 2026	
	Pages or sheets covered by this seal: Entire Document	

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# 1. Introduction

The Fugitive Dust Control Plan was developed for MidAmerican Energy Company (MidAmerican) Louisa Generating Station (LGS) Coal Combustion Residuals (CCR) Monofill and Expansion Monofill, hereafter referred to collectively as the Monofill, in accordance with the Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments (40 Code of Federal Regulations (CFR) Part 257, Subpart D, the CCR Rule) and the Iowa Administrative Code (IAC) 567 Chapter 103.1 (3)b and (4)b. This Plan addresses actions to minimize fugitive dust generation, mitigation measures, and documentation requirements.

MidAmerican is subject to the CCR Rule and Rule Extension, and as such has revised their original Fugitive Dust Control Plan for sites handling and disposing of CCR per 40 CFR 257.80. This report provides the revised Fugitive Dust Control Plan for the LGS located in Muscatine, Iowa.

This Fugitive Dust Control Plan is in addition to, not in place of, any other applicable site permits, environmental standards, or work safety practices.

## 2. Plan Objectives

The Fugitive Dust Control Plan identifies MidAmerican control measures and practices to minimize and control fugitive dust as required by the CCR Rule. The plan defines the ways in which MidAmerican personnel and subcontractors will mitigate CCR dust emissions at the plant.

To meet these objectives, the Fugitive Dust Control Plan:

- Identifies and describes the CCR fugitive dust control measures to minimize CCR from becoming airborne at the facility.
- Describes procedures to emplace CCR as conditioned CCR. Conditioned CCR means wetting CCR with water or an appropriate chemical dust suppressant that will prevent wind dispersal.
- Describes the procedures the owner or operator will follow to periodically assess the effectiveness of the plan.
- Identifies fugitive dust control recordkeeping requirements.
- Identifies fugitive dust control notification requirements.

## 3. Fugitive Dust Sources and Controls

MidAmerican owns and operates LGS, located 7 miles south of Muscatine, Iowa. The plant operates a 745-megawatt (MW) generating unit. CCR produced at LGS includes fly ash, bottom ash/economizer ash, and scrubber (waste) ash. Fly ash is currently utilized for beneficial reuse, all other ash is disposed in the on-site Monofill. At various points in the handling of CCR, there is the potential for fugitive dust generation and emissions.

In addition to the controls outlined in this plan, MidAmerican adheres to controls and best management practices that are required and outlined in site permits and plans. MidAmerican also holds subcontractors managing CCR responsible for controlling fugitive dust.

Table 3.1 lists the CCR related fugitive dust sources identified at the facility, briefly describing operations at each potential source of fugitive dust.



**Table 3.1 CCR Fugitive Dust Sources**

Source Name	Description
Bottom Ash/Economizer Ash Handling	Transported via truck and disposed of at the monofill
Fly Ash Handling	Pneumatic transport to silo.
Scrubber waste Ash Handling	Pneumatic transport to silo and wetted for disposal at the monofill
Haul Roads	Transport road within the plant site and to the monofill
Monofill	Truck unloading/material placement/grading

## 3.1 Bottom Ash/Economizer Ash Handling

Bottom ash and economizer ash are handled dry and discharged into an enclosed concrete bunker. The storage bunker is covered and enclosed on three sides to minimize potential fugitive dust emissions. A front-end loader is used to load the bottom/economizer ash into haul trucks. Due to the coarse, sand-like consistency of the bottom/economizer ash, it is not necessary to condition the ash prior to loading into haul trucks.

The bottom/economizer ash is transported from the storage bunker to the Monofill and unloaded. Dust control measures for loading, transport, and disposal of bottom ash and economizer ash are described in Table 3.2.

**Table 3.2 Bottom Ash/Economizer Ash Handling Control Measures**

Control/Activity	Description
Bottom and Economizer Ash Bunkers	Concrete enclosures minimize potential for fugitive dust emissions since the area is blocked from wind.
Street Sweeper	The plant uses a street sweeper daily when CCR is displaced from the ash bunkers.
Personnel monitoring	Personnel unloading the trucks at the Monofill are responsible for observing the conditions of the ash and adding water during unloading, if necessary.

## 3.2 Fly Ash Handling

Fly ash is pneumatically transported from the precipitator and stored temporarily in a fly ash silo. Fly ash is loaded dry into trucks and transported offsite for beneficial reuse. Fly ash truck loading is completed via over-suction chute and is transported in enclosed trucks. The fly ash is generally transported offsite for beneficial reuse.

Fly ash that does not meet reuse specifications for beneficial reuse is transported to the monofill in enclosed trucks and is conditioned by water trucks. After the conditioned ash has solidified, it is ground into a product called c-stone that can be beneficially reused. Dust control measures are described in Table 3.3.

**Table 3.3** Fly Ash Handling Control Measures

Control/Activity	Description
General Silo Controls	Storage silo is equipped with bin vent filter.
Dry Unloading	The dry unloading process includes a telescopic chute that lowers into enclosed tanker trucks to minimize material fall distance. The loading chute has over-suction to prevent fugitive dust emissions during unloading.
Monofill Placement	Dry fly ash sent to the monofill is conditioned with water trucks during placement. Hauling and disposal activities are halted when wind conditions are extreme when operationally feasible.
Grinding Material	Water trucks are used during the grinding of c-stone to minimize the potential for fugitive dust emissions.

