Weaver, William (DEP)

From:	Gurinder (Gary) Saini <saini@rtpenv.com></saini@rtpenv.com>
Sent:	Friday, December 31, 2021 7:00 AM
То:	Weaver, William (DEP)
Cc:	Wetzel, Brian; Hanlon, Thomas; Rich Zavoda; Ajalli, Ray
Subject:	[External] Plan Approval Application for URM Project at the Cleveland-Cliffs Steelton site Title V
	Permit number 22-05012
Attachments:	2021 12 31 Application Package Final.pdf

ATTENTION: This email message is from an external sender. Do not open links or attachments from unknown sources. To report suspicious email, forward the message as an attachment to CWOPA_SPAM@pa.gov.

On behalf of Cleveland-Cliffs Steelton LLC, I am submitting, electronically, the attached Plan Approval application for a project to install a universal rail mill that will replace some of the existing finishing operations at the Steelton site.

A check for the required fee for this plan approval application is also being sent, by courier, to your office early next week.

Please let us know if there are any questions or anything else is needed in this regard.

We are available for a call to discuss the application submittal, project timing and other aspects with your staff.

Regards

Gurinder (Gary) Saini RTP Environmental Associates Inc. 304A West Millbrook Road Raleigh, NC 27609 Tel:+1(919)845-1422,42 Tel:+1(919)533-4558

From: Wetzel, Brian <briwetzel@pa.gov>
Sent: Thursday, December 23, 2021 12:42
To: Gurinder (Gary) Saini <saini@rtpenv.com>
Subject: RE: [External] email address for Bill Weaver

That is correct.

From: Gurinder (Gary) Saini <<u>saini@rtpenv.com</u>> Sent: Thursday, December 23, 2021 10:04 AM To: Wetzel, Brian <<u>briwetzel@pa.gov</u>> Subject: [External] email address for Bill Weaver

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Is this the correct email address for Bill Weaver: wiweaver@pa.gov

Regards

Gurinder (Gary) Saini RTP Environmental Associates Inc. 304A West Millbrook Road Raleigh, NC 27609 <u>Tel:+1(919)845-1422,42</u> <u>Tel:+1(919)533-4558</u>



RTP ENVIRONMENTAL ASSOCIATES INC.

AIR · WATER · SOUD WASTE CONSULTANTS

304 - A West Millbrook Road Raleigh, NC 27609 (saini@rtpenv.com)

(919) 845-1422x 42 Fax: (919) 845-1424

December 31, 2021

Via Electronic Mail

William Weaver Air Quality Program Manager Southcentral Regional Office Pennsylvania Department of Environmental Protection 909 Elmerton Avenue Harrisburg, PA 17110 Email: <u>wiweaver@pa.gov</u>

Re: Universal Rail Mill Project – Cleveland-Cliffs Steelton LLC Plan Approval Application

Dear Mr. Weaver,

On behalf of Cleveland-Cliffs Steelton LLC ("Cleveland-Cliffs"), we are electronically submitting the attached Plan Approval application for a project at the Steelton site. Cleveland-Cliffs owns and operates a steel mini-mill facility in Steelton, Pennsylvania which is an existing major facility. This Plan Approval application to your office is for a proposed project that will involve installation of a new Universal Rail Mill and associated equipment at this facility. This change involves state-of-the-art rail rolling operations that allows Cleveland-Cliffs to continue to meet the customer specifications and improve product quality.

A complete application for a Plan Approval (PDF format) is included in this package for your review and approval. Also enclosed with this letter is a copy of the check No. 3126748 for \$35,000 as requisite application fee for a 'source requiring approval under Subchapter B and PSD requirements under Subchapter D.' The check for the application is being sent via FedEx to your office.

We believe that this submittal meets the requirements for plan approval for the proposed project at Steelton. This project is critical for maintaining competitive edge for Cleveland-Cliff's operations at this plant by improving product quality.

We appreciate PADEP's support in issuance a plan approval for this project. If you need any additional information or if there are any questions, please contact me at (919) 845-1422, 42 or <u>saini@rtpenv.com</u>.

Sincerely,

Wains

Gurinder (Gary) Saini Senior Environmental Engineer RTP Environmental Associates Inc

CC: Tom Hanlan, Permitting Chief, PADEP Southcentral, <u>thanlon@pa.gov</u> Brian Wetzel, PADEP Southcentral, <u>briwetzel@pa.gov</u> Ray Ajalli, Cleveland-Cliffs, <u>Ray.Ajalli@clevelandcliffs.com</u> Rich Zavoda, Cleveland-Cliffs, <u>rich.zavoda@clevelandcliffs.com</u>

Attachments



DATE: December 21, 2021 CHECK NUMBER: 3126748 AMOUNT PAID: \$35,000.00

DOD18 33914 CKS ND 21354 - DOD3126748 NNNNNNNNN 3545100006209 XI09A1 C COMMONWEALTH OF PA - DEP SOUTHCENTRAL REGIONAL OFFICE AIR QUALITY PROGRAM 909 ELMERTON AVENUE HARRISBURG PA 17110-8200

Vendor No: 082178

Date	Document	Your Document	Description	Gross Amount	Discount	Net Amount
12/01/21	2022AIR PLAN	2022AIR PLAN	Payment for invoice: 2022AIR PLAN	\$35,000.00	\$0.00	\$35,000.00
			TOTALS	\$35,000.00	\$0.00	\$35,000.00

PLEASE DETACH BEFORE DEP	OSITING CHECK	**** STATEMENT OF	EARNINGS, DEDUCTIONS AND TAXES, F	PLEASE RETAIN FOR YOUR RE	CORDS ****
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			December 2	1, 2021	
PAY COMMON TO THE SOUTHCE ORDER OF: AIR QUAL 909 ELMEI HARRISBU	WEALTH OF PA - DEP NTRAL REGIONAL OFFICE TY PROGRAM RTON AVENUE JRG, PA 17110-8200 EXACTLY ****	*****35,000 DOL	LARS AND 00 CENTS	\$35	CHECK AMOUNT , 0000.00 Perusty features Transfer Details on back.
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Prevention of Significant Deterioration and Plan Approval Application for Universal Rail Mill Project Cleveland-Cliffs Steelton LLC Steelton Pennsylvania



Submitted to:

Pennsylvania Department of Environmental Protection Bureau of Air Quality Southcentral Region 909 Elmerton Avenue Harrisburg, PA 17110

Prepared by:

RTP Environmental Associates, Inc. 304-A West Millbrook Rd. Raleigh, NC 27609

Submitted by:

Cleveland-Cliffs Steelton LLC 215 S. Front Street Steelton, Pennsylvania 17113

December 2021

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APPENDICES

Appendix A	Plan Approval Application Forms
Appendix B	Detailed Emissions Calculations
Appendix C	Copies of Pending Municipal Notifications

1. Introduction and Summary

Cleveland-Cliffs Steelton LLC ("Cleveland-Cliffs") owns and operates a steel mini-mill facility in Steelton, near Harrisburg, Pennsylvania. This mini-mill was the first steel plant in the United States to produce steel for railroad rails. To improve quality of product and meet the customer specifications for rail product, Cleveland-Cliffs is proposing a project to replace some of the obsolete rail rolling equipment with a modern Universal Long-length Rail Rolling Operation ("Universal Rail Mill Project" or "URM Project" or "Project").

The Steelton mini-mill uses an electric arc furnace ("DCEAF") to melt scrap materials to produce molten steel. The molten steel is either sent to a continuous caster to produce blooms or to the ingot teeming process for ingot production. Blooms are reheated in a reheat furnace for further processing in a blooming mill, a rail rolling mill, and other downstream operations to produce finished rails and other products.

As noted earlier, Cleveland-Cliffs is proposing to install a modern URM operation as part of the proposed URM Project that will also involve the permanent shutdown of several existing product rolling operations at the site. In addition, there will be changes to some of the existing site equipment. The proposed emission unit equipment comprising the URM operation will produce state-of-the-art rail products that will meet the current and future customer specifications.

1.1 Permitting Status

Cleveland-Cliffs Steelton mini-mill is an existing major facility operating in accordance with Title V/State Operating Permit 22-05012, revised on May 5, 2021. This project involves the construction of new air contamination sources; therefore, a plan approval is required in accordance with Title 25, Chapter 127 of the Pennsylvania Code (25 Pa. Code 127) Subchapter B. Project and net emissions increases will be below the applicable significant emission rates for all regulated NSR pollutants except carbon monoxide ("CO"). CO emissions increase for the project exceed the significant emission rate. Therefore, the URM Project constitutes a major modification for CO subject to the prevention of significant deterioration ("PSD") permitting requirements under 25 Pa. Code 127 Subchapter D.

Requirements of nonattainment major new source review ("NNSR") ozone under 25 Pa. Code 127 Subchapter E do not apply to this project as the net emissions increases for ozone precursors will be below the applicable significant emission rate. This document and its attachments constitute Cleveland-Cliffs' application to Pennsylvania Department of Environmental Protection ("PADEP") for a plan approval authorization for the proposed URM Project.

1.2 Project Schedule

The construction on the Project is expected to commence in the second quarter of 2023. Operation of the modified facility is expected to begin around first quarter of 2025.

1.3 Plan Approval Application

The remainder of this plan approval application is organized as follows.

- Section 2 presents description of the existing Steelton site and the proposed project;
- Section 3 documents the emissions increase calculation methodology and presents an emissions summary for the URM Project;
- Section 4 presents a regulatory analysis, documenting the applicability of Federal and State air quality regulatory requirements to the project;
- Section 5 contains the additional impacts analysis;
- Appendix A contains completed plan approval application forms;
- Appendix B contains detailed emissions calculations for the proposed project; and
- Appendix C contains the copies of the pending municipal notifications.

