



FUGITIVE DUST CONTROL PLAN

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GRAND HAVEN BOARD OF LIGHT AND POWER

J.B. SIMS GENERATING STATION

Fugitive Dust Control Plan

Pursuant to 40 CFR 257.80

Unit 3 East and West Ash Pond Surface
Impoundments



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1. INTRODUCTION

The purpose of this Fugitive Dust Control Plan (FDCP) is to minimize fugitive dust emissions from coal and coal combustion residual (CCR) handling operations at the Grand Haven Board of Light and Power (GHBLP) J.B. Sims Generating Station (JBSGS, Site), located on Harbor Island, Grand Haven, Michigan. This plan has been developed in accordance with the CCR regulations stipulated in 40 CFR 257.80, along with the current JBSGS Fugitive Dust Standard Operating Procedures. The scope of this plan includes the active CCR units and their corresponding, roads, handling and control equipment, and associated activities therein, see Figure 1. A site Fugitive Dust Plan Coordinator (FDPC) has been appointed and is responsible for ensuring adequate resources are provided for controlling fugitive dust, as well as implementing the monitoring and record keeping requirements of this plan.



2. REGULATORY TEXT [40 CFR 257.80(B)]

Fugitive dust control plan requirements for CCR are presented in 40 CFR 257.80(b)(1) through (7). The regulatory requirements are included below.

■ 40 CFR 257.80(b)

- CCR fugitive dust control plan. The owner or operator of the CCR unit must prepare and operate in accordance with a CCR fugitive dust control plan as specified in paragraphs (b)(1) through (7) of this section. This requirement applies in addition to, not in place of, any applicable standards under the Occupational Safety and Health Act.
 - (1) The CCR fugitive dust control plan must identify and describe the CCR fugitive dust control measures the owner or operator will use to minimize CCR from becoming airborne at the facility. The owner or operator must select, and include in the CCR fugitive dust control plan, the CCR fugitive dust control measures that are most appropriate for site conditions, along with an explanation of how the measures selected are applicable and appropriate for site conditions. Examples of control measures that may be appropriate include: Locating CCR inside an enclosure or partial enclosure; operating a water spray or fogging system; reducing fall distances at material drop points; using wind barriers, compaction, or vegetative covers; establishing and enforcing reduced vehicle speed limits; paving and sweeping roads; covering trucks transporting CCR; reducing or halting operations during high wind events; or applying a daily cover.
 - (2) If the owner or operator operates a CCR landfill or any lateral expansion of a CCR landfill, the CCR fugitive dust control plan must include procedures to emplace CCR as conditioned CCR. Conditioned CCR means wetting CCR with water to a moisture content that will prevent wind dispersal, but will not result in free liquids. In lieu of water, CCR conditioning may be accomplished with an appropriate chemical dust suppression agent.
 - (3) The CCR fugitive dust control plan must include procedures to log citizen complaints received by the owner or operator involving CCR fugitive dust events at the facility.
 - (4) The CCR fugitive dust control plan must include a description of the procedures the owner or operator will follow to periodically assess the effectiveness of the control plan.
 - (5) The owner or operator of a CCR unit must prepare an initial CCR fugitive dust control plan for the facility no later than October 19, 2015, or by initial receipt of CCR in any CCR unit at the facility if the owner or operator becomes subject to this subpart after October 19, 2015. The owner or operator has completed the initial CCR fugitive dust control plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(1).
 - (6) Amendment of the plan. The owner or operator of a CCR unit subject to the requirements of this section may amend the written CCR fugitive dust control plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(1). The owner or operator 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.



- (7) The owner or operator must obtain a certification from a qualified professional engineer that the initial CCR fugitive dust control plan, or any subsequent amendment of it, meets the requirements of this section.



3. 40 CFR 257.80(B)(1)- IDENTIFICATION AND DESCRIPTION

3.1 Flue Gas Desulfurization (FGD) Flue Gas Desulfurization (FGD) By-product Storage and Handling Areas

- Gypsum trucking will be scheduled to reduce dusting exposure to the extent possible.
- Gypsum yard storage pile will be maintained to minimum size.