### 3.3 Scrubber (Waste) Ash Handling

Scrubber (waste) ash is transported to and stored in a storage silo that is equipped with a bin vent filter. The waste ash is conditioned to at least 20% moisture content via an in-silo pugmill. From the silo scrubber, ash is loaded onto trucks via loading chute with belt skirting. The skirting helps to minimize dust emissions during truck loading. The waste ash is transported from the silo to the monofill and unloaded. Dust control measures for loading, transport, and disposal are described in Table 3.4.

**Table 3.4** Scrubber Waste Ash Handling Control Measures

Control/Activity	Description
General Silo Controls	Storage silo is equipped with bin vent filter.
Wet Unloading	Waste ash is conditioned to at least 20% moisture content via pug mill within silo enclosure prior to unloading.
Haul Truck Loading/Unloading	Belt skirting on the silo chute minimizes potential of fugitive dust emissions during truck loading by providing a somewhat enclosed drop zone during truck loading. When the material is placed at the monofill it has already been conditioned.
Personnel Monitoring	Personnel unloading the trucks are responsible for observing the condition of the ash and adding water during unloading if necessary. Hauling and disposal activities are halted when wind conditions are extreme if operationally feasible.

### 3.4 Haul Roads

A paved haul road connects the plant to the monofill site. Haul trucks use the paved haul road to transport CCR materials. Dust control measures are described in Table 3.5.

**Table 3.5**      *Haul Roads Control Measures*

Control/Activity	Description
Haul Roads	Plant haul road is paved and there is an enforcement of a strict speed limit on all vehicles accessing the haul roads; this minimizes fugitive dust generation during transport.
Street Cleaning	The plant uses a street sweeper routinely, when hauling material to the monofill, to clean paved haul road of CCR material.
Enclosed/Covered Trucks	All haul trucks are enclosed or covered to minimize fugitive dust. Haul truck drivers are responsible for notifying the Plant Manager when the haul road requires watering/cleaning.

## 3.5 Monofill

CCR materials are transported to the onsite permitted monofill for disposal. Dust control measures at the monofill are described in Table 3.6.

**Table 3.6**      *Monofill Control Measures*

Control/Activity	Description
Water Trucks	Water trucks are used as necessary to prevent fugitive dust from becoming airborne. Wetting CCR with water serves to condition the CCR material to a moisture content that will prevent wind dispersal. A chemical dust suppressant may be used, as needed, to reduce dust generation. Leachate may be used as the wetting agent within the lined portion of the monofill.
Operations Halt	During abnormally high winds, CCR placement within the landfill is halted until conditions improve if operationally feasible.

## 3.6 CCR Impoundment

LGS includes a CCR impoundment closed in 2020. Closure construction included a cover system that keeps CCR isolated. There are no anticipated activities to cause fugitive CCR dust, however, cover maintenance activities may create observable soil dust.

# 4. Procedures for Logging Citizen Complaints

A specific requirement of the CCR Fugitive Dust Control Plan requires owners and operators of all CCR units to develop and implement formal procedures to log citizen complaints involving CCR fugitive dust events. LGS staff will investigate complaints to determine and verify the nature of the complaint and the factors contributing to it, including site operations at the time, location of complaint versus Monofill location, and weather conditions including wind direction. These complaints must then be included as part of the annual CCR Fugitive Dust Control Report. This report must be placed in the operating record and on the owner or operator's publicly accessible internet site.

MidAmerican logs complaints as received on the log form in Appendix A. The contact information, if provided, and the nature of the complaint will be recorded. Citizens, groups, or agencies who wish to log a complaint may do so by calling the main plant phone number at (563) 262-2867 and asking to speak with the site Environmental Coordinator. During the evening, weekends and holidays, the caller can request to log a complaint with the shift supervisor, or

request for the Environmental Coordinator to return their call within 24 hours. Complaints can also be submitted in writing to the plant address at 8602 172nd Street, Muscatine, Iowa 52761, Attn: Environmental Coordinator.

## **5. Periodic Assessment of the Plan**

MidAmerican may amend the written CCR Fugitive Dust Control Plan at any time. However, MidAmerican must amend the written plan whenever there is a change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR unit. The plan and any subsequent amendments must be certified by a qualified professional engineer. As with other requirements of this rule, in order to ensure that the provisions of the fugitive dust criteria are maintained throughout the operating life of the CCR unit, MidAmerican is required to prepare an annual CCR Fugitive Dust Control Report, describing additional actions taken to control CCR fugitive dust beyond what is described in the plan, a record of all citizen complaints, and a summary of any corrective measures taken.

MidAmerican commits to assessment of this plan's effectiveness in accordance with 40 CFR 257.80(b), at a minimum, on an annual basis, during preparation of the annual CCR Fugitive Dust Control Report to identify deficiencies or additional Best Management Practices. If more effective technology techniques have been identified at the time of the review and will substantially improve dust control, the plan will be amended to reflect these changes. These changes will be implemented within [6 months] of the Plan's amendment. Additionally, these changes will be documented in the annual CCR Fugitive Dust Control Report in the year in which they are identified.

## **6. Annual Report**

An Annual CCR fugitive dust control report will be prepared by MidAmerican in accordance with 40 CFR 257.80 (c). The annual CCR Fugitive Dust Control Report will include:

- A description of the actions taken by the owner or operator to control CCR fugitive dust,
- A record of all citizen complaints, and
- A summary of any corrective measures taken.

## **7. Record of Revisions and Updates**

Table 7.1 provides a revision record for the WSEC CCR Fugitive Dust Control Plan.