2. **Project Description**

This section presents the background site information for the existing Steelton facility and the details of changes under the proposed URM Project scope.

2.1 Site Information

Cleveland Cliffs' Steelton facility is located at 215 S. Front Street in Steelton, Steelton Borough, Dauphin County, Pennsylvania. Dauphin County is designated as attainment or unclassified for all criteria pollutants.¹ Also, this area is part of the Northeast Ozone Transport Region' ("OTR") in the Commonwealth which is treated as 'moderate' non-attainment for ozone (and its precursors).² A site location map of the Steelton Site is presented in Figure 2-1. A plot plan of Steelton identifying existing and proposed new equipment under the URM Project is presented in Figure 2-2.

2.2 Background

The Steelton steel mill facility has existed since 1867 and is one of the oldest rail production operations. Scrap steel and other raw materials are brought to the site using trucks and rail. At the Meltshop, scrap steel materials are charged into a 163 tons per hour DCEAF furnace to produce molten steel using electrical energy. The molten steel is further refined in the ladle refining furnace ("LRF") and a tank vacuum degasser. Thereafter, molten steel is either sent to a three-strand continuous bloom caster to produce blooms or to the ingot teeming process for ingot production.

Blooms are reheated in an existing natural gas-fired walking beam furnace ("WBF") or the natural gas-fired soaking pits for further processing in a blooming mill, a rail rolling mill, and other downstream operations to produce finished rails, specialty blooms, flat bars, and other specialty sections. Natural gas-fired 35" mill reheat furnaces 3 and 4 and other ancillary operations are also used in the finishing operations. Primary rail rolling operations involve 44" blooming mill, 28"/35" hot rolling mills, 100-meter inline head hardening process, controlled cooling, etc. The finished rail sections and other products are then shipped to the customers via truck or rail.

¹ 40 CFR § 81.339 for the nonattainment designation for the State.

² See, How to Complete a Plan Approval Application to Construct, Modify or Reactivate an Air Contamination Source and/or Install an Air Cleaning Device, page 16,

https://files.dep.state.pa.us/air/AirQuality/AQPortalFiles/Permits/plan/inst_pln.pdf (last accessed on December 18, 2021.)



Figure 2-1. Location Map of Cleveland-Cliffs Steelton



Figure 2-2. Site Layout Plan for the Proposed URM Project

2.3 URM Project Scope

Cleveland-Cliffs Steelton is proposing installation of a new Universal Long-length Rail Rolling operation to modernize product finishing and reduce cost. The proposed URM Project scope at Steelton involves the following:

- (a) Changes to the existing three-strand continuous caster (Source ID 124) including replacement of the existing mold system and foot rolls to provide a caster extension to produce longer blooms, cut-off torches and runout table extension, and bloom collecting system.
- (b) New universal breakdown mill.
- (c) New five strand reversing tandem mill.
- (d) Various new rail product transfers and cooling operations.
- (e) New descaler that will use high pressure water system to remove scale from the rolled rail product.
- (f) New compressed air dryer to blow-off water in the web of the rail.
- (g) New rail marking system that indents/stamps product identification in the rail web.
- (h) New head hardening system for rails using a polymer quench system.

Upon completion of shakedown and commissioning the equipment, Cleveland-Cliffs plans to permanently shutdown obsolete and redundant equipment used in the rail finishing operations. Additionally, fuel combustion equipment such as 35" Reheat Furnaces and Soaking Pits will also be permanently shutdown.

This project does not involve any other 'physical changes in or changes in the methods of operation' of other existing emissions units at the Steelton facility (such as DCEAF, LMF, vacuum degasser etc.). However, as part of this project, Cleveland-Cliffs also analyzed potential impacts on emissions of regulated NSR pollutants for other non-modified emissions units at the facility.

3. Emissions Calculations

Emissions increases from the proposed URM Project, and the contemporaneous creditable emissions increases and decreases at the stationary source were calculated in accordance with the applicable provisions under 25 Pa. Code 127 Subchapter D and Subchapter E for the prevention of significant deterioration ("PSD") and the nonattainment new source review ("NNSR") programs, respectively. The calculation methodology and summary results are presented below. Detailed emissions calculations and supporting documentation are contained in Appendix B.

3.1 Regulated NSR Pollutants Emissions

The regulated NSR pollutants included here are particulate matter equal to or less than an aerodynamic diameter of nominally 10 μ m ("PM10") and 2.5 μ m ("PM2.5"), oxides of nitrogen ("NO_X"), carbon monoxide ("CO"), volatile organic compounds ("VOC"), sulfur dioxide ("SO₂"), lead ("Pb"), and greenhouse gases ("GHGs") as carbon dioxide equivalent ("CO₂e").³ CO₂e is calculated in accordance with 40 CFR § 52.21(b)(49)(ii) using the mass emission rates of six GHGs defined in 40 CFR § 52.21(b)(49)(i) and corresponding global warming potential ("GWP") published in 40 CFR Part 98, Subpart A, Table A-1.⁴ For this application, Table A-1 GWPs from the July 1, 2020, version of the 40 CFR Part 98 is used.

3.2 Calculation Methodology

As noted in Section 2.3, the proposed URM Project involves installation of new emission units comprising the new URM operation, that includes a head hardening system that uses polymer quench for the rail product. In addition, there will be increases in utilization for several existing emissions units. Finally, creditable emissions decreases will be generated from the permanent shutdown of the existing 35" Mill Reheat Furnaces 3 and 4 - Unit 301 as part of the project.

For determining the applicability of major modification under the PSD program, the project emissions increase calculations for PM10, PM2.5 SO₂, NO_x, CO and GHGs are performed in accordance with 40 CFR § 52.21 and 25 Pa. Code 127 Subchapter D. Project emissions increase, and net emissions increase for NO_x and VOC (both ozone precursors) are calculated in accordance with 25 Pa. Code 127 Subchapter E for determining applicability of major modification under the NNSR program. Major modification applicability calculations for this type of project are based on the 'Hybrid Test,' since this project will involve construction of new emissions units and also affects certain existing emissions units at the Steelton facility. Under the hybrid test, the emissions increase for a regulated NSR pollutant is calculated as the sum of the increases from the new and the existing affected emissions units. For new emissions units, the regulations require that emissions increase of regulated NSR pollutants be calculated using the actual-to-potential test *i.e.* in general, potential to emit ("PTE") of the new emission unit. Increases in emissions of regulated NSR pollutants for the existing emissions units are calculated using the actual-to-projected-actual ("ATPA") test.

³ Since PM10 evaluation is more stringent than PM because it includes filterable and condensable fractions of particulate, we did not include PM for purposes of emissions increase evaluation.

⁴ The aggregate group of six greenhouse gases are: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. (40 CFR § 52.21(b)(49)(i))

The calculation methodologies for new emissions units, affected existing units, and creditable increases and decreases in emissions is described below. Detailed emissions calculations are included in Appendix B.

3.2.1 Universal Rail Mill Head Hardening System Polymer Quench

As previously noted, Cleveland-Cliffs is proposing to replace the existing rail rolling process at the Steelton facility by installing equipment that will comprise a new URM operation to produce long-length rail product. Blooms are currently reheated in the WBF for further processing. As part of the proposed URM operation, a breakdown mill followed by a five-strand reversing tandem mill will be used to form the reheated blooms to long rail sections. Thereafter, rails will be transferred to the rail head hardening system to achieve the required mechanical properties. The rail will be tilted, and the head will be immersed in a polymer quench bath. Key parameters for polymer quench bath are listed below:

(A) Polymer water mixture application rate	1.7 lb/ton of rail produced
(B) Polymer concentration	20%
(C) VOC content of the polymer	88.4 ppm
(D) Projected rail production rate	720,000 tons/year

PTE of VOC from this operation is calculated by conservatively assuming that 100% of organics in the polymer are released in the process to the atmosphere. Based on the annual polymer usage, we rounded up the VOC emission rate from this operation to two (2) tons per year. No other regulated NSR pollutants will be emitted from the new rail head hardening system that is part of the proposed URM operation.

3.2.2 Project Affected Existing Emissions Units

The ATPA emissions calculations for the existing emissions units involve summing the differences between baseline actual emissions ("BAE") and projected actual emissions ("PAE") for each project affected emissions unit and accounting for excludable emissions as provided by the definition of PAE.⁵ The following existing emissions units could be affected by the URM Project:

- (A) Scrap preparation (ID 138)
- (B) DC Electric Arc Furnace ("DCEAF") (ID 501A)
- (C) Ladle Refining Furnace ("LRF") (ID 501B)
- (D) Tank Vacuum Degasser ("VDG") at Steelmaking (ID 500)
- (E) 3-Strand Continuous Bloom Caster and Cutting Torches (ID 124, 118)
- (F) Reheat Walking Beam Furnace ("WBF") (ID 311)
- (G) Ancillary operations in the Meltshop such as Ladle Preheaters, Tundish Preheaters (ID 109. 113, 114&116)
- (H) Unpaved haul road truck traffic (ID 924)

⁵ The NNSR requirements under 25 Pa. Code 127 Subchapter E do not include the term 'Hybrid Test' that is applicable to projects involving new and existing emissions units under the Federal PSD rules at 40 CFR § 52.21. However, the essence of the applicability calculations for this type of project remains the same: The sum of PTE for new units and ATPA for existing units.

