

Background

Ohio EPA Division of Air Pollution Control Permit to Install & Operate (PTIO) requires Cyprus Amax to develop and implement a site-specific Work Practice Plan (WPP) designed to minimize or eliminate fugitive dust associated with certain remedial operations at the former Satralloy facility located in Mingo Junction, Ohio (the Site). The current Interim Action (IA) project which is the subject of this air permit application will consist of removing slag from current locations and consolidating it in a single repository located in a former coal mining area. The WPP is designed to minimize fugitive dust from:

- Roadways and Parking Areas (Emissions Unit F001) from vehicle traffic and
- Storage Pile(s) [Accumulation Area(s)] in Material Handling Operations (Emissions Unit F005).

Cyprus Amax is required to submit a proposed WPP within 30 days of final issuance of its PTIO. The PTIO (Permit Number P0134193) was issued on December 5, 2023.

Specific requirements of the WPP listed in the PTIO are shown in *italics*.

Roadways and Parking Areas (F001)

PTIO REQUIREMENTS

This work practice plan includes the following elements:

- *An identification of each roadway or parking area, or segment of roadway or parking area, for which the plan applies. The permittee can select whether to develop a plan based on segments or entire roads.*
- *A determination of the frequency that each roadway, parking area or segment will be inspected to determine if additional control measures are needed. The frequency of inspection can either be common for all segments of the roadway or parking areas or may be identified separately for various segments of the roadway or parking areas.*
- *The identification of the record keeping form/record that will be used to track the inspection and treatment of the roadways. This form/record should include, at a minimum, the following elements:*
 - *Roadway, parking area, or segment inspected;*
 - *Date inspected;*
 - *Name of employee responsible for inspection;*
 - *Result of the inspection (needs treated or does not need treated);*
 - *A description of why no treatment was needed;*
 - *Date treated;*
 - *Name of employee responsible for roadway, parking area, or segment treatment; and*
 - *Method used to treat the roadway, parking area, or segment.*
- *A description of how and where the records shall be maintained.*

In addition, Cyprus Amax is required to perform inspections of each roadway segment and parking area at frequencies described in the WPP during representative, normal conditions. No inspection is required when there is a snow or ice cover or when precipitation has occurred that is sufficient for that day to ensure compliance with the visible emissions requirement.

Cyprus Amax is required to keep the records of

- Inspections, and
- The date and reason any element of the WPP was not completed.

Reports of deviations from the WPP must be submitted annually as part of the Permit Evaluation Report (PER).

SITE-SPECIFIC WORK PLAN

The overall work at the Site will be dynamic, changing over time, in various phases. The Haul Road segments expected to be utilized during the course of the Site work have been identified in Attachment 1, Haul Road Map.

The Standard (applicable requirement) for roadways in the PTIO is: *No visible PE from any unpaved roadway or parking area except for three minutes during any sixty-minute observation period.* The official test method for determination of compliance is EPA Method 22.

The means by which this Standard will be achieved is as follows:

On a daily basis, on each operating day (i.e., when slag or clean soil fill is being hauled) use the Form in Attachment 2 and:

1. Record **name** (or initials) and **date**.
2. Identify and record the **Roadway Segment(s) in operation** by its 3 digit code from the Map (e.g., PA1). "In operation" means that dump trucks, bulldozers or other heavy equipment are traveling on that segment on that day.
3. Note if the road segment is snow or ice covered or if recent precipitation makes it unnecessary to do a VE check. This condition will be noted "**P**" (recent precipitation). Otherwise, the segment will be marked "**D**" (dry conditions).
4. If a VE check is needed:
 - a. By visual assessment and experience-based judgment, confirm that haul trucks or other heavy equipment are operating at a speed that matches conditions to minimize VE, and not to exceed the site **speed** limit of 20 MPH. Note either **OK** or not OK (**NOK**). Take and document corrective action if necessary.
 - b. Confirm that haul trucks either have a suitable **cover** to prevent VEs or that VEs are not present from the material being hauled. Note either **OK** or not OK (**NOK**). Take and document corrective action if necessary.
 - c. If dry (D), perform a VE check for the segment(s) identified above. The VE check will be a qualitative assessment for the presence or absence of fugitive dust by the Construction Manager or their designated representative who is familiar with such assessments. The inspector will perform these checks approximately perpendicular to the roadway segment and focused on a distance approximately 4 feet above the roadway surface. Note whether no VEs are present for more than 3 minutes in an hour (**OK**) or VEs are present (**NOK**). A spot check while a representative vehicle passes with no VEs can satisfy this evaluation.
 - d. If roadway VEs are present for more than 3 minutes in one hour as described above, request and record **corrective action**, consisting of water application with the Site water truck. Verify effectiveness of water control. Note name (or **initials**) of water truck operator.
5. The Daily Inspection Records identified in the WPP must be maintained for five (5) years from the date the record was created. The records may be maintained electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested record available to Ohio EPA upon request is a violation of the permit's Standard Terms & Conditions.