**Table 7.1 CCR Fugitive Dust Control Plan Revision History.**

Revision Number	Date	Revisions Made	By Whom
A	3/16/2020	Removed discussion of the use of the unlined existing monofill for CCR disposal. Figures 1 and 2 have been updated to reflect current site conditions and haul route.	George Fletcher, P.E.
B	10/12/2021	Revised Figure 2 showing West CCR Monofill is closed.	George Fletcher, P.E.
C	4/1/2025	Revised to update periodic assessment requirements	GHD

# Appendices

# **Appendix A**

## **Citizen Compliant Log**

## Louisa Generating Station – CCR Fugitive Dust Complaint Log

Date	Plaintiff Location, Group, or Affiliation	Nature of Complaint	Action Taken to Mitigate Fugitive Emissions





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**→ The Power of Commitment**

# **Attachment D**

## **Emergency Response and Remedial Action Plan**



# **Emergency Response and Remedial Action Plan (ERRAP)**

**Louisa Generating Station CCR Monofill  
Permit #70-SDP-16-04P**

MidAmerican Energy Company  
Muscatine, Iowa

August 08, 2025

**GHD**

11228 Aurora Avenue

Des Moines, Iowa 50322-7905, United States

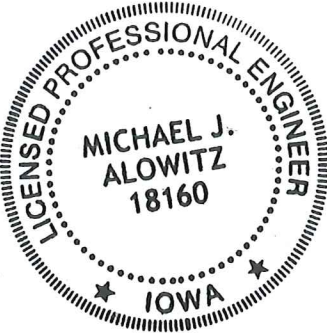


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# Emergency Response and Remedial Action Plan (ERRAP)

## Certification

	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.	
	 _____ Michael J. Alowitz, P.E.	 _____ Date
	License Number:	18160
	My license renewal date is:	December 31, 2026
	Pages or sheets covered by this seal:	Entire Document

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# 1. Regulatory Requirements

The following Emergency Response and Remedial Action Plan (ERRAP) was prepared for the Louisa Generating Station (LGS) Coal Combustion Residue (CCR) East Monofill (Monofill) under Iowa Department of Natural Resources (IDNR) operating permit # 70- SDP-16-04P.

The ERRAP has been prepared in accordance with Iowa Code 455B.306(6)"d." At a minimum the ERRAP will address the following:

- a. Established provisions to minimize the possibility of fire or explosion.
- b. Established provisions to minimize any releases to air, land, or water of pollutants that could threaten human health and the environment.
- c. The identification of possible occurrences that may endanger human health and the environment.

This ERRAP fulfills the regulatory requirements and will be updated, as necessary, with subsequent permit renewal applications.

# 2. Facility Information

This ERRAP for MidAmerican Energy Company's (MidAmerican's) LGS CCR Monofill was prepared in accordance with Subrule 567-103.2, Iowa Administrative Code (IAC). The Monofill consists of a closed western portion (Operating Permit #70-SDP-17-04P) and an active eastern portion addressed in this ERRAP. The East Monofill is lined with leachate collection and associated pumping, transport, and storage infrastructure.

The East Monofill is located in the east  $\frac{1}{4}$  of the NW  $\frac{1}{4}$  and the west  $\frac{1}{4}$  of the NE  $\frac{1}{4}$  of Section 4 Township 75N, R2W (Louisa County). The Monofill is located within the fenced, and gated perimeter of the LGS and located north of the coal pile. Access within the fence line is controlled and not public ally accessible. The surrounding land use is primarily agricultural.

The responsible official for MidAmerican is Mr. Todd Horchem, General Manager Louisa Generating Station

8602 172<sup>nd</sup> Street

Muscatine, IA 52761

Phone: (563) 262-2865

Fax: (563) 262-2892

E-mail: [Todd.Horchem@midamerican.com](mailto:Todd.Horchem@midamerican.com)



### **3. Emergency Conditions – Response Activities – Remedial Action**

This section identifies emergency conditions that may affect operations at the Monofill. Hazards associated with each emergency condition and the proposed response action to be taken at the Monofill are discussed. For all emergency conditions, the emergency contact is the LGS Shift Manager at (563) 262-2866. Appendix A identifies this contact information for quick reference. Appendix B is a table summarizing the applicable emergency conditions, appropriate responses, and contact information. The severe weather shelter and accountability location are identified in Appendix C and presented in Figure 1.

#### **3.1 Failure of Utilities**

##### **3.1.1 Short-Term (48 Hours or Less)**

A short-term power loss will primarily impact the leachate lift station pumps, leachate loadout and the non-potable water well pump. If an electrical storm is not evident, the loss of electrical power will be investigated by on-site MEC staff to identify the potential cause of the outage. Some possible causes include:

- Downed power lines.
- Transformer malfunction.
- Circuit breaker tripped (internal and external).
- Power grid failure.

A short-term power loss to the leachate lift station pumps, leachate loadout or the non-potable water well pump will have minimal impacts. If leachate does need to be extracted from one or both of the leachate lift stations, a portable pump powered by a portable generator can be used to transfer leachate to the leachate pond. All manufacturers' recommendations regarding the safe use of auxiliary generators will be used until power is restored. The need for use of the non-potable water well during a short-term power outage is unlikely. However, if water is needed at the Monofill during a short-term power outage it may be hauled from the LGS main facility. The leachate loadout facility can be without power for short periods without undue impacts to the operation of the disposal facility.