As previously noted, Cleveland-Cliffs is proposing changes to the components of the existing 3strand continuous bloom caster to produce longer blooms for further processing in the new URM operation. No other physical changes or changes in the method of operation are planned for the other project affected existing emissions units listed here.

For the project affected existing emissions units' emissions calculations, Cleveland-Cliffs reviewed the project engineering documentation and analyzed historical performance and production information.⁶ Based on this information, the proposed project is not expected to result in any changes in the regulated NSR pollutant emissions factors for the affected existing emissions units. Therefore, the same emission factors are used for the BAE and PAE in these calculations for the existing emissions units.⁷

BAE for all regulated NSR pollutants (both PSD and NNSR) are based on the same 24-month period from January 2017 to December 2018. Actual emissions from the Air Information Management System ("AIMS") reports for the period that were submitted to PADEP are used for as BAE for the project affected existing emissions units. Upon further evaluation, Cleveland-Cliffs concluded that the historical haul road truck traffic emissions in the AIMS reports were an over estimation. Therefore, these emissions were revised based on the more recent information for fugitive PM10 and PM2.5 emissions from the facility unpaved haul roads.⁸

The projected production rates for the project-affected existing emissions units are derived from the relevant information from the company's projected highest business activity for the five-year period after implementation of the URM Project. This information is used along with the ratio of fuel use and emission factors for regulated NSR pollutants to calculate the PAE for the existing emissions units affected by the project. In addition, historical monthly production rates for the existing emissions units were evaluated to identify the peak monthly production rate for the project affected emissions units. February 2017 represented the peak production month for DCEAF and other affected emissions units. Evaluation of the historical operating data indicated that the existing Steelton operations could have accommodated the annualized peak monthly production (for February 2017) within its existing capabilities, and this production rate is also unrelated to the proposed URM Project. We further verified that the peak monthly production annualized rate is within the range of the historical peak annual production rate for the Steelton operations. Therefore, Cleveland-Cliffs used the annualized peak monthly rate to calculate the portion of excludable emissions in calculating project emissions increase for the project.⁹ Key production parameters used in the ATPA test for the existing emissions units affected by the project are provided in Table 3-1 below.

⁶ Historical production information pertained to the amount of steel cast on monthly basis. In addition, Cleveland-Cliffs reviewed documentation regarding existing units' throughput capacities, delay analysis and other historical changes.

⁷ The emission factors for existing emission units are based on historical performance testing, AP-42 or engineering estimate.

⁸ Emission rates for PM10 and PM2.5 from the unpaved haul roads are based on the estimated truck trips and the emission factor equations from U.S. EPA's AP-42 Chapter 13.2.2, November 2006.

⁹ Historical data shows that Steelton operations produced 650,584 tons during the January 2006 to December 2006 period. Further back, even higher production rates were achieved for the existing Steelton operations.

Parameters	Values
Baseline production rate during 1/2017 to 12/2018 (tons/year or TPY)	295,215
Projected production rate for the five-year period after the project (TPY)	768,000
Projected production rate for bloom caster (TPY)	720,000
Projected ingot production rate (unaffected by the project) (TPY)	48,000
Peak monthly production rate for DCEAF for 2/2017 (tons/day)	1,354
Annualized peak monthly production rate that the existing units could accommodate and unrelated to the project (TPY)	494,054
Excludable production rate by subtracting baseline rate from annualized peak monthly production rate (TPY)	198,838

 Table 3-1. Summary of Key Production Parameters for ATPA Test

3.3 Summary of URM Project Emissions Increases

Table 3-2 presents the PTE of VOC for the proposed new URM operation. This table also shows the sum of increases in emissions of regulated NSR pollutant calculated using the ATPA test for the existing emissions units that could be affected by the overall URM Project. Table 3-2 also includes a comparison of the project emissions increases ("PEI") for each regulated NSR pollutant, calculated as sum of the emissions increases for the new and the existing emissions units, with the applicable significant emissions rate. Detailed emissions calculations are provided in Appendix B.

Emission Unit or Process	Project Emissions Increase (tons/year)						
	PM10*	PM2.5	SO ₂	NO _X	VOC	CO	CO ₂ e*
Universal Rail Mill					2.00		
DCEAF Furnace	3.24	2.40	9.45	11.12	6.63	156.52	31,245
Ladle Refining Furnace	0.00	0.00	0.00	0.00	0.00	0.00	0
Meltshop Fugitives	0.72	0.72	0.00	0.00	0.00	0.00	0
VDG @ Steelmaking	0.00	0.00	0.00	0.00	0.00	14.37	0
Walking Beam Furnace	1.96	1.96	0.15	21.46	0.28	41.95	30,774
EAF Ladle Preheaters #1-#4	0.16	0.16	0.01	2.10	0.12	1.76	2,504
Burn Off Oven	0.00	0.00	0.00	0.01	0.00	0.01	13
Caster Tundish Preheaters & Dryer	0.07	0.07	0.01	1.32	0.03	0.79	1,127
Caster Cutting Torches #1-#6	0.01	0.01	0.00	0.11	0.01	0.10	136
Caster Vents	0.00	0.00	0.00	0.00	4.61	0.00	0
Scrap Prep	0.31	0.31	0.00	0.00	0.00	0.00	0
Scrap Prep	0.03	0.03	0.00	0.48	0.02	0.29	410
Haul Roads	2.85	0.29	0.00	0.00	0.00	0.00	0
Total	9.34	5.94	9.63	36.60	13.70	215.78	66,209
PSD/NNSR Significant Rate	15	10	40	40	40	100	75,000
Whether Significant?	No	No	No	No	No	Yes	No
*PM analysis is not included here since PM10 represents more conservative calculation of emissions increase.							
**CO2e calculation for determining whether GHGs subject to regulation.							

Table 3-2. Summary of URM Project Emissions Increases

For the URM Project, PEI for all regulated NSR pollutants except CO are each below the applicable significant emission rates. Since the CO PEI exceeds the PSD significance emission

rate, the proposed URM Project is a major modification for CO, subject to the PSD permitting requirements. As explained in the next section, the proposed project does not result in any physical changes or changes in the method of operation of any emissions units where CO emissions are increasing as a result of the project. In addition, there will not be any increases in the 1-hour and 8-hour emission rates of CO because of this project. Therefore, even though the URM Project is a major modification for CO, under the PSD regulations, it is not subject to several of the substantive requirements under 40 CFR §§ 52.21 (j) through (r)(5). Section 4 details the applicability of substantive requirements under the PSD program.

In accordance with 25 Pa. Code § 127.203a (a)(1) for a proposed project, if NO_x and VOC PEI are less than the applicable significant emission rate, a net emissions increase evaluation under 25 Pa. Code § 127.203a (a)(1)(ii) is not required for major modification determination under the NNSR program. For URM Project, both NO_x and VOC PEI are below the applicable significant emission rates. Thus, the project is a non-major modification under the NNSR program.

For NO_X and VOC, as documented above and in Appendix B, the proposed project will result in 'de-minimis' emissions increase as defined in 25 Pa. Code § 121.1. Therefore, in accordance with 25 Pa. Code § 127.203a (a)(2), a de minimis netting analysis is required for NO_X and VOC emissions from the URM Project. Cleveland-Cliffs is submitting this application for the proposed project prior to December 31, 2021.¹⁰ Therefore, time period from January 2012 to December 2021 is selected as the ten-year contemporaneous period for the project. Table 3-3 presents a summary of contemporaneous and creditable emissions increases and decreases.

Net Emissions Increase (NEI) (tons/year)	NO _X	VOC			
URM Project	36.60	13.70			
Creditable Increases					
WBF Project (2015)	58.41	6.54			
Creditable Decreases					
Curtailment of soaking pit batteries*	-43.32	-1.51			
Shutdown of 35" Mill Reheat Furnaces #3 & #4 (Planned	-87.68	-0.51			
Prior to URM Project Emission Increase)					
Total	(35.99)	18.22			
* NOx and VOC emissions decreases for soaking pit batteries for Jan 2013-Dec 2014 period					
from the 2016 application for the WBF Project.					

Table 3-3. Net Emissions Increase for NO_X and VOC

As shown in the table above, net emissions increases of NO_x and VOC are below the applicable significant emission rate. Therefore, the emission offset requirements under 25 Pa. Code § 127.205(3) (relating to special permit requirements) are not applicable to the URM Project. In accordance with 25 Pa. Code § 127.207, Cleveland-Cliffs will submit an application for creditable decreases under the emission reduction credits ("ERC") provisions from the planned permanent shutdown of the 35" Mill Reheat Furnaces 3 and 4 – Unit 301 prior to the URM Project emission increase.

¹⁰ In accordance with 25 Pa. Code § 127.203a (a)(2)(ii), an increase or decrease is contemporaneous if it occurred within 10 years prior to the date of the Department's receipt of a complete plan approval application.

4. Regulatory Applicability Review

A review of the potentially applicable federal and Pennsylvania regulations has been conducted for this plan approval application. The following subsections summarize the applicability of these regulations to the proposed URM Project at the Steelton site.

4.1 Commonwealth's Regulations

This analysis is based on the version of the Commonwealth of Pennsylvania Code ("Pa. Code") available on the Commonwealth's website at the time this application was prepared.¹¹

4.1.1 25 Pa. Code Chapter 123, Standards for Contaminants

25 Pa. Code Chapter 123 specifies air contaminant emission standards for fugitive and point PM, SO₂, NO_x, and visible emissions. The proposed URM Project will not result in emissions of any of these air contaminants.

4.1.2 25 Pa. Code Chapter 127, Construction, Modification, Reactivation and Operation of Sources

25 Pa. Code Chapter 127 contains requirements for Plan Approvals, PSD, NNSR, and operating permits. The applicability of these requirements to the project is documented below.