Slag Accumulation (F005)

Cyprus Amax will be accumulating (depositing) slag in the areas as described in its PTIO application. Sub-areas will be identified by Cyprus Amax and noted on a Master Map (or added to the Map in Attachment 1).

PTIO REQUIREMENTS

This work practice plan includes the following elements to minimize or eliminate fugitive dust from material storage piles:

- *An identification of each storage pile or each storage pile area for which the plan applies;*
- *A determination of the frequency that each storage pile or each storage pile area will be inspected to determine if additional control measures are needed. The frequency of inspection can either be common for all storage piles or may be identified separately for various storage pile areas.*
- *The identification of the record keeping form/record that will be used to track the inspection and treatment of the storage piles. This form/record should include, at a minimum, the following elements:*
 - *Storage pile or storage pile area inspected;*
 - *Date inspected;*
 - *Name of employee responsible for the inspection;*
 - *Result of the inspection (needs treated or does not need treated);*
 - *A description of why no treatment was needed;*
 - *Date treated;*
 - *Name of employee responsible for treatment of the storage pile or storage pile area; and*
 - *Method used to treat the storage pile or storage pile area.*
- *A description of how and where the records shall be maintained in accordance with the PTIO's Standard Terms and Conditions.*

SITE-SPECIFIC WORK PLAN

The Standard (applicable requirement) for the slag accumulation area(s) (aka "storage piles") in the PTIO is: *No visible particulate emissions from any storage pile except for a period of time not to exceed thirteen minutes during a sixty-minute observation period.*