##### **3.1.2 Long-Term (Over 48 Hours)**

Long-term interruptions in electrical power are unlikely. However, should this occur, the same response activities described for the short-term power outage will be used until power is restored. The leachate loadout operation, if needed, can be conducted using a suction lift pump and a backup generator to load leachate to haul trucks. However, the leachate pond is sized such that leachate loadout is not likely needed even during long term power loss at the facility.

#### **3.2 Weather-Related Events**

##### **3.2.1 Tornado**

The National Weather Service issues tornado watches and warnings. A tornado watch means conditions exist for tornadoes to develop. A tornado warning means a tornado has been sighted visually or by weather radar. Because tornadoes move so rapidly (25 to 60 mph), little time may be available to take any action other than seeking cover. Preparations for seeking cover should begin once a severe weather advisor is issued indicating that the right conditions exist for potential tornado development.

Appropriate actions by Monofill personnel are:

- Operations at the Monofill will cease when the National Weather Service issues a tornado warning for the area.
- Listen to the radio to keep track of developments. Alert site personnel that a tornado warning has been issued. Monitor weather in the area with a weather radio.
- If a tornado is sighted, immediately seek shelter in the emergency storm shelter located adjacent to the Monofill. If an emergency shelter cannot be reached, take cover close to the ground or lie flat in the nearest ditch or ravine if there is not time to escape. Personnel should take care to protect their head and eyes and be aware of potential flooding or flying debris. Do not try to outrun a tornado by car or truck.

### 3.2.2 Windstorms

Windstorms are common in Iowa and may or may not be associated with an approaching storm. High winds can be as dangerous as tornadoes. Safety precautions during high wind events should be similar to a tornado event. Additionally, if high winds are predicted or anticipated, adequate operational changes need to be made to reduce windblown CCR. These precautions may include:

- Temporarily discontinuing CCR placement operations.
- Using a dust suppressant (leachate or water) on exposed CCR material.

High winds during the winter have additional concerns including:

- Reduced wind chills.
- Blowing and drifting snow.
- Precautions need to be taken to limit skin exposure.
- Regular snow clearing needs to take place.

Following any severe weather occurrence, the condition of the Monofill including access roads, drainage structures, and deposited CCR should be inspected, and corrective measures taken if needed. The assessment of field conditions will be completed by field personnel and LGS management.

### 3.2.3 Snow and Ice

Snow and ice are common during the winter months in Iowa. Depending on the amount of snow or ice received, operating hours may be temporarily changed to get the site cleared of snow and ice. Operators will arrive on site when conditions allow and begin clearing the road to the Monofill and the active disposal area. Heavy equipment is used to clear the site.

### 3.2.4 Intense Rainstorms and Erosion

Rainstorms of high intensity can cause erosion concerns. The active and inactive fill areas and associated storm water controls should retain the sediments associated with the storm related erosion. Following any intense rainstorm, the erosion control structures will be assessed for erosion damage following major rain events. While storm water control structures are designed to manage the 25-year, 24-hour storm event, intense rain events can overwhelm the structures and require subsequent repair.

Where possible, minimize slopes to reduce the velocity of the water. Erosion damage should be repaired as soon as possible to protect worker safety and to limit future drainage from subsequent rainfall events.

### 3.2.5 Lightning Strikes

Lightning may strike from over 10 miles away and poses a risk to on-site workers and equipment. In the event that field monitoring personnel are on-site, field activities will be suspended for 30 minutes following observed lightning strikes. The following safety rules should be obeyed if lightning threatens:

- If caught in rubber tired vehicles, stay in the vehicle with all metal parts (such as loader buckets) lifted off the ground.
- If caught in a metal-wheeled or tracked vehicle, shut down the engine and dismount; seek shelter in buildings, on-site storm shelters, low areas, or inside a rubber-tired vehicle.
- If there is not a shelter nearby, find a low spot and assume the safety position. The safety position consists of squatting down as low as possible while keeping only the soles of the shoes in contact with the ground. The safety position minimizes ground contact area and lowers one's profile. Stay twice as far away from trees as the trees are high.
- If you feel a tingling sensation or if your hair stands on end, immediately assume the safety position.

Personnel struck by lightning can be handled safely. If the person is unconscious or appears dead, do not move the person unless in an exposed area. Apply appropriate first aid. Contact the LGS Shift Manager at (563) 262-2866 to initiate a 911 call.

### 3.2.6 Flooding

Since all landfills must be so situated to be outside a flood plain, in accordance with 567 IAC- 103.1(1)a and Federal rule 40 CFR 257.3-1, the possibility of a flood at the Monofill is remote. In addition, the Monofill is designed to promote positive drainage and flooding within the Monofill is unlikely. However, in the event flooding is observed within or adjacent to the Monofill, personnel should avoid placing themselves or heavy equipment in or near the flooded area. Any flood damage shall be repaired and documented to protect worker safety and the integrity of the Monofill.

### 3.2.7 Event and Post-Event Conditions

Significant damage from any weather-related condition shall be documented by field personnel and/or LGS management. Monofill operations should not resume until the location is safe for site personnel and equipment operations.

## 3.3 Fires and Explosions

In the event of any fire or explosion at the Monofill, the first priority will be worker safety, followed by notification of the LGS Shift Manager at (563) 262-2866. Small fires can be addressed using on-site fire extinguishers. Major fires will be left for the local first responder (Fire Department). Fires and explosions in CCR monofills are rare since the ash is inert and has been quenched.

