Fugitive Dust Emissions Control Plan for Taconite MACT



**Empire Iron Mining Partnership** 

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## 1. Purpose

Cleveland-Cliffs' Empire Iron Mining Partnership facility is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Taconite Iron Ore Processing [40 Code of Federal Regulations (CFR) Part 63 Subpart RRRRR]. This regulation is commonly referred to as the Taconite MACT. The regulation requires that the facility prepare and at all time operate according to a fugitive dust emissions control plan. The plan must be submitted to the Administrator for review and approval by October 30, 2006. An existing fugitive dust emissions control plan can be used to meet this requirement provided it meets the same requirements of the Taconite MACT, it describes current control measures, and it has been approved as part of a State Implementation Plan of a Title V permit.

This plan specifically addresses the requirements of 40 CFR 63.9591 which states:

- (a) You must prepare, and at all times operate according to, a fugitive dust emissions control plan that describes in detail the measures that will be put in place to control fugitive dust emissions from the locations listed in paragraphs (a)(1) through (6) of this section.
  - (1) Stockpiles (includes, but is not limited to, stockpiles of uncrushed ore, crushed ore, or finished pellets);
  - (2) *Material transfer points;*
  - (3) Plant roadways;
  - (4) Tailings basin;
  - (5) Pellet loading areas; and
  - (6) Yard areas.
- (b) A copy of your fugitive dust emissions control plan must be submitted for approval to the Administrator on or before the applicable compliance date for the affected source as specified in §63.9583. The requirement for the plant to operate according to the fugitive dust emissions control plan must be incorporated by reference in the operating permit for the plant that is issued by the designated permitting authority under 40 CFR part 70 or 40 CFR part 71.

- (c) You can use an existing fugitive dust emissions control plan provided it meets the requirements in paragraphs (c)(1) through (3) of this section.
  - (1) The plan satisfies the requirements of paragraph (a) of this section.
  - (2) The plan describes the current measures to control fugitive dust emission sources.
  - (3) The plan has been approved as part of a State implementation plan or title V permit.
- (d) You must maintain a current copy of the fugitive dust emissions control plan onsite, and it must be available for inspection upon request. You must keep the plan for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

#### 40 CFR 63.9624 states the following:

You must demonstrate initial compliance with the work practice standards by meeting the requirements in paragraphs (a) through (c) of this section.

- (a) You must prepare a fugitive dust emissions control plan in accordance with the requirements in §63.9591.
- (b) You must submit to the Administrator the fugitive dust emissions control plan in accordance with the requirements in §63.9591.
- (c) You must implement each control practice according to the procedures specified in your fugitive dust emissions control plan.

40 CFR 63.9635 states the following:

- (a) You must demonstrate continuous compliance with the work practice standard requirements in §63.9591 by operating in accordance with your fugitive dust emissions control plan at all times.
- (b) You must maintain a current copy of the fugitive dust emissions control plan required in §63.9591 onsite and it must be available for inspection upon request. You must

keep the plan for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

The purpose of this plan is to address these requirements. In addition to the general requirements, this document also addresses roles, responsibilities, revisions, recordkeeping, and reporting.

The following is a summary of the responsibilities for implementation of the Fugitive Dust Control Plan.

Document Section	Description of Requirement	<b>Responsible Person(s)</b>
5	Pellet Plant Fugitive Dust Activities	Section Manager - PP Oper
5	Pit Fugitive Dust Activities	Section Manager – Mining Oper
5	Tailings Basin Fugitive Dust Activities	Engineer – Tailing Basin
6	Record keeping Pellet Plant	PP Operations
6	Record keeping Pit	Pit Operations
6	Record keeping Tailings Basin	Engineer – Tailing Basin
7	Revisions of the Fugitive Dust Control Plan	Environmental Engineer

*Administrator* means the regulatory agency that is responsible for the administration of the Taconite MACT regulation; this could be EPA or State of Michigan EGLE (MDEQ).

CFR means Code of Federal Regulations.

EGLE means State of Michigan Department of Environment, Great Lakes, & Energy.

EPA means United States Environmental Protection Agency.

*Fugitive dust emission source* means a stationary source from which particles are discharged to the atmosphere due to wind or mechanical inducement such as vehicle traffic. Fugitive dust sources include, but are not limited to:

- Stockpiles (includes, but is not limited to, stockpiles of uncrushed ore, crushed ore, or finished pellets);
- (2) Material transfer points;
- (3) Plant roadways;
- (4) Tailings basins;
- (5) Pellet loading areas; and
- (6) Yard areas.

MACT means Maximum Achievable Control Technology.

MDEQ means the Michigan Department of Environmental Quality (EGLE).

# 4. Fugitive Dust Sources Covered by this Plan

This Plan has been developed for the fugitive dust sources covered by the Taconite MACT. This includes the following sources as listed in 40 CFR 63.9591(a):

- (1) Stockpiles (includes, but is not limited to, stockpiles of uncrushed ore, crushed ore, or finished pellets);
- (2) *Material transfer points;*
- (3) Plant roadways;
- (4) Tailings basin;
- (5) *Pellet loading areas; and*
- (6) Yard areas.

In order to comply with the requirement for a Fugitive Dust Control Plan, the facility has developed and implemented the following procedures:

- Stockpiles
  - Minimize concentrate stockpiling outside
  - Minimize concentrate tracking onto roadways
- Material transfer points
  - Operate the pellet stockpile watering or foam dust control system when pellets are being transferred to stockpile or loaded into railcars
- Plant roadways and yard areas
  - Apply a dust suppressant to designated plant and yard road twice a year or as required to control fugitive dust
  - Maintain haulage routes watered with water trucks to minimize dust, as needed
- Tailings basin
  - Optimize water inundation of the tailings
  - Manage tailings discharge point
  - Apply mulch coverings and plant vegetation
  - Utilize scrap tire windbreaks
  - Compact snow
  - Apply freezing point depressants via aerial application
- Pellet loading areas

• Operate the pellet stockpile watering or foam dust control system when pellets are being transferred to stockpile or loaded into railcars

In order to document compliance with this plan, the facility maintains the following records for a minimum of 5 years:

- Fugitive dust activities are recorded in a fugitive dust activities log for the Pellet Plant. Maintaining these records is the responsibility of pellet plant operations.
- Fugitive dust activities are recorded in a fugitive dust activities log for the Pit. Maintaining these records is the responsibility of pit operations
- Fugitive dust activities are recorded in a fugitive dust activities log for the tailings basin. Maintaining these records is the responsibility of the tailings basin engineer.

# 7. Revisions of the Fugitive Dust Control Plan

Revisions of the Fugitive Dust Control Plan is the responsibility of the Environmental Department.

## 7.1 Revisions Required by the Permitting Authority

As stated in 40 CFR 63.9591 and 40 CFR 63.9624(b), the facility must develop this plan and submit it for approval by the Administrator. If the permitting authority determines that any portion of the plan is not adequate, the facility will address the issues as agreed upon with the permitting authority.

## 7.2 Revisions Initiated by Cleveland-Cliffs

Cleveland-Cliffs may periodically revise this plan, as necessary, to satisfy the requirements of the regulation or to reflect changes in equipment or procedures at the affected source. In order to make these changes, the facility will use the following procedure:

- The facility will submit the proposed revisions to the Administrator for approval;
- In the interim of the approval of the revised portions of the plan, the facility will continue to follow the current Plan as submitted, until the revisions are accepted as adequate by the Administrator.

Original Plan October 2006 Minor Revisions July 2019