4.1.2.1 Subchapter B, Plan Approval Requirements

In accordance with 25 Pa. Code 127 Subchapter B, a plan approval is required for the proposed new URM operation to be installed at Steelton facility. This document satisfies the requirement to submit a plan approval application. The primary requirements to obtain a plan approval 25 Pa. Code § 127.12(a) are summarized below with cross-references to application content addressing each requirement (underlined).

- Identify the location of the emission sources and the name, title, address and telephone number of the individual responsible for the operation of the source. <u>This information is presented in Sections 1, 2, and Appendix A.</u>
- Provide information regarding emission rates. <u>This information is presented in Sections 2</u> and 3.
- Show that the source will be equipped to record emissions, maintain records, and report emissions to the PA DEP as required. <u>This requirement is addressed in the application forms included in Appendix A.</u>
- Show that the source will comply with applicable requirements of PADEP regulations and requirements promulgated by the Administrator of the EPA. <u>This is addressed in Section 4 of the application.</u>
- Demonstration that emissions will be the minimized through the use of the Best Available Technology (BAT). <u>The BAT demonstration is presented later in this section.</u>

¹¹http://www.pacodeandbulletin.gov/Display/pacode?file=/secure/pacode/data/025/chapter127/subchapEtoc.html&d =reduce (last accessed on December 18, 2021).

- Show that the appropriate municipal notifications of the Plan Approval Application have been sent and received. <u>Cleveland-Cliffs will provide the requisite municipal notifications</u> and submit its copies along with the receipts of delivery via UPS/USPS for verification in accordance with DEP Guidance directing that notifications be made at least 30-days prior to the issuance of the Plan Approval for the URM Project.¹² We will keep in touch with PADEP regarding processing of this application for the URM Project to align the timing of the municipal notifications.
- Show that the proposed air cleaning devices are capable of being operated and maintained in accordance with good air pollution control practices. <u>There are no air cleaning devices</u> (add-on controls) associated with the proposed equipment.
- Contain a completed Compliance Review Form. <u>The completed form is contained in</u> <u>Appendix A.</u>

4.1.2.2 Best Available Technology Demonstration for URM Operation

The proposed URM Project at the Steelton site includes a state-of-art Universal Long-length Rail Rolling (URM) operation that includes a new head hardening system. The head hardening system utilizes a polymer quench bath that uses 20% concentration polymer mix to coat the rail head. Small amount of organics may flash-off as the heated rails are quenched in this system. We are not aware of any add-on VOC emissions controls for such a low emission rate and low concentration stream of organics emissions. In addition, we did not identify any alternative product with lower VOC content that could be used in this process to produce the target rail product. Therefore, as part of BAT no additional requirements are feasible for this operation.

4.1.2.3 Subchapter D Prevention of Significant Deterioration Requirements

The federal PSD regulations in 40 CFR § 52.21 are incorporated by reference in 25 Pa. Code 127, Subchapter D. As noted previously, Steelton area is attainment or unclassifiable for all criteria pollutants. However, Commonwealth of Pennsylvania is in the Northeast OTR and treated as 'moderate' nonattainment for ozone. Therefore, the PEI for PM/PM10, PM2.5, SO₂, NO_x (as NO₂), CO, and GHGs from the proposed URM Project are evaluated for major modification applicability under the PSD program. PEI for these regulated NSR pollutants are calculated using the procedures in 40 CFR § 52.21(a)(2)(iv)(c) "Actual-to-projected-actual" test for major modification applicability, for projects that only involve existing emissions units."¹³ As documented in subsection 3.3 and Appendix B, PEI for PM/PM10, PM2.5, SO₂, and NO_x associated with the proposed project are below all applicable significant emission rates under 40 CFR § 52.21(b)(23). In addition, GHG PEI in terms of CO₂e is below the threshold under 40 CFR § 52.21(b)(49)(iii). Only the CO PEI for the proposed URM Project exceeds the significant emission rate. Therefore, the proposed URM Project is a major modification as defined at 40 CFR § 52.21(b)(2) for the CO emission increase and is subject to the requirements of 40 CFR § 52.21(b)(2) for the CO emission increase and is subject to the requirements of 40 CFR § 52.21(b)(2) for the CO emission increase and is subject to the requirements of 40 CFR § 52.21(b)(2) for the CO emission increase and is subject to the requirements of 40 CFR § 52.21(b)(2) for the CO emission increase and is subject to the requirements of 40 CFR §§

¹² PADEP guidance for "Public Notification" states that "...the written notices shall be received by the municipalities at least thirty (30) days before the Department of Environmental Resources may issue or deny the permit....," Document Number: 275-2101-011 available at

http://www.depgreenport.state.pa.us/elibrary/GetDocument?docId=7860&DocName=PUBLIC%20NOTIFICATIO N.PDF%20%20%3Cspan%20style%3D%22color%3Agreen%3B%22%3E%3C%2Fspan%3E%20%3Cspan%20styl e%3D%22color%3Ablue%3B%22%3E%3C%2Fspan%3E (last accessed on December 20, 2021).

¹³ The ATPA test is applicable here since the new emission unit (URM operation) only emits VOC (ozone precursor).

52.21(j) through (r)(5), to the extent applicable. Applicability of substantive PSD requirements is presented below.

1. Control Technology Review (40 CFR § 52.21(j))

For a major modification, best available control technology ("BACT") requirement applies "... to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit."¹⁴ The new equipment comprising the proposed new URM operation only emits VOC from the head-hardening system using polymer quench, and does not result in any CO emissions. In addition, the existing emissions units (such as DCEAF, WBF etc.), where CO emissions do increase as a result of the URM Project, will not be undergoing any 'physical change or change in the method of operation.' This is because the proposed Project does not involve any changes to the maximum throughput rates and the CO emission factors for the project affected existing emissions units. Therefore, the BACT requirement does not apply to the equipment covered under the proposed URM Project.

2. Source Impact Analysis (40 CFR § 52.21(k))

This provision requires an air quality modeling evaluation for a modification to show "... that allowable emission increases from the proposed source or modification..." would not cause or contribute to violation of national ambient air quality standard ("NAAQS") or PSD increment. There is no increment for CO under the PSD program. In addition, CO NAAQS are based on 1-hour and 8-hour averaging times and there is no annual CO NAAQS.¹⁵ In this case, the proposed URM Project is a major modification for CO. The proposed URM Project will not result in any increase in CO emissions for any of the existing emissions units affected by the project (such as DCEAF, WBF etc.) for either the 1-hour or the 8-hour periods. This is because the proposed Project does not involve any changes to the maximum throughput rates or the CO emission factors for the project affected existing emissions units. Since there are no increases in 1-hour or 8-hour CO emission rates for the URM Project affected existing emissions units, source impact analysis requirements do not apply to this Project.

3. Air Quality Models (40 CFR § 52.21(1))

See discussion under item 2 above. Since the URM Project does not increase 1-hour or 8-hour CO emission rates, we have demonstrated no violation of the NAAQS without needing an air quality model. Therefore, we ask that DEP deem this application complete without CO air modeling.

4. Air Quality Analysis (40 CFR § 52.21(m))

Under this provision, applicant is required to provide an analysis of ambient air quality. Based on the U.S. EPA guidance, if sufficient data exists to provide representative regional background concentrations, the agency may waive the preconstruction monitoring requirement.¹⁶ PADEP CO monitor NARSTO site located in Arendtsville, PA

¹⁴ 40 CFR § 52.21(j)(3).

¹⁵ See U.S. EPA's NAAQS Table at <u>https://www.epa.gov/criteria-air-pollutants/naaqs-table</u> (last accessed on December 19, 2021).

¹⁶ "Circuit Court Decision on PM2.5 Significant Impact Levels and Significant Monitoring Concentration," USEPA, March 4, 2013, at <u>http://epa.gov/nsr/documents/20130304qa.pdf</u>.

was identified as the nearest regional CO monitor. Ambient CO data for this site was obtained from PADEP website and is presented in Table 4-1 below.¹⁷

Site ID 420010001 Averaging Period	2018 Ambient CO (ppm)	2019 Ambient CO (ppm)	2020 Ambient CO (ppm)	CO Standard (ppm)*		
8-hour	0.41	0.40	0.44	9		
1-hour	1.30	0.70	1.60	35		
* Not to be exceeded more than once per year.						

Table 4-1. Ambient CO Concentration for NARSTO Site Arendtsville, PA

Based on the above monitored values, CO ambient concentrations in the area are well below the applicable NAAQS for all averaging periods.

- 5. Source Information (40 CFR § 52.21(n)) This application document and its attachments constitute necessary information required under this provision.
- 6. Additional Impact Analysis (40 CFR § 52.21(0)) This information is included Section 5 of this application.
- 7. Sources Impacting Federal Class I Areas (40 CFR § 52.21(p)) The proposed Project is a major modification for CO. There is no CO increment and CO emissions are not a cause for visibility concerns in any areas.
- Public Participation (40 CFR § 52.21(q))
 The applicant will comply with any applicable provisions under the PADEP and federal PSD regulations regarding public participation for this application.
- 9. Source Obligation (40 CFR § 52.21(r)) The applicant will comply with the applicable requirements under these provisions.