### 3.3.1 Waste Materials

The Monofill will only store CCR. There is no potential for fire hazards associated with CCR.

### 3.3.2 Buildings and Site

In the event of fire or explosion at the Human-Machine Interface (HMI) Shelter, take the following action:

- Try to put the fire out with extinguishers, if it is safe to do so;
- Move to safety; and
- Contact the LGS Shift Manager at (563) 262-2866.

### 3.3.3 Field Fires (Grass Fires)

Despite the best precautions, even when danger is low, a field fire may ignite or move on-site. If this happens, the following actions will be taken:

- Contact the LGS Shift Manager at (563) 262-2866. An employee will be stationed at the gate or other location to direct firefighting assistance to the fire.
- Evacuate nonessential personnel.
- Assist in containment of the fire using Monofill equipment, if necessary, under the direction of the Fire Department.

### 3.3.4 Equipment

The occurrence of vehicle chassis fires can be minimized by proper preventative maintenance and cleanliness. Equipment used at the Monofill includes dump trucks, front-end loaders, road graders, and bulldozers. The potential for vehicle chassis fires or explosions associated with this equipment exists. Each vehicle is equipped with fire extinguishing equipment.

If a fire occurs, take the following actions:

- Evacuate the vehicle after putting on the emergency brake and turning off the ignition.
  - If personnel are trapped or unconscious in the vehicle:
    - Concentrate on preventing the fire from spreading to the cab.
    - Attempt personnel rescue only if there is no danger of a fuel explosion.
    - Summon first aid equipment and the rescue squad.
  - If there is imminent danger of a fuel explosion, evacuate the fire scene immediately and seal off the area.
  - If danger is not imminent, move all nonessential vehicles and individuals away from the burning vehicle and seal off the area. After personnel safety has been ensured, assess the situation to determine if the fire can safely be extinguished by personnel trained in proper use of fire extinguishing equipment.
  - Contact the LGS Shift Manager at (563) 262-2866.
  - After the fire is extinguished, the Monofill will be inspected for damage and cleanup activities will be completed to return the Monofill to normal operation as soon as safely possible.
  - An incident report for MEC will be completed, describing the cause of the fire, the circumstances and events of the incident, and prevention of future occurrences.

### 3.3.5 Fuel Fires (Including Oil, Grease, and Other Liquids)

In the event of a fire associated with fuel at the Monofill, personnel will first secure their personal safety and immediately contact the LGS Shift Manager at (563) 262-2866. No attempt to extinguish a fire involving liquid fuel products should be attempted by site personnel.

### 3.3.6 Electrical Fires

Electrical fires could occur in electrical boxes and in pumps or auxiliary electrical equipment. When electrical fires are identified, personnel will first secure their personal safety. Once personnel safety has been assured, site personnel should immediately contact the LGS Shift Manager at (563) 262-2866. Site personnel should then assess the fire to determine if the fire can safely be extinguished by personnel trained in proper use of fire extinguishing equipment.

### 3.3.7 Facilities

No facilities are currently developed or planned for the Monofill.

### **3.3.8 Working Area**

Fires or explosions in the working area of the Monofill could occur from malfunctioning heavy equipment. Equipment shall be maintained in working order.

### **3.3.9 Hot Loads**

The CCR is partially quenched to reduce the temperature before disposal. CCR will not come into direct contact with high-density polyethylene (HDPE) leachate collection pipes or the geomembrane liner.

### **3.3.10 Waste Gases**

CCR will be the only material stored at the Monofill. CCR does not produce any explosive gases; therefore, no explosion hazards are present.

### **3.3.11 Evacuation**

If evacuation from the Monofill area is necessary, personnel shall leave the Monofill by the closest and safest exit point. The accountability location for Monofill personnel is the Coal Car Dumper Building (Figure 1). In the event of any evacuation from the Monofill, the LGS Shift Manager should be notified at (563) 262-2866.

## **3.4 Regulated Waste Spills and Releases**

The only regulated material deposited at the Monofill is CCR and no additional wastes will be managed.

### **3.4.1 Waste Materials**

CCR is the only material accepted for deposition in the Monofill and is not a classified hazardous waste. In the event of a CCR spill, the material will be collected and placed inside the Monofill, as per standard operating procedures. Soil or other nonhazardous material on which the spill occurred may also be placed in the Monofill to ensure complete cleanup.

### **3.4.2 Leachate**

Leachate generated by the operation of the landfill can potentially spill or leak to the ground. Spills and leaks of leachate can occur through leachate seeps, pipe leaks or pumping system shutdown.

Leachate seeps can be minimized by adequate cover soils over filled areas and routine inspection. Leachate seeps, if discovered, can also be controlled by constructing a dry well in the seep area to re-direct the leachate back into the fill area.

Pipe leaks are caused by leachate pipe integrity being compromised. If a leachate collection pipe is suspected to be leaking, proper repair procedures will be undertaken to repair the leak and clean up contaminated soil.

### **3.4.3 Waste Gases**

CCR is inorganic and will not generate explosive or hazardous vapors such as methane. Waste gases are not a concern at the Monofill.

### **3.4.4 Waste Stockpiles and Storage Facilities**

Stockpiles at the Monofill are limited to recently deposited CCR prior to spreading and compacting. The stockpiles are minimal in size and do not pose a hazard.

### 3.4.5 Waste Transport Systems

CCR is transported from the main facility by truck to the Monofill. On occasion, a vehicle containing CCR material may spill in an undesignated area. Spill cleanup will consist of using on-site equipment (e.g., front loader or similar) to collect the spilled material and impacted surrounding soil for transport and placement in the Monofill.

