

**ANNUAL FUGITIVE DUST CONTROL REPORT  
EXISTING COAL COMBUSTION RESIDUE (CCR) LANDFILL  
MUSCATINE POWER & WATER**

**REPORT DATE: DECEMBER 19, 2020**

**A. Rule Requirement – Federal CCR Rule §257.80(c)**

Under Federal Rule §257.80(c), Muscatine Power & Water prepared an Annual Coal Combustion Residue (CCR) Fugitive Dust Control Report within 14 months of placing the initial CCR Fugitive Dust Control Plan (2015) in the landfill's operating record. From then on, the schedule for completing a subsequent annual report is one year after the date of completing the previous report. This document comprises Annual CCR Fugitive Dust Control Report for 2020 required under this rule.

The annual fugitive dust control report provides the following items: (1) a description of the actions taken to control CCR fugitive dust, (2) a record of all citizen complaints, and (3) a summary of any corrective measures taken to address dust control, as presented below.

**1) Description of the actions taken to control CCR fugitive dust**

Haul Road: The haul road from the landfill entrance to the active fill area is surfaced with crushed gravel. To mitigate dusting, the road is watered down as needed (i.e., not every time a load of fly ash is taken to the landfill), using tanker trucks fitted with spray nozzles.

During CCR Disposal Operations: The majority of the CCR disposed of at the landfill includes fly ash, flue gas desulfurization material (FGD), and boiler slag. The fly ash material is the most susceptible to dusting due to its fine particle size and dry nature.

The means for controlling fugitive dust during offloading of fly ash in the active landfill cell is a cover and wet suppression procedure. Fly ash is unloaded from a bulk tanker truck through a pipe that discharges the fly ash underneath a tarp. A water truck is used to spray down incidental fugitive dust to augment the tarp control. An irrigation system has also been used to spray water for dust suppression during unloading procedures.

Wet dust suppression is typically not used during freezing temperatures. When temperatures are above freezing, no fly ash is placed at the landfill when wind speeds exceed 25 MPH. When temperatures are below freezing, no fly ash is placed at the landfill when wind speeds exceed 15 MPH.

Active Area: During regular working hours, if weather conditions and areas of the active cell show potential for generating fugitive dust (loose CCR on the surface), an irrigation device (Ag-Rain Model T40A/1320) is used for dust suppression. Water from the site run-off control pond is used for this procedure.

**2) Record of all citizen complaints**

A procedure to log citizen complaints is identified in Section IV of the CCR Fugitive Dust Control Plan, updated December 5, 2018.

Two citizen complaints were recorded during this annual reporting period. The attached forms, including descriptions of the complaints and resulting corrective action, were entered into the landfill operating record/log.

**3) Summary of any corrective measures**

Summaries of corrective actions taken to address dust control during this reporting period in reference to citizen complaints are included on the attached forms.

A copy of this report will be placed in the operating record as required under §257.105(g)(2).

Under §257.80(d) Muscatine Power & Water intends to comply with the recordkeeping requirements specified in §257.105(g)(2), the notification requirements specified in §257.106(g)(2), and the public internet site requirements specified in §257.107(g)(2).

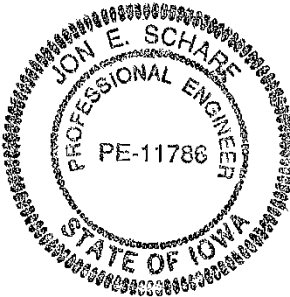
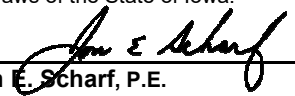
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EXISTING COAL COMBUSTION RESIDUE (CCR) LANDFILL  
MUSCATINE POWER & WATER

CERTIFICATION

ANNUAL FUGITIVE DUST CONTROL REPORT

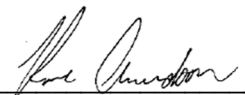
CCR LANDFILL  
Permit No. #70-SDP-06-82P-CCR

MUSCATINE POWER & WATER  
MUSCATINE, IOWA

	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.
	 Date: <u>12/19/2020</u>
	<u>Jon E. Scharf, P.E.</u> License No. 11786 My renewal date is <b>December 31, 2021</b>
	Pages or sheets covered by this seal: <u>ENTIRE DOCUMENT</u>
	_____

Prepared By:

Name: Rose Amundson, CGP  
Certified Groundwater Professional

Signature:   
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Date: December 19, 2020