4.1.2.1 Subchapters E, Non-attainment NSR Requirements

The Pennsylvania NNSR regulations are contained in 25 Pa. Code 127 Subchapter E that apply to ozone precursors as the area is located in the Northeast OTR. As documented in subsection 3.3 and Appendix B, PEI for NOx and VOC associated with the proposed project are below all applicable significant emission rates under 25 Pa. Code § 121.1. Additionally, the net emissions increases of NOx and VOC determined in accordance with 25 Pa. Code § 127.203a (a)(2) are below the significant emission rate thresholds. Therefore, the proposed URM Project constitutes a non-major modification under NNSR and none of the requirements of these regulations, including the 'emission offsets' requirements of 25 Pa. Code § 127.205(3), are applicable.

Upon implementation of the URM Project, Cleveland-Cliffs plans to permanently shutdown the existing 35" Mill Reheat Furnaces 3 & 4 (ID 301). In accordance with 25 Pa. Code § 127.207, Cleveland-Cliffs is submitting the emission reduction credit ("ERC") application for the reductions in NOx emissions from this operation in order to make the decrease creditable prior to the URM Project increase. The ERC application includes emission reductions in excess of what is needed for the URM Project increase.

¹⁷ See: <u>https://www.epa.gov/outdoor-air-quality-data/monitor-values-report</u>, <u>https://www.ahs.dep.pa.gov/aq_apps/aadata/Default.aspx</u> (last accessed on December 19, 2021).

4.1.2.2 Subchapters F and G, Operating Permit Requirements

Cleveland-Cliffs is submitting this application for issuance of plan approval for the proposed installation of the URM operation emission units. In addition to authorizing the construction of the proposed units, Cleveland-Cliffs requests that the plan approval allow for a reasonable shakedown period of up to 180 days of operation of the new URM operation while the existing 35" Mill Reheat Furnaces continue to operate to supply customer demand. We also understand that the Plan Approval will also authorize operation of the new emissions units and Cleveland-Cliffs will submit an application for a Title V Operating Permit Modification in accordance with 25 Pa 127 Subchapters F and G and as directed by the Department.

4.1.3 25 Pa. Code Chapter 129, Sources of VOCs

25 Pa. Code § 129 establishes standards for several categories of operations that result in VOC emissions. The URM operation with polymer quench does not fall into any of the categories specified under the rule.

4.1.4 25 Pa. Code Chapter 129.91, Control of Major Sources of NOx and VOCs

25 Pa. Code § 129.91 requires the application of RACT for construction or modification of major NO_x and VOC emitting facilities. The equipment comprising the proposed new URM operation does not meet the definition of major VOC emitting facility under 25 Pa. Code § 121.1. Therefore, this requirement is not applicable to the proposed equipment.

4.1.5 25 Pa. Code Chapter 135, Reporting of Sources

25 Pa. Code Chapter 135 requires the preparation and submittal of emission statements showing actual annual emissions of all criteria pollutants for the facility. Cleveland-Cliffs will continue to comply with the Chapter 135 reporting requirements as applicable.

4.2 Federal Regulations

Applicability of federal regulations for the proposed project is discussed in this subsection.

4.2.1 New Source Performance Standards (NSPS)

NSPS are promulgated in 40 CFR Part 60 and incorporated in 25 Pa. Code Chapter 122. NSPS apply to affected facilities in regulated source categories for which construction, reconstruction, or modification occurs after specified dates. No NSPS are applicable to the proposed new equipment comprising the URM operation at the Steelton facility.

4.2.2 National Emission Standards for Hazardous Air Pollutants (NESHAP)

NESHAP for source categories is promulgated in 40 CFR Part 63 and incorporated in 25 Pa. Code Chapter 124. NESHAP are applicable to affected sources at major, and in some cases minor (area) sources of HAP emissions. The Steelton facility is and will remain a minor (area) source of HAP following the project, with potential emissions less than 10 and 25 tons per year of any single HAP and total combined HAP, respectively. No NESHAP are applicable to the proposed new equipment comprising the new URM operation. There is no change to the applicability of NESHAP 40 CFR Part 63 Subpart YYYYY that is applicable to area sources.

5. Additional Impacts Analyses

An additional impacts analysis is performed consistent with the requirements of 40 CFR § 52.21(o) (Additional Impacts Analysis) to determine potential air emissions impacts on soils, vegetation, visibility, and growth for the proposed URM Project. The Project will emit CO in excess of the PSD significant emission rates and are therefore considered in the analysis.

As explained in subsection 4.1.2.3, there will be no increase in 1-hour or 8-hour CO emission rates as a result of this Project. Since there is no increase in short term emission rates, there will be no change to the ambient CO concentration in the area due to the proposed URM Project. CO emissions, at ambient impact concentrations, are not known to cause any soils or vegetation impacts.¹⁸ However, elevated CO may produce some impacts such as epinasty, chlorosis, and abscission. However, plant injury occurs at concentration over 100 ppm which is well over the CO primary NAAQS.¹⁹ As previously noted there will be no changes to the ambient CO concentration, which are currently well below the CO primary NAAQS. Therefore, no adverse soil and vegetation impacts are expected from the proposed URM Project.

In addition, CO emissions do not contribute to formation of the particulate that causes visibility impairment.²⁰ Finally, Cleveland-Cliffs Steelton is an existing facility and the project is not expected cause any quantifiable growth impacts due to additional industrial, commercial, or residential growth in the area.

¹⁸ Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings [https://www.epa.gov/criteria-air-pollutants/naaqs-table (last accessed on November 27, 2019)]. The U.S. EPA revoked the secondary NAAQS for CO in 1985 noting that "[c]arbon monoxide is a normal constituent of the plant environment. Plants can both metabolize and produce CO. This may explain the fact that relatively high levels of CO are necessary before damage occurs to vegetation. The lowest level for which significant effects on vegetation have been reported is 100 ppm for 3 to 35 days. The effect observed in this study was an inhibition of nitrogen fixation in legumes. Since CO concentrations of this magnitude are rarely if ever observed in the ambient air, it is very unlikely that any damage to vegetation will occur from CO air pollution. No other effects on welfare have been associated with CO exposures at or near ambient levels. Because no standards appear to be requisite to protect the public welfare from any known or anticipated adverse effects from ambient CO exposures, EPA is rescinding the existing secondary standards." 50 Fed. Reg. 37484, September 13, 1985.

¹⁹ "The Effects of Air Pollutants on Vegetation and the Role of Vegetation in Reducing Atmospheric Pollution," Iuliana Florentina Gheorghe and Barbu Ion, September 26, 2011, <u>https://www.intechopen.com/books/the-impact-of-air-pollution-on-health-economy-environment-and-agricultural-sources/the-effects-of-air-pollutants-on-vegetation-and-the-role-of-vegetation-in-reducing-atmospheric-pollu (last accessed on February 26, 2020).</u>

²⁰ https://www.epa.gov/visibility/basic-information-about-visibility (last accessed on November 3, 2019).

Appendix A – Plan Approval Application Forms



AIR QUALITY FEES FOR NEW PLAN APPROVAL

Company Information						
Federal Tax ID: 022-05012			Firm Name: Cleveland-Cliffs Steelton LLC			
Permit #	(If any): 22-0507	12	Facility Name: Cleveland-Cliffs Steelton LLC/Steelton			
Municipa	lity: Steelton Bo	rough	County: Dauphin			
Contact	Person Name: R	ay Ajalli	Telephone Number: (610) 3	383-2097		
E-mail: r	ay.ajalli@clevela	indcliffs.com				
		New Plan Approval (The fol	lowing fees are cumulative	.)		
Line #Check the appropriate boxes belowType of review requestedFee 2021 - 2025				Fee 2021 - 2025	Total Fees	
1	Base Fee	Subchar	oter B	\$2,500	\$2,500	
2		New Source Review	w, Subchapter E	\$7,500		
3		NSPS/NESHAP // A. # of NSPS: B. # of NESHAP/MACT: C. Add lines A and B: D. Maximum applicable standa E. Enter smaller of line C or lin Multiply line E by \$2,500 and e "Total Fees" column.	MACT standard	\$2,500		
4		Case-by-Ca	se MACT	\$9,500		
5		Prevention of Significant Deterioration (PSD) requirements. Subchapter D		\$32,500	\$32,500	
6		Plantwide Applicability Limit (PAL) for NSR regulated pollutants or PAL for PSD regulated pollutants or both \$7,500		\$7,500		
7		Risk Assessment Analysis – Inhalation only \$10,000				
8		Risk Assessment Analysis – Multi-pathway \$25,000				
Add Lines 1 thru 8 of Total Fees column and write it here.						

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

GENERAL INFORMATION FORM – AUTHORIZATION APPLICATION

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This form is used by the Department of Environmental Protection (DEP) to inform our programs regarding what other DEP permits or authorizations may be needed for the proposed project or activity. This version of the General Information Form (GIF) must be completed and returned with any program-specific application being submitted to the DEP.