### 3.4.6 Litter and Airborne Particles

CCR is the only material accepted for deposition in the Monofill. CCR is not considered a source of litter and therefore litter is of little concern. Trash receptacles will be used for personnel trash and will be maintained to prevent litter from becoming airborne.

Airborne particles at the Monofill site consist primarily of dust. Dust can be caused by the moving and placement of CCR, soil movement as part of the Monofill construction process, and by traffic on unpaved roads within and around the Monofill area. These operations will be controlled to minimize dust.

Compaction and wetting of the CCR material and soil upon placement will minimize the potential for airborne particles. In the event of airborne CCR or soil particles, additional wetting shall be performed.

Dust controls are designed and utilized to minimize releases of dust from unpaved roads at the Monofill. All roadways at the Monofill should be inspected, scraped, graded, or otherwise maintained as required by prevailing conditions.

Dust suppressant will be used on all interior roadways (i.e. roadways within the waste limit) to control dust on an as needed basis. Leachate generated from the Monofill will be used within the lined cell areas as the dust suppressant if available, otherwise water will be used.

CCR Monofills generally do not require intermediate cover. However, if intermediate cover is utilized it will be maintained to minimize dust generation. This may include water application as a dust suppressant and seeding areas prone to dust creation.

### 3.4.7 Site Drainage Systems

Storm water generated from the Monofill will be directed to the sedimentation basin located on the west side of the Monofill. Due to the lithology at the site it is anticipated that most of the storm water will infiltrate to the subsurface as opposed to be discharged. If storm water is discharged the sediment will have been removed through settling processes in the sedimentation basins prior to release.

### 3.4.8 Off-Site Releases

CCR is generated and disposed on-site. No off-site release of regulated CCR is expected.

In the unlikely event that an off-site release occur, measures will be taken to contain and remediate the release. Remediation measures include collection of spilled material and impacted surrounding soil for transport and placement in the Monofill.

## 3.5 Hazardous Material Spills and Releases

The only material accepted at the Monofill is CCR. Since CCR is not a classified hazardous waste, the possibility of a hazardous waste release is limited. The only known hazardous material that will be present at the Monofill is petroleum products used in the heavy equipment, trucks, and cars.

### 3.5.1 Load Check Control Points

The Monofill will only accept CCR material. Thus, there will be no load check control points for hazardous material.

### **3.5.2 Mixed Waste Deliveries**

The Monofill will only accept CCR material. Thus, there will not be mixed waste deliveries.

### **3.5.3 Fuels**

For a minor spill, the refueling truck spill kit will be utilized. In the event of releases, the LGS Shift Manager will be notified immediately at (563) 262-2866. CCR may be used to control a spill or as a sorbent; however, the impacted CCR shall be removed from the Monofill for proper disposal.

### **3.5.4 Waste Gases**

CCR is inorganic in nature and thus waste gases will not be generated or released.

### **3.5.5 Site Drainage Systems**

Spills and releases of hazardous materials to site drainage systems are extremely unlikely. If a petroleum product is released at the Monofill, the LGS Shift Manager will be notified at

(563) 262-2866, and the spill will be evaluated and/or remediated according to the SPCC for the Louisa Generating Station.

### **3.5.6 Off-Site Releases**

Given the nature of the site and Monofill operations, there is no practical method of an off-site release of a hazardous material. In the event of a release of any hazardous material, the LGS Shift Manager will be notified immediately at (563) 262-2866.

## **3.6 Mass Movement of Land and Waste**

### **3.6.1 Earthquakes**

The site is not located in a seismically active area; thus, an earthquake at the LGS site is unlikely. In the event of an earthquake activities at the Monofill will cease. During an earthquake personnel should move to an open area away from anything that may fall and cause injury. Aftershocks commonly occur after the earthquake has ended, and personnel should be aware of this possibility and take precautions. Following an earthquake, improvements (such as roads and drainage structures) should be inspected for damage, and clean-up or repair activities will be completed so normal operations can resume as soon as safely possible..

### **3.6.2 Slope Failure**

Slope failures are caused by external loads, removal of part of the slope by excavation, undermining the slope, shock, tension cracks, and water pressure cracks.

Slope failure potential will be reduced by keeping slopes no steeper than 3 horizontal to 1 vertical feet. However, this may not eliminate slope failure. Should a slope fail, the engineer of record should be contacted to evaluate the failure. This evaluation should include determination of the potential cause for the failure and appropriate repair strategy.

Monofill personnel shall not attempt to restore the slope until danger to workers from additional slope failure has been evaluated.

### **3.6.3 Waste Shifts**

Waste shifts are similar to slope failure and may indicate structural problems in the waste prism. If a waste shift is identified it should be treated as a slope failure and be evaluated by the site engineer. Given the placement process for CCR in the Monofill, a waste shift is unlikely.

### **3.6.4 Waste Subsidence**

Due to the waste placement process at the Monofill, and the fact that CCR material is largely homogenous in nature, it is unlikely that waste subsidence will occur.

## **3.7 Emergency and Release Notifications and Reporting**

Personnel working at the Monofill will not be responsible for emergency release notifications and reporting. In the event of an emergency, personnel should contact the LGS Shift Manager at (563) 262-2866. The LGS Shift Manager will facilitate emergency response, notification, and reporting activities at the direction of the LGS Shift Manager. Event reporting, if appropriate, will be conducted through MidAmerican's established protocols and spill response program.

