Genesee Power Station

G5310 North Dort Highway Flint, Michigan 48505

(810) 785-4144

# **Fugitive Dust Control Plan**



7C - Fugitive Dust Control Plan.doc 06/07/2022

## Fugitive Dust Control Plan

## 1. Scope

This written plan applies to Genesee Power Station and its employees and regards all activities conducted at the facility that generate, handle, or dispose of ashes or other forms of dust from the steam boiler. Genesee Power Station has prepared this fugitive dust control plan in accordance with Section 324.5524 of the Natural Resources and Environmental Protection Act, Act 451 for fugitive dust sources or emissions. The facility is located at G5310 North Dort Highway, Flint, Michigan 48505.

## 2. Purpose

This procedure describes the methods used to minimize the amount of ash or other forms of dust that is re-introduced into the outer air once it has been removed by the pollution control equipment at Genesee Power Station. A copy of the plan will be maintained onsite. The fugitive dust plan will be revised to address reasonable revision requests by Michigan Department of Environment, Great Lakes, and Energy (EGLE) or as Genesee Power Station determines necessary.

Site Contact:

#### 2.1 Name and Address of Responsible Official and Site Contact

Responsible Official: Mr. Thomas Andreski

Mr. Thomas Andreski Plant Manager Thomas.Andreski@cmsenergy.com (810)785-4144x222 Mrs. Roxanna Woodward Environmental Health & Safety Coordinator Roxanna.woodard@cmsenergy.com (810)785-4144x224

## 3. Definitions

### 4. Plan

### 4.1. Unpaved Roads and Parking Areas

There are no unpaved throughways or parking areas at Genesee Power Station's facility at G5310 North Dort Highway, Flint, Michigan as shown on Figure 1. Employees of the company will frequently park on a gravel pad adjacent to paved parking areas near the transformer and demineralized water tank.



Figure 1: Site Plan

#### 4.2. Paved Roads and Parking Areas

As part of the general preventative maintenance program at Genesee Power Station the roads and parking areas are inspected no less often than once a week to assess the likelihood of ash or dust from being blown up off the surface and into the air. If the area is dry and appears to be overly dusty it will be sprayed with water, swept, or scraped, or any combination of these activities to reduce the amount of dust in the air.

This inspection especially focuses on the area between the generation building and the ash storage building (located at the bottom of Figure 1). If the area is dry and appears to be overly dusty it will be sprayed with water, swept, or scraped, or any combination of these activities to reduce the amount of dust in the air and ease in its removal to the ash storage building where it is kept until it is hauled off site.

GPS has a third-party contractor come to site two times per week to clean all streets and entry ways to the ash barn. This is done to avoid any rubber or ash from contaminating the storm drains.

#### 4.3.Traffic Speeds

Vehicular traffic on all plant roadways shall be limited to a maximum speed of 15 miles per hour. This limit is posted near the plant entrance and other select locations on the site.

#### 4.4. Biomass (Fuel) Piles

It is a standard operating procedure of the Fuel Supply Operator (or bulldozer driver) on shift to move piles of newly delivered waste wood into the appropriate waste wood pile as soon as possible after it has been completely unloaded from its delivery truck. This allows subsequent deliveries to be made in a timely manner without waiting for space to be made at the unload site. This practice holds true for those loads with a large amount of sawdust in them as well. By mixing the sawdust-laden load into the large pile of biomass fuel soon after it is delivered the chance for the sawdust to be blown into the air is minimized. This practice is visually verified by plant staff as well as management staff on a continual basis.

#### 4.5. Loading and Unload Operations

All conveyors that handle biomass and ashes from the boiler shall be covered. All biomass and ash handling equipment shall use minimum drop heights to minimize the likelihood of introducing the dust from the wood or ash into the air.

#### 4.6.Ash Handling

Figure 2 provides a schematic view of the ash handling plan that shall be used at the facility.



Figure 2: Ash Handling

#### 4.6.1. Bottom Ash

The bottom ash that accumulates from the Hydrograte as a by product of the steam generation process is collected in the bottom ash shed. When a minimum of a front-end loader bucketful of bottom ash has accumulated it is moved to the ash storage building just south of the generation building via front-end loader with limited drop heights. When the bottom ash is deposited in the ash storage building it is placed as far from the entrance as necessary to keep it away from gusts of wind at the storage building door. The bottom ash is kept there to dry until it is loaded into a waste hauling truck for disposal at a permitted landfill. The bottom ash is transported in vehicles maintained to prevent leakages and spillage.

#### 4.6.2. Fly Ash

The fly ash is collected by both the cyclonic precipitator and the electrostatic precipitator. The combined collection of fly ash is deposited in the bed of a dump truck which is parked with its bed in the fly ash shed. The fly ash conveyor system has an automatic shut off when the level of the ash in the bed of the dump truck reaches a certain level. This prevents the truck from over-filling and creating a problem with ash spilling in the yard as it is moved to the ash storage building. When the conveyor system shuts off, the plant operator on duty takes the collected ash to the ash storage building. The ash is deposited far from the opening of the ash storage building and kept until a waste hauling truck arrives to remove the ash from the facility. The dump truck is then returned to the fly ash shed. The fly ash is transported in vehicles maintained to prevent leakages and spillage.

Should the ash dump truck be out of commission the fly ash is treated similar to bottom ash and moved to the "back" of the ash storage building with a front-end loader. During such times, special attention is given to inspecting and cleaning the area outside the fly ash shed.

In either case, the dump truck or front end loader is driven slowly to minimize the swirling of fly ash into the air.

The entrance to the ash storage building is treated similar to the paved areas around the facility as far as inspection and cleaning are concerned.

## 5. Recordkeeping Requirements

Records of sweeping and watering of roadways, yards, and parking areas will be kept on file for the most recent 5-year period and can be made available to EGLE upon request. Record will be kept of date, time and control method (i.e., wetting or sweeping).

## 6. Responsibilities

#### 6.1. Genesee Power Station

• Implement appropriate and effective measures to minimize the re-introduction in the air those particulates the control devices have removed.

## 6.2. Production Employees (plant operators, fuel supply operators, and maintenance)

- Inspect all paved road and report dust related concerns to their supervisor.
- Clean, by appropriate means, roads or yards to minimize the amount of dust that could be introduced into the air.
- Mix all newly delivered loads of fuel containing large quantities of sawdust (fuel supply operators).

## 7. Related Documentation

• Air Use Permit MI-ROP-N3570-2018.

## **Procedure Revision History**

This procedure is reviewed by the EH&S Coordinator and updated as needed. Updates are given on Figure 3 below.

Revision No.	Date	Revision Description
2	1/8/1997	?
3	7/30/2007	Rewritten for clarity and inclusion of diagrams.
		Deletion of references to dumpsters which are no longer used.
		Inclusion of front end loaders and dump trucks which are now used.
4	5/15/2013	Rewritten for clarity responsibility change and Annual Review
4	5/08/2014	Annual Review By Mitchell R. Hefner

4	4/23/2015	Annual Review By Mitchell R. Hefner
4	4/20/2016	Annual Review By Mitchell R. Hefner
4	5/07/2017	Annual Review By Mitchell R. Hefner
5	4/30/2019	Reviewed and updated by K. Cunningham
6	6/14/2022	Reviewed and updated for compliance with Section 324.5524

Figure 3: Procedure Revisions

## 9. Procedure Approval

Prepared By:	Date:
Roxanna Woodard	6/14/2022
Approved By:	Date:
Tom Andreski	6/14/2022

## End