Related ID#s (If Known)				DEP USE ONLY				
Client ID# _	APS ID#			Date Rece	eived & Gene	ral Notes		
Site ID#	Auth ID#							
Facility ID#								
	CLIENT INFO	RMATIC	NC					
DEP Client ID#	Client Type / Code LLC		Du	n & Brad	street ID#			
Legal Organization Name or Reg	istered Fictitious Name	E	mployer I	D# (EIN)	Is the El	N a SSI	N?	
Cleveland-Cliffs Steelton LLC		8	5-4084783	-1	🗌 Yes	\boxtimes	NO	
State of Incorporation or Registr	ation of Fictious Name	🗌 Corpo	oration 🛛	LLC	Partnershi	p 🗌 Li	LP 🗌 LP	
Delaware		🗌 Sole F	Proprietorsh	nip 🗌	Associatio	n/Organ	ization	
		Estate	e/Trust 🗌	Other				
Individual Last Name	First Name	N	11	Suffi	ix			
Additional Individual Last Name	Eirst Namo		11	Suffi	iv			
	i ii st indille	IV		Sulli				
Mailing Address Line 1		Mailing A	Address Li	ne 2				
215 S Front St								
Address Last Line – City	State	Z	IP+4	С	ountry			
Steelton	PA	1	7113-2538	U	ISA			
Client Contact Last Name	First Name			MI	S	uffix		
Ajalli Client Contect Title	Ray	Dhana		Ev4	P			
Manager - Environmental		(610) 38	3-2007	EXL	C.	en Pho	ne	
		(010) 30	5-2031	FΔY				
rav.ajalli@clevelandcliffs.com				1 77				
			N					
DEP Site ID# Site Name			14					
DEF SILE ID# SILE NAME Claveland_Clift	fs Steelton LLC							
EPA ID#	Estimated Number of	Employe	es to be P	resent at	Site	700		
Description of Site		pioye		. soont at				
Steel mini-mill produces high qualit	y rails and specialty ingots	5						
Tax Parcel ID(s):								
County Name(s) M	unicipality(ies)			City	Boro	Twp	State	
Dauphin S	teelton							
				<u> </u>	<u>⊢ </u>			
		N						
Site Location Line 1 215 S Front St	S	bite Locat	ion Line 2					
Site Location Last Line – City	S	State	ZIP+4					
Steelton	F	PA	17113-253	8				
Detailed Written Directions to Sit	e							

Coal Ash Beneficial Use Operation

Commercial Hazardous Waste Operation

Deep Mine Safety Operation -Anthracite

Deep Mine Safety Operation -Bituminous

Deep Mine Safety Operation -Ind Minerals

Encroachment Location (water, wetland)

Erosion & Sediment Control Facility

Explosive Storage Location

Coal Mining Operation

Coal Pillar Location

Dam Location

Site C	ontact Last Name		First Name	•	MI		Suffix
Ajalli			Ray				P.E.
Site C	ontact Title			Site Co	ntact Firm		
Manag	ger - Environmental			Clevelar	nd-Cliffs Plate LLC		
Mailin	g Address Line 1			Mailing	Address Line 2		
139 Modena Road							
Mailin	g Address Last Lir	ne – City		State	ZIP+4		
Coate	sville			PA	19320		
Phone	;	Ext	FAX	Email A	ddress		
(610)	383-2097			ray.ajalli	@clevelandcliffs.con	n	
NAICS Codes (Two- & Three-Digit Codes – List All That Apply) 6-Digit Code (Optional)							
331					331111		
Client	to Site Relationsh	ір					
OWN)P						
			FACILITY IN	FORMA	TION		
Modif	ication of Existing	Facility				Yes	No
1.	Will this project m	nodify an exi	sting facility, syste	m, or ac	tivity?	\boxtimes	
2.	Will this project in	volve an ad	dition to an existing	g facility	, system, or activity	/? 🛛	
	If "Yes", check all r	elevant facilit	ty types and provide	DEP faci	lity identification num	bers below.	
					-		
	Facility Type		DEP Fac ID#	F	acility Type		DEP Fac ID#
\bowtie	Air Emission Plant		468809	_ [] Ir	dustrial Minerals Mining (Operation	
	Beneficial Use (water)			_ 님 └	aboratory Location		
	Blasting Operation			_ 凵 └	and Recycling Cleanup Lo	ocation	
\Box	Captive Hazardous Was	ste Operation			line Drainage Treatment /	Land	

Recycling Project Location

Municipal Waste Operation

Public Water Supply System

Residual Waste Operation

Water Pollution Control Facility

Storage Tank Location

Oil & Gas Location

Radiation Facility

Water Resource

Other:

Oil & Gas Encroachment Location

Oil & Gas Water Poll Control Facility

Latitude/Longitude					Longitude			
Point of Origin	Dogroos	Minutos	Soconde	Dogroos	Minutos	Soconde		
Form of Origin	Degrees	10	Seconds	Degrees	winnutes	Jeconus		
	40	13	59	76	50	13		
Horizontal Accuracy Measure	Feet		0r	- Me	eters			
Horizontal Reference Datum Code	Nort	h American I	Datum of 192	27				
	North American Datum of 1983							
	🗌 Wor	Id Geodetic S	System of 19	84				
Horizontal Collection Method Code			-					
Reference Point Code								
Altitude	Feet		0r	- Me	eters			
Altitude Datum Name	The	National Ge	odetic Vertica	al Datum of [·]	1929			
	The	North Ameri	can Vertical	Datum of 19	88 (NAVD88)			
Altitude (Vertical) Location Datum Colle	ection Metho	od Code						
Geometric Type Code								
Data Collection Date								
Source Map Scale Number		Inch(es)	=		Feet			
Or		Centimeter	r(s) =		Meter	S		

PROJECT INFORMATION

Proj	ect Name									
Univ	ersal Rail Mill (URI	N) Project								
Proj Repl	ect Description	il rolling mi	ll equinment	with a state-of-th	a-art I Inive	arcal R	ail Mill d	neration		
Proj	ect Consultant La	st Name		First Name			MI	peration	Suffix	
Proi	ect Consultant Ti	tle		Consu	ltina Firm					
Sr. E	Environmental Engi	neer		RTP E	nvironmen	tal Ass	ociates	Inc.		
Mail	ing Address Line	1		Mailing	g Address	Line 2	2			
<u>304</u> A	West Millbrook R	oad								
Add	ress Last Line – C	City		State			ZIP+4			
Pho	ne	Evt	FAX	Emai	il Addross	:	27608)		
(919) 845-1422	42		saini	@rtpenv.co	, om				
Time	e Schedules	Project M	/lilestone (C	Optional)		-				
1.	Is the project lo	cated in o	r within a 0.	5-mile radius	\boxtimes	Yes		No		
	of an Enviror defined by DEP	nmental 、 ?	Justice co	mmunity as						
	To dotormino	if the project	at is located in	or within a 0.5 mil	o radius of	an anvi	ronmont	al instico oc	mmunity	
	the online En	vironmental	Justice Areas	<u>Viewer</u> .			Ionneni		mmunity	, please use
2.	Have you infor	med the s	surrounding	community		Yes	\boxtimes	No		
	prior to subr	nitting th	e applicat	ion to the						
	Department?									
	Method of notif	ication:								
3.	Have vou addr	ressed co	mmunitv co	oncerns that		Yes		No	\boxtimes	N/A
	were identified?	?	,, ,							
	If no, please	briefly descr	ibe the comm	unity concerns that	have been	express	sed and	not address	ed.	
4		funded by	atata ar fad	aral grapta?		Voc		No		
4.	Note: If "Yes" s	necify what :	state of the	project is related to	the grant ar	nd provi	ide the a	rant source	contact	nerson
	and grant	expiration d	ate.		ano grant a				, oontaot	poroon
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	referenced list.	see Appe	endix A of the	he Land Use						
	Policy attached	to GIF ins	tructions)							
	Note: If "No" to (Question 5, <u>t</u>	he application	n is not subject to th	e Land Use	Policy.				
	If "Yes" to questions	Question 5, in the Land	the applicatio	n is subject to this p tion section.	policy and the	ne Appl	icant sho	ould answer	the addi	tional

LAND USE INFORMATION

<u>Note</u>: Applicants should submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances.

1.	Is there an adopted county or multi-county comprehensive plan?		Yes		No						
2.	Is there a county stormwater management plan?		Yes		No						
3.	Is there an adopted municipal or multi-municipal comprehensive		Yes		No						
	plan?										
4.	Is there an adopted county-wide zoning ordinance, municipal zoning		Yes		No						
	ordinance or joint municipal zoning ordinance?										
	Note: If the Applicant answers "No" to either Questions 1, 3 or 4, the provisions of the PA MPC are not applicable and the										
	Applicant does not need to respond to questions 5 and 6 below.										
	If the Applicant answers "Yes" to questions 1, 3 and 4, the Applicant shou	uld respond	d to questio	ns 5 ar	d 6 below.						
5.	Does the proposed project meet the provisions of the zoning		Yes		No						
	ordinance or does the proposed project have zoning approval? If										
	zoning approval has been received, attach documentation.										
6.	Have you attached Municipal and County Land Use Letters for the		Yes		No						

project?

COORDINATION INFORMATION

<u>Note</u>: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 utilizing the <u>Project Review Form</u>.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 through 2.5 below.

If the activity will not be a mining project, skip questions 1.0 through 2.5 and begin with question 3.0.