3.2 Fly Ash

The following control measures are applicable and appropriate for fly ash management at the Site.

- All necessary precautions and operational adjustments shall be taken to prevent spilling ash over the sides of the ash-hauling trailers. This may include, but not be limited to, piling the ash so that it does not rise above the level of the trailer's sides.
- Fly ash is to be moisture conditioned via a water spray or fogging system before transport.
- The ash is to be run on the wet side – meaning to the point where the ash is clumping together in small balls instead of free flowing.
- To maintain a consistent flow through the ash unloader, flow adjustment shall be set to 50-percent.
- Efforts are to be made ensuring a minimum of ten (10) feet of ash within the ash silo.
- If fly ash is spilled during loading, personnel responsible for the spill shall remediate the spill and/or contact appropriate personnel for assistance. If the area cannot be addressed with a hand shovel, maintenance personnel shall be contacted to address the spill with heavy equipment.

3.3 Bottom Ash Storage Pile

As per the GHBLP Standard Operating Procedure, bottom ash inventory on site shall be kept to a minimum at all times.

3.4 Roads

Fugitive dust may be generated from trucks and other heavy equipment traveling on the site haul roads and entering/exiting the facility. Traffic on all unpaved areas and packed coal piles is to be minimized whenever possible. Calcium chloride treatment of unpaved roads will be reviewed for appropriate use during the dry summer months of July and August.

Paved roadways are to be visually inspected and cleaned weekly, at a minimum, during the following months: March (weather permitting), April, May, September, October, November, and December (weather permitting). Paved roadways are to be visually inspected and cleaned twice weekly, at a minimum, during the months of June, July, and August.

The General Manager's office shall continue to coordinate with the City in an attempt to encourage maintenance of Harbor Island city roadways so that fugitive dust is minimized.



3.5 Vessel Off-Loading

If visible dust emissions are present, mitigation efforts should be implemented or handling activities should be suspended until conditions permit. The following operational controls shall be utilized for vessel off-loading:

- Each coal shipment will be met dockside by GHBLP personnel to verify the following criteria have been, or will be, met by the shipping company:
 - Cycle of the tunnel and boom belts prior to arrival or discharge at GHBLP dock.
 - Moisture conditioning of coal in hoppers during unloading, as appropriate, as directed by GHBLP personnel.
 - Application of water on the boom during unloading at a rate directed by GHBLP personnel.
 - Continuous monitoring of the boom to assure the shortest fall of coal during the entire time of unloading, and the spreading of coal to minimize pile height in the discharge area.
 - Reduction in off-loading belt speed up to the extent allowable by the vessel company, as directed by GHBLP personnel.
- Weather conditions are to be observed at all times during off-loading and the above measures are to be exercised as appropriate in order to prevent fugitive dust generation.

Failure of the shipping company to meet any of the above criteria is to be reported to the Production Manager, or, in his/her absence, to the Environmental Compliance Specialist at the beginning of the next working day. This provision, "Vessel Off-Loading", is to be provided in writing to the vessel company by Administration and/or specifically included in vessel contracts, if possible.

3.6 Coal Piles and Coal Transportation

Weather and coal conditions are to be monitored by employees involved in coal handling. Stationary and mobile moisture conditioning equipment is to be utilized when appropriate for the following:

- Off-loading coal when the vessel's water application is insufficient.
- During knockdown, pushing, and packing of the coal.
- Coal laydown areas (storage piles)
- During pushing for bunker loading.



During coal pile laydown and packing, moisture conditioning equipment is to be utilized as appropriate. If operations are temporarily discontinued due to fugitive dusting, or potential dusting, operating crews are to be rescheduled to appropriately accommodate storage yard requirements.

3.7 Control Equipment

To ensure proper maintenance of the conveyor dust collection equipment, a minimum of four (4) inspections per week shall be conducted. Also, gypsum trucking shall be scheduled to reduce fugitive dusting at, and around, the FGD By-product Storage and Handling Areas of the facility.