Due to the nature of CCR, notification of news media and special populations is not necessary should a release occur.

## **3.8 Emergency Waste Management Procedures**

### **3.8.1 Communications**

During an emergency regarding waste management practices, internal communication via on-site radios or cellular telephone will be conducted between Monofill personnel and LGS facility, as normal. All external communication will be performed at the direction of the LGS Shift Manager.

### **3.8.2 Temporary Discontinuation of Services, Short- and Long-Term**

A short-term discontinuation of services will not have a significant impact on the Monofill. If long-term discontinuation of services occurs at the Monofill, procedures will be dictated by the Closure/Post-Closure Plan.

### **3.8.3 Facility Access and Re-Routing**

Due to the proximity to the LGS facility, no significant facilities requiring emergency waste management are expected to be developed near the Monofill.

### **3.8.4 Waste Acceptance**

Any emergency that occurs at the Monofill that would inhibit waste placement would be temporary. If this does occur, the LGS facility will be notified regarding the temporary waste acceptance schedule.

### **3.8.5 Waste in Process**

There are no waste-in-process procedures at the Monofill. As described in the previous sections if an emergency arises, waste acceptance can be temporarily discontinued with no significant impacts.



## **3.9 Primary Emergency Equipment Inventory**

### **3.9.1 Major Equipment**

The following pieces of major equipment are typically present and operational at the Monofill: motor grader, bulldozer, haul trucks and water truck.

### **3.9.2 Fire Hydrants and Water Sources**

Non-potable water is available at the Monofill and at the LGS main facility if needed to address an emergency situation.

### **3.9.3 Off-Site Equipment Resources**

If an emergency event requires off-site equipment resources, the LGS Shift Manager will coordinate this effort.

## **3.10 Emergency Aid**

In the event of an emergency, personnel shall contact the LGS Shift Manager using the emergency response number, (563) 262-2866. The LGS Shift Manager will coordinate emergency response, direct emergency aid vehicles, and will coordinate with MEC personnel.

## **3.11 ERRAP Training Requirements**

### **3.11.1 Training Providers**

LGS officials will review this ERRAP with personnel who work at the Monofill. No outside training agencies will be employed.

### **3.11.2 Employee Orientation**

MEC employees or contractors working at the Monofill will review this ERRAP and sign an acknowledgement form. A copy of the Review Acknowledgement form is provided as Appendix D.

### **3.11.3 Annual Training Updates**

LGS officials will review this *ERRAP* annually with personnel working at the Monofill. If this ERRAP is updated, LGS officials will notify all personnel and contractors who perform work at the Monofill.

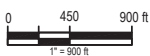
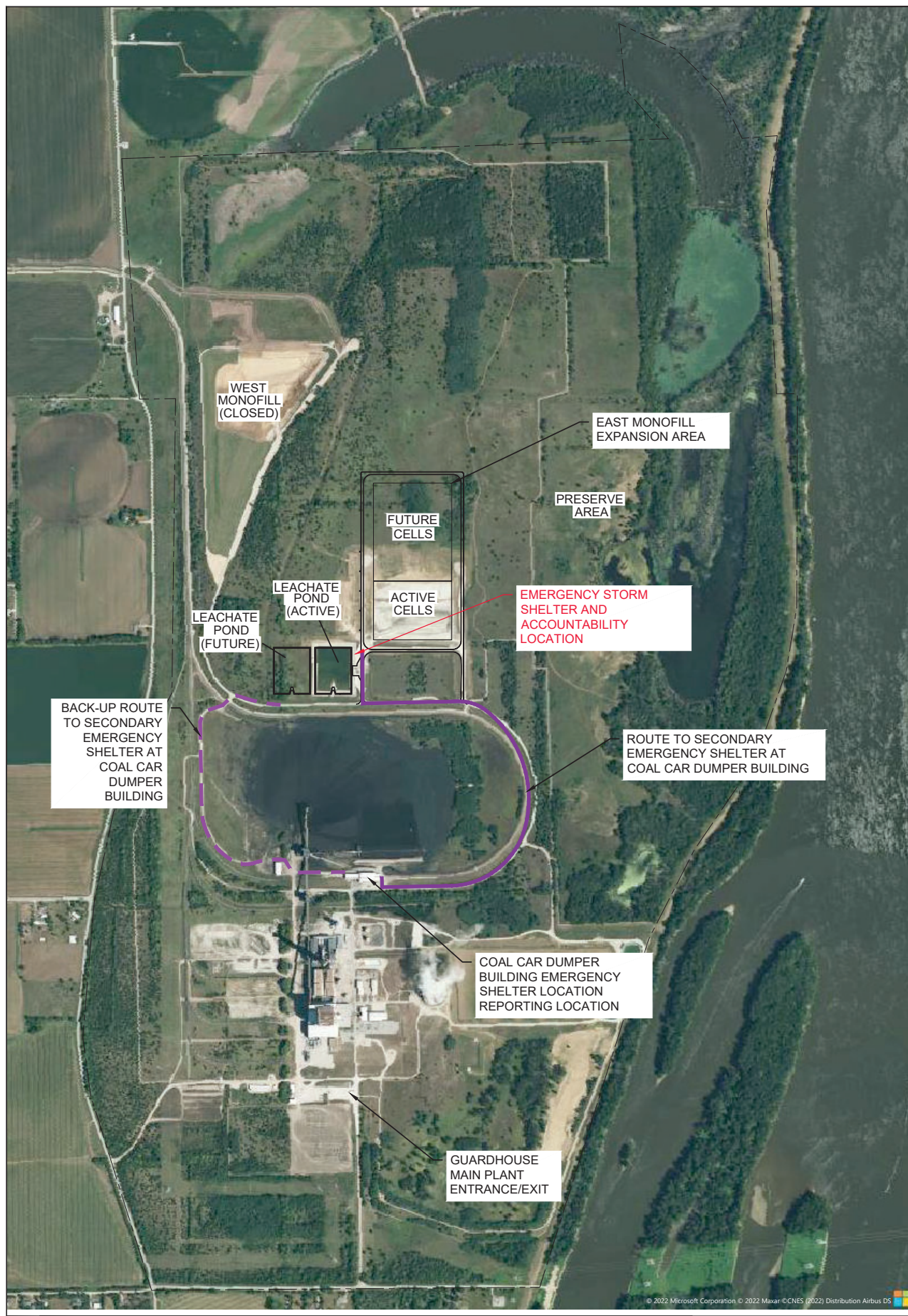
### **3.11.4 Training Completion and Recordkeeping**