1.0	Is this a coal mining project? If "Yes", respond to 1.1-1.6. If "No", skip to Question 2.0.	Yes	\boxtimes	No
1.1	Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be equal to or greater than 200 tons/day?	Yes		No
1.2	Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be greater than 50,000 tons/year?	Yes		No
1.3	Will this coal mining project involve coal preparation/ processing activities in which thermal coal dryers or pneumatic coal cleaners will be used?	Yes		No
1.4	For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?	Yes		No
1.5	Will this coal mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?	Yes		No
1.6	Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well?	Yes		No
2.0	Is this a non-coal (industrial minerals) mining project? If "Yes", respond to 2.1-2.6. If "No", skip to Question 3.0.	Yes	\boxtimes	No
2.1	Will this non-coal (industrial minerals) mining project involve the crushing and screening of non-coal minerals other than sand and gravel?	Yes		No
2.2	Will this non-coal (industrial minerals) mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations with a capacity of less than 150 tons/hour of unconsolidated materials?	Yes		No

2.3	Will this non-coal (industrial minerals) mining project involve the construction, operation and/or modification of a portable non- metallic (i.e., non-coal) minerals processing plant under the authority of the General Permit for Portable Non-metallic Mineral Processing Plants (i.e., BAQ-PGPA/GP-3)?		Yes		No
2.4	For this non-coal (industrial minerals) mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?		Yes		No
2.5	Will this non-coal (industrial minerals) mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?		Yes		No
3.0	Will your project, activity, or authorization have anything to do with a well related to oil or gas production, have construction within 200 feet of, affect an oil or gas well, involve the waste from such a well, or string power lines above an oil or gas well? If "Yes", respond to 3.1-3.3. If "No", skip to Question 4.0.		Yes		No
3.1	Does the oil- or gas-related project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)?		Yes		No
3.2	Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system? If "Yes", discuss in <i>Project Description</i> .		Yes		No
3.3	Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities?		Yes		No
4.0	Will the project involve a construction activity that results in earthdisturbance?If "Yes", specify the total disturbed acreage.4.0.1Total Disturbed Acreage13	\boxtimes	Yes		No
	4.0.2 Will the project discharge or drain to a special protection water (EV or HQ) or an EV wetland?		Yes	\boxtimes	No
	4.0.3 Will the project involve a construction activity that results in earth disturbance in the area of the earth disturbance that are contaminated at levels exceeding residential or non-residential medium-specific concentrations (MSCs) in 25 Pa. Code Chapter 250 at residential or non- residential construction sites, respectively?		Yes		No
5.0	Does the project involve any of the following: water obstruction and/or encroachment, wetland impacts, or floodplain project by the Commonwealth/political subdivision or public utility? If "Yes", respond to 5.1-5.7. If "No", skip to Question 6.0.		Yes		No
5.1	Water Obstruction and Encroachment Projects – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water?		Yes		No
5.2	Wetland Impacts – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a wetland?		Yes		No
5.3	Floodplain Projects by the Commonwealth, a Political Subdivision of the Commonwealth or a Public Utility – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a floodplain?		Yes		No
5.4	Is your project an interstate transmission natural gas pipeline?		Yes		No

5.5	Does your project consist of linear construction activities which result in earth disturbance in two or more DEP regions AND three or more counties?	Yes		No
5.6	Does your project utilize Floodplain Restoration as a best management practice for Post Construction Stormwater Management?	Yes		No
5.7	Does your project utilize Class V Gravity / Injection Wells as a best management practice for Post Construction Stormwater Management?	Yes		No
6.0	Will the project involve discharge of construction related stormwater to a dry swale, surface water, ground water or separate storm water system?	Yes		No
6.1	Will the project involve discharge of industrial waste stormwater or wastewater from an industrial activity or sewage to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system?	Yes		No
7.0	Will the project involve the construction and operation of industrial waste treatment facilities?	Yes	\boxtimes	No
8.0	 Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations? If "Yes", indicate estimated proposed flow (gal/day). Also, discuss the sanitary sewer pipe sizes and the number of pumping stations/treatment facilities/name of downstream sewage facilities in the <i>Project Description</i>, where applicable. 8.0.1 Estimated Proposed Flow (gal/day) 	Yes		No
9.0	Will the project involve the subdivision of land, or the generation of 800 gpd or more of sewage on an existing parcel of land or the generation of an additional 400 gpd of sewage on an already- developed parcel, or the generation of 800 gpd or more of industrial wastewater that would be discharged to an existing sanitary sewer system?	Yes		No
	9.0.1 Was Act 537 sewage facilities planning submitted and approved by DEP? If "Yes" attach the approval letter. Approval required prior to 105/NPDES approval.	Yes		No
10.0	Is this project for the beneficial use of biosolids for land application within Pennsylvania? If "Yes" indicate how much (i.e. gallons or dry tons per year). 10.0.1 Gallons Per Year (residential septage) 10.0.2 Dry Tons Per Year (biosolids)	Yes		No
11.0	Does the project involve construction, modification or removal of a dam? If "Yes", identify the dam. 11.0.1 Dam Name	Yes		No
12.0	Will the project interfere with the flow from, or otherwise impact, adam? If "Yes", identify the dam.12.0.1Dam Name	Yes		No
13.0	Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)?	Yes		No
	13.0.1 If "Yes", is the operation subject to the agricultural exemption in 35 P.S. § 4004.1?	Yes		No
	 13.0.2 If the answer to 13.0.1 is "No", identify each type of emission followed by the estimated amount of that emission. Enter all types & amounts of See Plan Approval application emissions; separate each set with semicolons. 			

14.0	Does the project include the construction or modification of a drinking water supply to serve 15 or more connections or 25 or more people, at least 60 days out of the year? If "Yes", check all proposed sub-facilities. 14.0.1 Number of Persons Served		Yes		No
	14.0.2 Number of Employee/Guests				
	14.0.3 Number of Connections				
	14.0.4 Sub-Fac: Distribution System		Yes		No
	14.0.5 Sub-Fac: Water Treatment Plant		Yes		No
	14.0.6 Sub-Fac: Source		Yes		No
	14.0.7 Sub-Fac: Pump Station		Yes		No
	14.0.8 Sub Fac: Transmission Main		Yes		No
	14.0.9 Sub-Fac: Storage Facility		Yes		No
15.0	Will your project include infiltration of storm water or waste water to ground water within one-half mile of a public water supply well,		Yes	\boxtimes	No
	spring or infiltration gallery?				
16.0	Is your project to be served by an existing public water supply? If	\Box	Yes	\bowtie	No
	"Yes", indicate name of supplier and attach letter from supplier stating				
	that it will serve the project.				
	16.0.1 Supplier's Name		Vaa		No
47.0	16.0.2 Letter of Approval from Supplier is Attached		Yes		NO
17.0	Will this project be served by on-lot drinking water wells?		Yes		No
18.0	will this project involve a new or increased drinking water		res	X	NO
	withdrawal from a river, stream, spring, lake, well or other water				
	bod(les) ? If Yes, reference Sale Drinking water Program.				
	18.0.1 Source Name		Vaa		No
19.0	storage, reuse, or disposal of waste? If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed.		res		NO
	19.0.1 Type & Amount		N		N.L.
20.0	contaminated media, or solid waste as part of any earth disturbance		res		INO
21.0	Does your project involve installation of a field constructed		Yes	\boxtimes	No
	underground storage tank? If "Yes", list each Substance & its				
	Capacity. Note: Applicant may need a Storage Tank Site Specific				
	Installation Permit.				
	21.0.1 Enter all substances &				
	capacity of each; separate				
	each set with semicolons.				
22.0	Does your project involve installation of an aboveground storage		Yes	\boxtimes	No
	tank greater than 21,000 gallons capacity at an existing facility? If				
	"Yes", list each Substance & its Capacity. <u>Note</u> : Applicant may need a				
	Storage Tank Site Specific Installation Permit.				
	22.0.1 Enter all substances &				
	capacity of each; separate				
2 0	each set with semicolons.		Var		No
23.0	1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724? If "Yes", list each Substance & its Capacity. <u>Note</u> : Applicant may need a Storage Tank Site Specific Installation Permit. 23.0.1 Enter all substances &		res	Ø	NU
	capacity of each: separate				
	each set with semicolons.				

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04.0			~~~~~	57	
24.0	Does your project involve installation of a storage tank at a new		Yes	\boxtimes	No
	facility with a total AST capacity greater than 21,000 gallons? If				
	"Yes", list each Substance & its Capacity. Note: Applicant may need a				
	Storage Tank Site Specific Installation Permit.				
	24.0.1 Enter all substances &				
	capacity of each; separate				
	each set with semicolons.				
	NOTE: If the project includes the installation of a regulated storage tank	svstem, ir	ncludina d	liesel e	mergency
	generator systems, the project may require the use of a Department Cen	tified Tanl	Handler	For a	a full list of
	regulated storage tanks and substances, please go to www.dep.pa.gov.s	earch tern	n storage	tanks	
25.0	Will the intended activity involve the use of a radiation source?		Yes	X	No
	CERTIFICATION				
L certi	fy that I have the authority to submit this application on behalf of the	annlican	tnamod	horoin	and that
tho in	formation provided in this application is true and correct to the best of	applican			and that
ILLE ILL	iormation provided in this application is true and correct to the pest of	і шу кноч	vieuge ar	ia inio	rmation.

For applicants supplying an EIN number: I am applying for a permit or authorization from the Pennsylvania Department of Environmental Protection (DEP). As part of this application, I will provide DEP with an accurate EIN number for the applicant entity. By filing this application with DEP, I hereby authorize DEP to confirm the accuracy of the EIN number provided with the Pennsylvania Department of Revenue. As applicant, I further consent to the Department of Revenue discussing the same with DEP prior to issuance of the Commonwealth permit or authorization.

George Downey Type or Print Name 12/22/2021 **Operations Manager** Title

2700-PM-AQ0007 Rev. 7/2004



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR QUALITY

PROCESSES

Application for Plan Approval to Construct, Modify or Reactivate an Air Contamination Source and/or Install an Air Cleaning Device

This application must be submitted with the General Information Form (GIF).

Before completing this form, read the instructions provided for the form.