4. 40 CFR 257.80(B)(2)- CCR LANDFILL OPERATIONS

The GHBLP does not own or operate a CCR landfill at the J.B.Sims Generating Station. Appropriate actions for transporting CCR, outlined in Section 3, shall be implemented for the transport of CCR to a landfill.



5. 40 CFR 257.80(B)(3)- CITIZEN COMPLAINTS

Citizen complaints regarding CCR fugitive dust at the Site will be forwarded to the station's environmental coordinator. All complaints, concerns and/or inquiries and any resulting actions shall be documented in the operating record.



6. 40 CFR 257.80(B)(4)- EFFECTIVENESS OF THE PLAN

Production supervisory personnel are to continuously monitor the effectiveness of this FDCP and its associated mitigation actions. Monitoring efforts are to include the following procedures.

- A daily log providing for general operations and observations pertinent to this FDCP and the J.B. Sims Title V ROP. This log is to be kept in the files of the Environmental Compliance Specialist.
- A record of weather is to be kept in the weather station electronic database and reviewed daily by the plant Lead Shift Operator (LSO); parameters reviewed include wind direction, wind speed, temperature, and date.
- Site camera surveillance has been installed and will be monitored regularly for fugitive dust conditions.
- During normal working hours the LSO will contact the Maintenance Supervisor if the conditions are such that fugitive dust could leave the J.B. Sims complex. During times other than normal working hours the LSO will continue to observe weather conditions as they are reported by the online weather services. If conditions are such that fugitive dust could migrate from the J.B. Sims complex, the LSO will ask that the Plant Utility (PU) person on duty visually check the coal pile and material handling areas.

Upon inspection, if conditions appear favorable for dust migration, or if migration is in progress, the PU will start the dust control water pump at the coal pile. When conditions exist for extended running of the pump, personnel shall be called in according to the normal call-out list procedures to wet the coal pile or other areas according to the outline in Section 3.

The visual inspection and call-in, if deemed necessary, shall be logged on the Unit 3 Control Room Operations Log, along with the time, date, wind direction, and wind speed recorded from the weather station.

The Fugitive Dust Control Plan Coordinator will prepare an annual CCR fugitive dust control report that includes a description of the actions taken by plant personnel or contractors to control CCR fugitive dust, a record of all citizen complaints, and a summary of any corrective actions taken. The report shall be reviewed by Environmental Services and the Legal Department prior to posting to the operating record.



7. 40 CFR 257.80(B)(5)- DEADLINE FOR INITIAL PLAN

The initial CCR fugitive dust control plan titled “*GRAND HAVEN BOARD OF LIGHT & POWER STANDARD OPERATING PROCEDURE FOR THE CONTROL OF FUGITIVE DUST – J.B. Sims Generating Station, recent update 3-24-15*”, was placed in the operating record prior to October 19, 2015.



8. 40 CFR 257.80(B)(6)- AMENDMENTS

The FDCP will be periodically reviewed by the Environmental Compliance Manager to ensure it is effective at minimizing CCR from becoming airborne. Recommended amendments to this plan are to be submitted in writing to Production Manager. Upon his/her approval, the General Manager's approval is required prior to formalization. Any amendments will be tracked in the log below.

CCR FUGITIVE DUST CONTROL PLAN AMENDMENTS

Date	Name and Title of Reviewer(s)	Amendment(s) Made
March 2017	Paul Cederquist, Environmental Compliance Specialist	CCR Rule compliance updates.



9. 40 CFR 257.80(B)(7)- PROFESSIONAL ENGINEER CERTIFICATION

CERTIFICATIONS –FUGITIVE DUST CONTROL PLAN

Professional Engineer Certification Statement [40 CFR 257.80(b)(7)]

I hereby certify that having reviewed the attached documentation, and being familiar with the provisions of Title 40 of the Code of Federal Regulations Section 257.80 (40 CFR Part 257.80(b)(7)), I attest that this Fugitive Dust Control Plan has been prepared in accordance with good engineering practices, including the consideration of applicable industry standards, and with the requirements of 40 CFR Part 257.80.

