DUST MANAGEMENT PLAN

Kaighn Avenue Facility (a portion of NJDEP PI 50023)

EMR Advanced Recycling

December 2022

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1. Introduction

The EMR Advanced Recycling ("EMR") Kaighn Avenue Facility (the "Facility") is located at Front Street and Kaighn Avenue in Camden, New Jersey. The Facility is located in an industrialized area with multiple similar operations occurring along the Delaware River. The Facility receives ferrous metal product including shredded iron and steel, prepared plate, structural steel, number 1 steel, as well as shredded non-ferrous product called Zorba. These materials are brought via barges and then stockpiled until they are loaded into trucks. The Facility is comprised of a loading/unloading area, a barge stockpiling area, and a Zorba stockpiling area together covering approximately 8.1 acres. Potential sources of dust emissions at the facility include barge unloading operations, vehicle loading operations, equipment traffic on paved roadways, and material handling and stockpiling within the stockpile areas, each of which is further described in Section 3.1 and shown on Figure 1.

2. Purpose

The purpose of this Dust Management Plan is to address and ensure compliance with the New Jersey Department of Environmental Protection ("NJDEP") requirements related to fugitive dust emissions and controls.

3. Plan Requirements

3.1. Potential Dust Emission Sources

3.1.1. Barge Unloading Operations

Incoming material is received via barge and unloaded using the Manitowoc crane and wheel loader within the approximately 1.3-acre unloading area shown on Figure 1. This material is typically trucked to the adjacent shredder facility on the same day as arrival. Potential dust emissions may be generated when material is placed onto the stockpiles or loaded directly into trucks.

3.1.2. Vehicle Loading Operations

Outgoing material is loaded into vehicles including tractor trailers within the approximately 1.8-acre ship loading area shown on Figure 1, using wheel loaders and/or material handlers. Potential dust emissions may be generated when material is placed into the vehicles.

3.1.3. Equipment Traffic/Roadways

The following mobile equipment is used for material handling at the Facility:

- Tractor Trailers
- 1 Tracked Manitowoc Crane
- 2 Wheel Loaders
- 2 Wheeled Material Handlers

Equipment traffic on paved roadways and within the paved stockpile area has the potential to generate dust emissions at the Facility. Approximately 300,000 square feet of paved surface may be used by equipment at the Facility, as shown on Figure 1. Vehicles also have the potential to "track-out" material onto Front Street, which can cause dust emissions.

3.1.4. Material Handling and Stockpiling

Stockpiles at the Facility may contain approximately 130,000 cubic yards of material and have the potential to generate visible dust emissions through wind erosion. Stockpiles are maintained using wheel loaders and material handling equipment within the approximately 4.3-acre stockpile area shown on Figure 1. Potential dust emissions may also be generated when the stockpiled material is disturbed.

3.2. Dust Management Procedures

3.2.1. Barge Unloading Operations

Potential dust emissions from barge unloading operations are controlled by limiting the drop height onto the stockpile or truck to the greatest degree practicable. Water sprays (see Section 3.2.5) are employed during unloading if dust emissions with the potential to leave the Facility are observed by the equipment operator or during the daily visual inspection described in Section 3.3.

3.2.2. Vehicle Loading Operations

Potential dust emissions from vehicle loading operations are controlled by limiting the drop height into the vehicle to the greatest degree practicable. Water sprays (see Section 3.2.5) are employed during vehicle loading if dust emissions with the potential to leave the Facility are observed by the equipment operator or during the daily visual inspection described in Section 3.3.

3.2.3. Equipment Traffic/Roadways

Potential dust emissions from equipment traffic are controlled by limiting vehicle speeds to less than 5 miles per hour. Speed limit signs will be posted at the entrance and various locations throughout the Facility. As part of the daily visual inspection described in Section 3.3, all equipment that has the potential to generate fugitive dust will be observed on a daily basis during operation to determine whether or not visible emissions are present.

To further limit the potential for dust emissions from vehicle traffic, the accessible paved roadways are cleaned once per operating day using a mechanical sweeper. If the mechanical sweeper is unavailable because of maintenance or repair, manual sweeping will be employed.

The Facility also employs a water truck to wet the paved roadways prior to vessel unloading, and periodically as necessary on days above freezing temperatures to control dust emission from paved roadways.