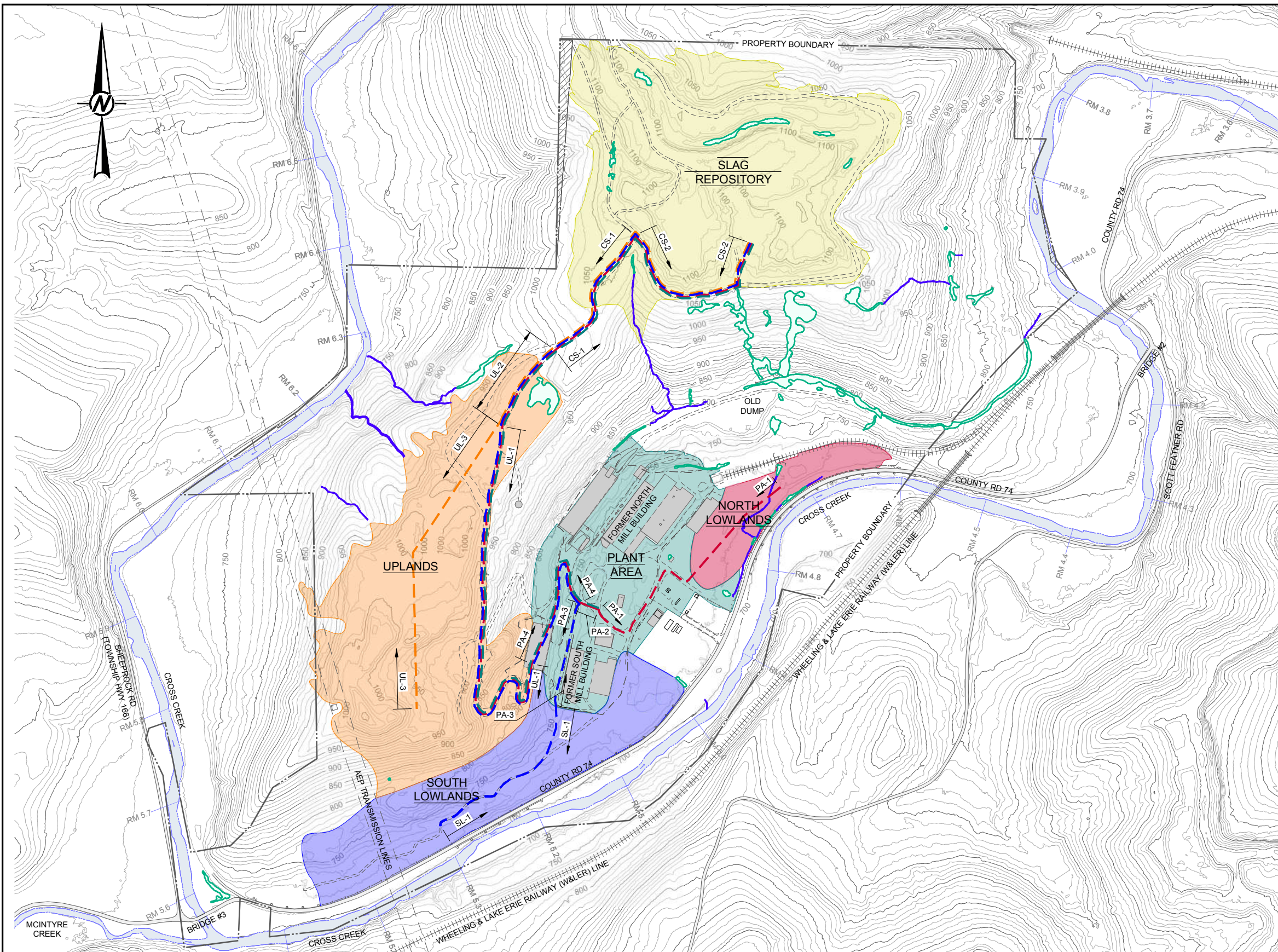
The means by which this Standard will be achieved is as follows:

On a daily basis, on each operating day (i.e., when slag is being moved to an accumulation sub-area) use the Form in Attachment 2 and:

1. Record **name** (or initials) and **date**.
2. Identify and record the **Accumulation Area(s)** in operation by its general location within the stockpile subarea shown on the Map in Figure 1 (e.g., "NE corner of stockpile"). "In operation" means that slag is being accumulated in that subarea on that day.
3. Note if the subarea is snow or ice covered or if recent precipitation makes it unnecessary to do a VE check. This condition will be noted "**P**" (recent precipitation). Otherwise, the subarea will be marked "**D**" (dry conditions).
4. If a VE check is needed:
 - a. If dry (D), perform a VE check for the subarea(s) identified above. The VE check will be a qualitative assessment for the presence or absence of fugitive dust by the Construction Manager or their designated representative who is familiar with such assessments. The inspector will perform these

- checks focused on a distance approximately 4 feet above the accumulation subarea surface. Note no VEs present or VEs present but less than 13 minutes per hour (**OK**) or VEs present more than 13 minutes per hour (**NOK**). A spot check while a representative truckload is placed into the subarea with no VEs can satisfy this evaluation.
- b. If accumulation subarea VEs are NOK as described above, request and record **corrective action**, consisting of water application with the Site water truck. Verify effectiveness of water control. Note name (or **initials**) of water truck operator.
 5. The Daily Inspection Records identified in the WPP must be maintained for five (5) years from the date the record was created. The records may be maintained electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested record available to Ohio EPA upon request is a violation of the permit's Standard Terms & Conditions.