HR Green, Inc.  
8710 Earhart Lane SW  
Cedar Rapids, IA 52404  
Phone: (319) 841-4000; Fax: (319) 841-4012

## Written Report for Citizen Complaint -CCR Landfill

**Written Report.** The written report of citizen complaint should contain the following information (Please complete as much as possible):

### Citizen submitting complaint:

Name	<u>Claudia Putnam</u>		
Physical Address	<u>2463 Jasper Avenue</u>	City	<u>Letts</u>
Phone Number	<u>319-726-4357</u>	Zip	<u>52754</u>

### Time and Date of complaint:

Time 1:08  AM  PM Date July 1, 2020

### Citizen Complaint: Write a narrative of the complaint

Ms. Putnam's complaint was dusting while unloading a tank truck at the landfill during truck unloading.

### Investigation of Complaint: Write a narrative of the events leading to the incident

Neal Nelson (Manager Power Production) received a picture via text message at 1:08 PM showing dust coming from the truck unloading area of the landfill from Ms. Claudia Putnam. Ms. Putnam included the following text: *"Just now at the fly ash dump. It was airborne and moving over the road."*

Neal Nelson contacted Ms. Putnam at 3:22 PM that same day to inform her that the dusting situation was being addressed with the contractor.

Wind speed and direction at the time of the incident was variable 7-8 mph from the East/South East. The picture showed the visible dust crossed the internal landfill haul road although no visible dust was crossing the property boundary.

From discussion with the hauling contractor, the tarp under which the fly ash is unloaded broke loose from its restraints and fly ash exited the unloading area before he could shut down the unloading process.

### Actions Taken: Write a narrative of the actions taken to correct future issues.

The hauling contractor was contacted and reminded of the requirement that unloading must stop if more than minimal dusting is occurring during the unloading of CCR. The contractor agreed he understood and would meet the requirement to stop unloading if significant dusting occurs and to further manage the windscreen (tarp) described in the Fugitive Dust Control Plan, used to minimize dusting potential by making sure it is securely held in place during the unloading and not open gaps are present.

Person Completing Report	<u>Neal Nelson</u>	<u>July 8, 2020</u>
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Send Report to	Phone	Email
<u>MP&amp;W Environmental Department</u>	<u>563-262-3585</u>	<a href="mailto:jbrewster@mpw.org">jbrewster@mpw.org</a>

## Written Report for Citizen Complaint -CCR Landfill

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### Citizen submitting complaint:

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Physical Address	<u>2463 Jasper Avenue</u>	City	<u>Letts</u>
Phone Number	<u>319-726-4357</u>	Zip	<u>52754</u>

### Time and Date of complaint:

Time 1:35  AM  PM Date December 2, 2020

### Citizen Complaint: Write a narrative of the complaint

Ms. Putnam's complaint was regarding dust at the landfill while unloading a tank truck during unloading.

### Investigation of Complaint: Write a narrative of the events leading to the incident

Neal Nelson (Manager Power Production) received a picture via text message at 1:35 PM showing dust coming from the tank truck unloading area of the landfill from Ms. Claudia Putnam. Ms. Putnam included the following text: "Fly ash dump today about 1:00 pm." The picture showed local dusting at the point of unloading but no visible dust crossing the property boundary.

Neal Nelson contacted Ms. Putnam at 1:37 PM to inform her the issue was being addressed.

The contractor unloading the fly ash was contacted although the unloading was completed by the time we were notified. Wind speed at the time of the report was variable 1-3 mph from the North.

The contractor unloading the ash reported that the dusting occurred at the end of the unloading cycle when the air flow from the truck increased as the amount of ash decreased. The windscreen tarp used to contain dust as described in the fugitive dust control plan was being utilized and was not breached or loose.

### Actions Taken: Write a narrative of the actions taken to correct future issues.

MPW met with the contractor to discuss the unloading process and to determine what additional methods could be implemented to minimize fugitive dust from leaving the unloading area. For the interim, the contractor will be lowering air pressure during the unloading process and slowing down the flow of fly ash to minimize dusting potential. The tarp under which fly ash is unloaded under will continue to be utilized.

The contractor will be investigating alternative unloading practices for dusty materials.

Person Completing Report	<u>Neal Nelson</u>	<u>December 8, 2020</u>
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Send Report to	Phone	Email
<u>MP&amp;W Environmental Department</u>	<u>563-262-3585</u>	<u><a href="mailto:jbrewster@mpw.org">jbrewster@mpw.org</a></u>