To limit "track-out" of material onto Front Street, a stone pad will be installed at the Facility exit, as shown on Figure 1. The pad will be approximately 50 feet long and 20 feet wide and is constructed of at least 6 inches of ASTM C-33 No. 2 or No. 3 clean crushed angular stone. The condition and efficacy of the stone pad is monitored during the daily visual inspection described in Section 3.3 and is maintained in a condition which will prevent track-out of sediment onto the roadway. Maintenance may include periodic top dressing with additional stone, installation of additional pad length, or removal and replacement of the stone pad, as necessary to prevent track-out.

3.2.4. Material Handling and Stockpiling

Potential dust emissions from the stockpiling area are controlled by limiting the stockpile footprints to the extent practicable and through periodic wetting of the stockpiled material. Water sprays (see Section 3.2.5) are applied to the stockpiles at the beginning of each shift on dry days and periodically throughout the operating day as necessary to prevent visible dust emissions from leaving the Facility. The condition of the stockpiles and material handling within the stockpile area is continuously observed by the equipment operators and during the daily visual inspection described in Section 3.3.

3.2.5. Water Sprays

Prior to any barge unloading or vehicle loading operation, water cannons and/or misters will be staged in the area and ready to provide dust suppression to prevent visible dust emissions from leaving the Facility. Additionally, the stockpiles are wetted at the beginning of each shift on dry days and periodically throughout the day if visible dust emissions are observed. If visible dust emissions with the potential to leave the Facility are observed from any source, either by the equipment operator or during the daily visual inspection described in Section 3.3, the Supervisor will be notified and the operation causing those emissions will be immediately halted until adequate dust suppression can be provided.

3.3. Visual Dust Inspection Procedures

Once per operating day, a visual inspection of each of the potential dust emission sources listed in Section 3.1 is performed and documented using the inspection checklist attached as Appendix B to this Plan. The inspection documents the performance of the Dust Management Procedures listed in Section 3.2 and assesses each of the potential sources for the presence of visible dust emissions with the potential to leave the Facility. Any deficiencies in the specified Dust Management Procedures, or any observed visible emissions with the potential to leave the Facility are immediately reported to the Facility supervisor for corrective action, and performance of the immediate corrective action is documented on the checklist. The completed inspection forms are retained with this Plan and reviewed during the annual training described in Section 3.5.

3.4. Corrective Actions

If visible dust emissions with the potential to leave the Facility are observed during the daily visual inspection described in Section 3.3, the inspector shall immediately notify the Facility supervisor. The supervisor will halt the emitting operation until corrective actions have been implemented, and the inspector will document the immediate corrective action taken on the inspection checklist. Immediate corrective actions may include dust suppression via water sprays, stockpile wetting, roadway sweeping/wetting, or others as applicable to the source of dust emissions, as noted on the inspection checklist. Follow-up corrective actions may include equipment maintenance, maintenance of the stone pad, additional employee training, or other corrective actions deemed necessary by Facility supervisor. This plan shall be updated as necessary. Updates to this Plan require submission of a seven-day-notice change application to NJDEP, along with an updated version of the Plan and a summary of the changes.

3.5. Staff Training

As part of new employee onboarding, all operations personnel at the Facility are trained on the general requirements of this Plan, the necessity of preventing visible dust emission from leaving the Facility, and their duty to report such potential emissions to the Facility supervisor for immediate corrective action. An annual training is also provided for all affected employees. The annual training will cover all aspects of this Plan as well as a review of inspection record trends from the previous year to identify opportunities for improvement. A form for documenting acknowledgement of receipt of the annual training by employees is included in Appendix A. Completed records of training are retained with this Plan.

4. Plan Certification Statement

"I certify under penalty of law that I believe the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fine or imprisonment or both, for submitting false, inaccurate or incomplete information."

Name: Cynthia McKeown Title: EHS Director

Signature:  Date: 12-22-2022

Figure 1 – Facility Diagram

Appendix A – Records of Training

ANNUAL DUST MANAGEMENT PLAN TRAINING RECORD

Date: _____

I have read and understand the EMR Dust Management Plan and received a training conducted by Cynthia McKeown of EMR. I understand the training I have received is essential in protecting the environment.

Printed Name	Signature	Department

Appendix B – Daily Visual Inspection Checklist

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Employee Training Record: GABRIEL MARTINEZ GROUPA42 Learning and Development