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- NOTES**
- BASE TOPOGRAPHY PROVIDED BY JEFFERSON COUNTY, OHIO, ENGINEER'S OFFICE, DATED 2003. TOPOGRAPHY UPDATED USING AS-BUILT SURVEY OF STAGE 1 INTERIM ACTION PROVIDED BY RETTEW, DATED AUGUST 30, 2017, AS-BUILT SURVEY OF NEW HAUL ROAD PROVIDED BY RETTEW, DATED DECEMBER 20, 2021 AND AS-BUILT SURVEY OF STAGE 2 INTERIM ACTION (DEMOLITION) PROVIDED BY RETTEW, DATED OCTOBER 4, 2022.
 - PROPERTY BOUNDARY SURVEY PROVIDED BY RETTEW, DATED JULY 29, 2022.
 - JURISDICTIONAL WETLAND AND TRIBUTARY ORDINARY HIGH WATER MARK (OHWM) DELINEATION PROVIDED BY WESTLAND RESOURCES, INC., DATED NOVEMBER 14, 2018.
 - CROSS CREEK MILE MARKERS OBTAINED FROM GEODATABASE AVAILABLE ON THE OHIO STATE DNR WEBSITE, JUNE 2012.
 - SITE ADDRESS: 4243 COUNTY ROAD 74
MINGO JUNCTION, OH 43938

- LEGEND**
- 1050 — EXISTING MAJOR CONTOURS (50-FT INTERVAL)
 - EXISTING MINOR CONTOURS (10-FT INTERVAL)
 - PROPERTY BOUNDARY (SEE NOTE 2)
 - ▨ PROPERTY DEED OVERLAP
 - CROSS CREEK
 - JURISDICTIONAL WETLANDS (USACE JURISDICTION) (SEE NOTE 3)
 - JURISDICTIONAL TRIBUTARY (USACE JURISDICTION) (SEE NOTE 3)
 - - - EXISTING ON-SITE ACCESS ROAD
 - EXISTING ROAD (PAVED)
 - ||||| EXISTING RAILROAD
 - EXISTING FENCE
 - EXISTING CONCRETE PAD
 - EXISTING BUILDING
 - CONSOLIDATION STOCKPILE AREA
 - SLAG REMOVAL AREA - UPLANDS
 - SLAG REMOVAL AREA - PLANT AREA
 - SLAG REMOVAL AREA - NORTH LOWLANDS
 - SLAG REMOVAL AREA - SOUTH LOWLANDS
 - - - HAUL ROUTE - UPLANDS
 - - - HAUL ROUTE - PLANT AREA
 - - - HAUL ROUTE - NORTH LOWLANDS
 - - - HAUL ROUTE - SOUTH LOWLANDS

DRAFT

0 300 600
1" = 300' FEET

HAUL DISTANCES BY SEGMENT		
HAUL ROAD ID	LENGTH (MI)	WIDTH (FT)
PA-1	0.29	25
PA-2	0.02	25
PA-3	0.11	20
PA-4	0.18	20

SL-1	0.20	10
UL-1	0.45	30
UL-2	0.10	20
UL-3	0.34	20
CS-1	0.16	25
CS-2	0.20	20

CLIENT
CYPRUS AMAX MINERALS COMPANY

CONSULTANT		DATE
	DESIGNED	2023-03-24
	PREPARED	VMN
	REVIEWED	FSS
	APPROVED	RSA

PROJECT
FORMER SATRALLOY SITE
SLAG REMOVAL INTERIM ACTION
JEFFERSON COUNTY, OHIO

TITLE
AIR PERMIT - HAUL ROUTES

1" = 300' IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANS/D

**DAILY INSPECTION LOG
FUGITIVE DUST WORK PRACTICE PLAN**

*Cyprus Amax Mineral Company
Mingo Junction, Ohio*

ROADWAY INSPECTIONS - Standard is NO VISIBLE EMISSIONS except for 3 minutes in any 60 minute period.

Date	Inspector (initials)	Segment(s) in Operation	Condition P or D	Speed OK/NOK	Cover OK/NOK	If D, VE check OK/NOK	If NOK Action	Watered OK/NOK	Watered By (initials)	Comments

SLAG DEPOSIT AREAS - Standard is NO VISIBLE EMISSIONS except for 13 minutes in any 60-minute period.

Date	Inspector (initials)	Area(s) in Operation	Condition P or D	If D, VE check OK/NOK		If NOK Action	Watered OK/NOK	Watered By (initials)	Comments

ADDITIONAL COMMENTS - EXPLAIN WHY IF WATER CONTROLS APPEARED NECESSARY BUT WERE NOT COMPLETED