Golder Associates Inc.



Signature

3/27/17

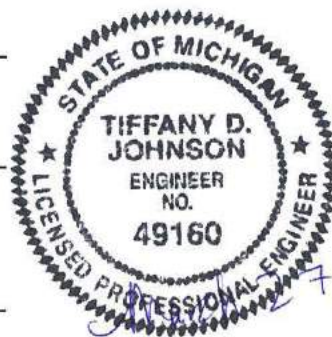
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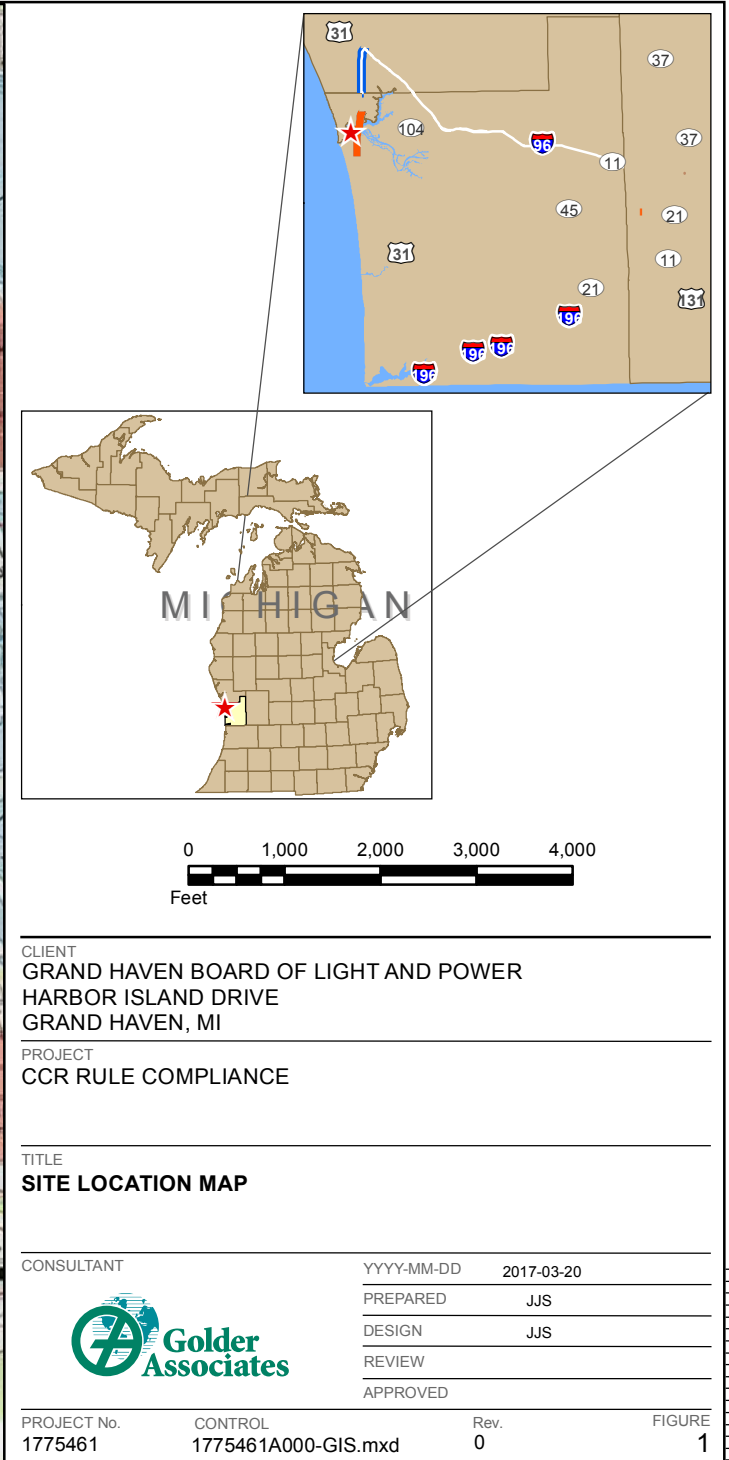
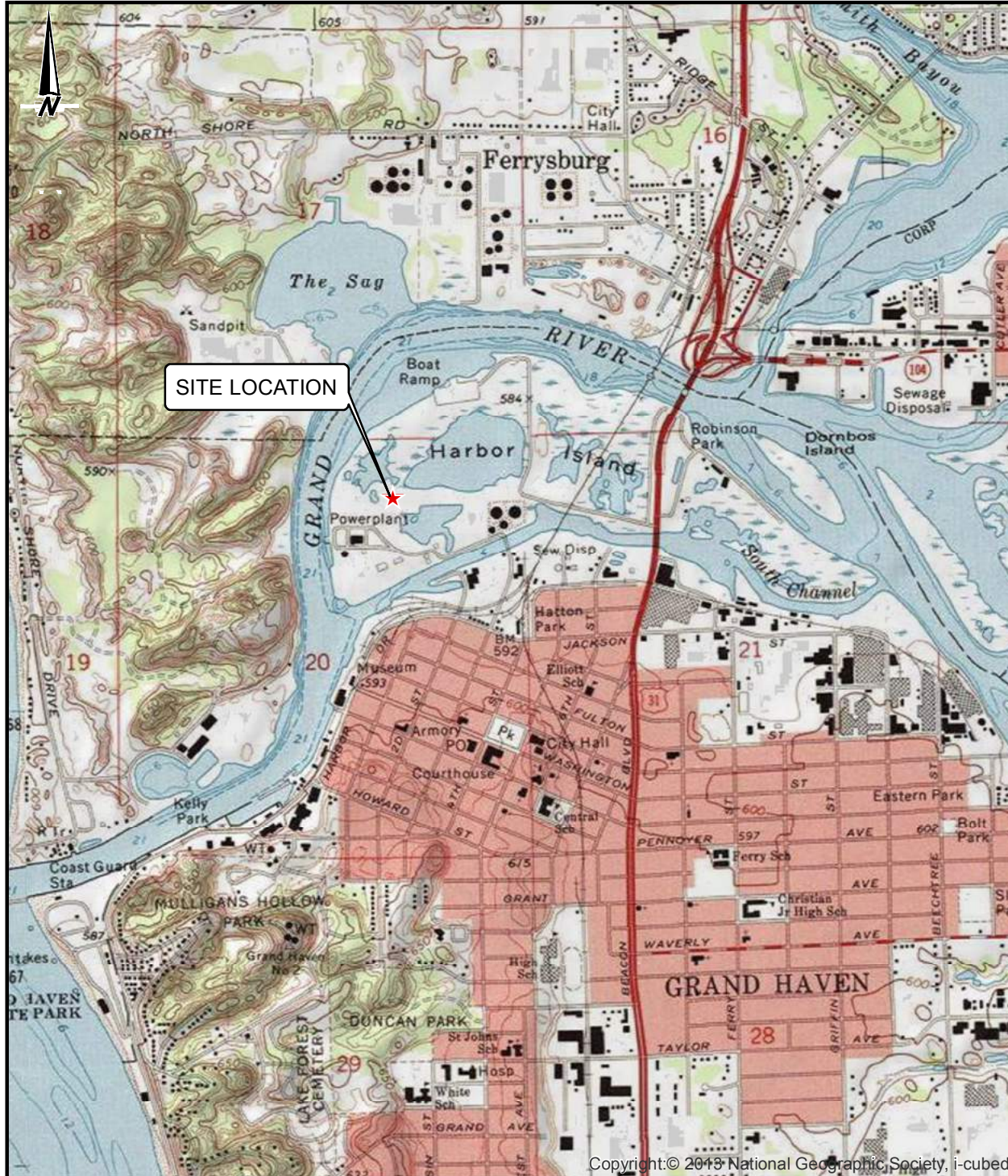
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