LGS officials will maintain a list of Monofill personnel who have reviewed this ERRAP and are eligible to perform work at the Monofill. A copy of the Review Acknowledgement form is provided as Appendix D.

## **3.12 Reference Tables, Figures, and Maps**

A site map is provided to identify the Monofill location, accountability/shelter location, and features (Figure 1). All emergency response will be coordinated through the LGS Shift Manager at (563) 262-2866. For quick reference, this number is presented in Appendix A. Appendix B includes a brief presentation of emergency responses. Emergency shelter, accountability, and fire emergency reporting locations are identified in Appendix C. Appendix D contains a Review Acknowledgement form.

# Figure



MIDAMERICAN ENERGY COMPANY  
LOUISA GENERATING STATION  
EAST MONOFILL ERRAP  
MUSCATINE, IOWA

EMERGENCY RESPONSE AND REMEDIAL  
ACTION PLAN

Project No. 12575233  
Date December 2022

FIGURE 1

# Appendices

# **Appendix A**

## **Emergency Contact Information**

## Emergency Contact Information

Contact	Number
Louisa Generating Station Shift Manager	(563) 262-2866

This number should be called to report any emergency conditions and the need for medical attention. The LGS Shift Manager will notify 911 and coordinate emergency response. In the event of a spill, all reporting will be facilitated by the LGS Shift Manager

# **Appendix B**

## **Emergency Response Reference Table**

## Emergency Response Reference Table

Emergency Condition	Action	Response
Tornado	Operations cease when a Severe Weather Advisory is issued.	If present at the Monofill during a tornado, take shelter at the on-site storm shelter(s) adjacent to the Monofill. If unable to reach a shelter location, when seeking a ditch or low-lying area to take shelter in, the potential for flooding should be taken into account.
Wind Storm	Operations cease when a Severe Weather Advisory is issued.	Proceed to on-site storm shelter(s) adjacent to the Monofill, or, if necessary, seek shelter in a ditch or low-lying area.
Fire Monofill Equipment Fuel	Secure personal safety.	If reasonable, attempt to contain and extinguish the fire and call the LGS Shift Manager at (563) 262- 2866. Fire extinguishing equipment is located on each of the vehicles used for daily operations
Intense Rain Storm	Operations cease when a Severe Weather Advisory is issued.	If necessary, seek shelter. When seeking an area to take shelter, the potential for flooding should be taken into account
Explosion	Secure personal safety.	Decide whether you can contain and extinguish the fire and call the LGS Shift Manager at (563) 262-2866. Fire extinguishing equipment is located on each of the vehicles used for daily operations.
CCR Spill		Any spilled CCR should be gathered and placed in Monofill.
Leachate Discharge Outside of Containment		Notify the LGS Shift Manager at (563) 262-2866.
Fuel Spill	Attempt to safely contain the release	Notify the LGS Shift Manager at (563) 262-2866.
Earthquake	Monofill operations will cease	Move to an open area away from anything that may fall and cause injury.
Accidents Personal Injury	Secure personal safety.	Monofill Personnel should contact the LGS Shift Manager at (563)26-2866.
Vehicle / Equipment	Secure personal safety.	Assess the situation and contact the LGS Shift Manager at (563) 262-2866 to determine what further action

Abbreviations: CCR = Coal Combustion Residue; LGS = Louisa Generating Station



# **Appendix C**

## **Emergency Shelter/Accountability Locations**

## **Emergency Shelter/Accountability Locations**

In the event of emergency weather conditions, personnel shall attempt to safely proceed as noted below.

### **Severe Weather, Shelter, and Tornado Areas**

In the event of emergency weather conditions, Monofill personnel shall proceed to the on-site storm shelter adjacent to the Monofill as shown in Figure 2-1.

### **Accountability/Fire Emergency Locations**

The accountability location for Monofill personnel is the Coal Car Dumper Building located on the south side of the coal pile. Routes to the Coal Car Dumper Building are shown in Figure 2-1.

# **Appendix D**

## **Emergency Response and Remedial Action Plan Review Acknowledgement**

## Emergency Response and Remedial Action Plan Review Acknowledgement

### MidAmerican Energy Company Louisa Generating Station Coal Combustion Residue Monofill Louisa and Muscatine Counties, Iowa

Employee Name	Signature	Company	Date



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