Section A - Facility Name, Checklist And Certification	t sugar in								
Organization Name or Registered Fictitious Name/Facility Name: <u>Cleveland-Cliffs Steelton LLC</u>									
DEP Client ID# (if known):									
ype of Review required and Fees:									
 Source which is not subject to NSPS, NESHAPs, MACT, NSR and PSD:\$ Source requiring approval under NSPS or NESHAPS or both:\$ Source requiring approval under NSR regulations:\$ Source requiring the establishment of a MACT limitation:\$ Source requiring approval under PSD:\$									
Applicant's Checklist									
Check the following list to make sure that all the required documents are included.									
General Information Form (GIF)									
Processes Plan Approval Application									
Compliance Review Form or provide reference of most recently submitted compliance review form for facilities submitting on a periodic basis:									
🛛 Copy and Proof of County and Municipal Notifications									
⊠ Permit Fees									
Addendum A: Source Applicable Requirements (only applicable to existing Title V facility)									
Certification of Truth, Accuracy and Completeness by a Responsible Official									
George Downey , certify under penalty of law in 18 Pa. C. S. A. §4904, and									
5 P.S. §4009(b) (2) that based on information and belief formed after reasonable inquiry, the statements and information this application are true, accurate and complete.	ation								
A A Jackson									
Signature): <u>The new Your Ney</u> Date: <u>12/22/2021</u>									
lame (Print): <u>George Downey</u> // Title: <u>Operations Manager</u>									
OFFICIAL USE ONLY									
Application No. Unit ID Site ID									
DEP Client ID #: APS. ID AUTH. ID									
Date Received Date Assigned Reviewed By									
Date of 1 st Technical Deficiency Date of 2 nd Technical Deficiency Comments:									
Section B - Processes Information									
--	--	--------------------------	---	-------------------	---------------------------------	--	--	--	
1. Source Inform	nation								
Source Description	(give type, use, raw n	naterials, product	t, etc). Attach additio	nal sheets as	s necessary.				
	produce rails from b	nooms							
Manufacturer TBD		Model N TBD	lo.	Num 1	ber of Sources				
Source Designation URM1	Source DesignationMaximum CapacityRated CapacityURM1150 tons/hour150 tons/hour								
Type of Material Pro Blooms	cessed								
Maximum Operatin	g Schedule								
Hours/Day 24	Days/Wee 7	ek	Days/Year 365		Hours/Year 8,760				
Operational restriction	ons existing or reque	sted, if any (e.g.,	bottlenecks or volunt	ary restrictio	ns to limit PTE)				
Capacity (specify ι	inits)								
Per Hour 150 tons	Per Day		Per Week		Per Year 720,000 tons				
Operating Schedul	e								
Hours/Day Days/Week Days/Year Hours/Year									
Seasonal variations	(Months) From		to						
2. Fuel	0		1	0/ 6 . 1	1				
Туре	Hourly	Annually	Sulfur	% Asn (Weight)	BTU Content				
Oil Number	GPH @ 60°F	X 10 ³ Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F				
Oil Number	GPH @ 60°F	X 10 ³	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F				
Natural Gas	SCFH	X 10 ⁶	grain/100		Btu/SCF				
Gas (other)	SCFH	X 10 ⁶	SCF SCF (106 grain/100 Bł						
Coal	TPH	Tons	% by wt		Btu/lb				
Other *									
<u> </u>									
*Note: Describe and	d furnish information	separately for oth	ner fuels in Addendun	n B.					

Section B - Processes Information (Continued)							
3. Burner							
Manufacturer	Type and I	Model No.			Number of Burners		
Description:							
Rated Capacity		Maximum C	apacity				
4. Process Storage Vessels		1					
A. For Liquids:							
Name of material stored							
Tank I.D. No.	Manufacturer			Date Insta	lled		
Maximum Pressure		Capacity	(gallons/M	leter ³)			
Type of relief device (pressure set vent	conservation vent	/emergency y	ent/open v	(ont)			
Type of teller device (pressure set vent		emergency v	entropen v	entj			
Relief valve/vent set pressure (psig)	Vapor pr	ess. of liqu	id at storage	e temp. (psia/kPa)			
Type of Roof: Describe:							
Total Throughput Per Year		Number	of fills per	day (fill/day)	:		
		Filling Ra	Filling Rate (gal./min.):				
B. For Solids		Duration		1).			
Type: Silo Storage Bin Othe	er, Describe	Name of	Material S	tored			
	1						
Silo/Storage Bin I.D. No.	Manufacturer			Date Insta	lled		
State whether the material will be stored	d in loose or bags	in silos	Capacity	(Tons)			
Turn over per year in tons Turn over per day in tons							
Describe fugitive dust control system fo	r loading and hand	lling operation	ns				
Describe material handling system							
5. Request for Confidentiality							
Do you request any information on this	application to be ti	eated as "Co	nfidential"	?	res 🛛 No		
It yes, include justification for confidentia	ality. Place such i	ntormation or	n separate	pages mark	ed "confidential".		

Section B - Processes Information (Continued)

6. Miscellaneous Information

Attach flow diagram of process giving all (gaseous, liquid and solid) flow rates. Also, list all raw materials charged to process equipment, and the amounts charged (tons/hour, etc.) at rated capacity (give maximum, minimum and average charges describing fully expected variations in production rates). Indicate (on diagram) all points where contaminants are controlled (location of water sprays, collection hoods, or other pickup points, etc.). Describe collection hoods location, design, airflow and capture efficiency. Describe any restriction requested and how it will be monitored. See Plan Approval application. Use of polymer quench for head hardening in the URM operation results in small amount of emissions.

Describe fully the facilities provided to monitor and to record process operating conditions, which may affect the emission of air contaminants. Show that they are reasonable and adequate. See Plan Approval application.

Describe each proposed modification to an existing source.

Identify and describe all fugitive emission points, all relief and emergency valves and any by-pass stacks.

Describe how emissions will be minimized especially during start up, shut down, process upsets and/or disruptions.

Anticipated Milestones:

- i. Expected commencement date of construction/reconstruction/installation:
- ii. Expected completion date of construction/reconstruction/installation:
- iii. Anticipated date of start-up:

Section C - Air Cleaning Device										
1. Precontrol Emissions*										
			Maximum	Emission Rate	I	Calculation/				
	Pollutant	Specify Units	Pounds/Hour	Hours/Year	Tons/Year	Estimation Method				
PM										
PM ₁	0									
SOx										
CO										
NOx										
VOC										
Othe	ers: (e.g., HAPs)									
* Th sc va	* These emissions must be calculated based on the requested operating schedule and/or process rate, e.g., operating schedule for maximum limits or restricted hours of operation and/or restricted throughput. Describe how the emission values were determined. Attach calculations.									
2.	2. Gas Cooling									
Wate	er quenching	Yes 🛛 No	Water injection ra	te	GPM					
Radi	iation and convectic ′es ⊠ No	on cooling		Air dilution	Yes 🛛 No FM					
Ford	ed Draft 🛛 Yes	🛛 No		Water cooled duct wor	k 🗌 Yes 🛛	No				
Othe	er									
Inlet	Volume	ACFM		Outlet Volume	ACFM					
@_	°F	% Moisture		@°F	% Moisture					
Des	cribe the system in o	detail.	I							

Sec	Section C - Air Cleaning Device (Continued)								
3. Settling Chambers									
Manufacturer	Volume of gas handle ACF @°F	d FM	Gas velocity	(ft/sec.)					
Length of chamber (ft.) Width	of chamber (ft.)	Height of chamb	Height of chamber (ft.) Number of						
Water injection Yes No		Water injection rate (GPM)							
Emissions Data	1								
Inlet	Οι	ıtlet	R	emoval Efficiency (%)					
4. Inertial and Cyclone Collectors	\$								
Manufacturer	Туре		Model N	0.					
Pressure drop (in. of water)	Inlet volume@	ACFM Outlet volume		olumeACFM @°F					
Number of individual cyclone(s)		Outlet straightening vanes used?							
Length of Cyclone(s) Cylinder (ft.)	Diameter of Cyclon	Diameter of Cyclone(s) Cylinder (ft.) Length of Cyclone(s) con							
Inlet Diameter (ft.) or duct area (ft. ²) of	cyclone(s)	(s) Outlet Diameter (ft.) or duct area (ft. ²) of cyclone(s)							
If a multi-clone or multi-tube unit is inst	alled, will any of the ind	dividual cyclones o	cyclone tube	es be blanked or blocked off?					
Describe any exhaust gas recirculation loop to be employed.									
Attach particle size efficiency curve	Attach particle size efficiency curve								
Emissions Data									
Inlet	Οι	utlet	R	emoval Efficiency (%)					

Section C - Air Cleaning Device (Continued)									
5. Fabric Collector									
Equipment Specifications									
Manufacturer			Мос	del No.			Pressurized Design Suction Design		
Number of Compartments		Number of Filter	s Per	Compartment	Is Bag	house	Insulated?		
						Yes	∐ No		
Can each compartment be isolated for repairs and/or filter replacement?									
Are temperature controls provided? (Describe in detail)									
Dew point at maximum moist	ure	°F	[Design inlet volume SCFM					
Type of Fabric									
Material		E Felted		🗌 Membra	ine				
Weight	oz/sq.yd	🗌 Wover	n	Others:	List:				
Thickness	in	 Felted-	-Wove	en					
Fabric permeability (clean) @	$\frac{1}{2}$ " water- Δ	Ρ		_CFM/sq.ft.					
Filter dimensions Length _		Diame	eter/V	Vidth					
Effective area per filter			I	Maximum operating	g temper	ature	(°F)		
Effective air to cloth ratio	Minimu	m	_	Maximum		_			
Drawing of Fabric Filter A sketch of the fabric filter and temperature indicator s	showing all should be at	access doors, ca tached.	atwalk	s, ladders and exh	aust duc	ctwork	, location of each pressure		
Operation and Cleaning									
Volume of gases handled		Pressure dro	p acr	oss collector (in. of	water).				
ACFM @	°	_ Describe the	equi	pment to be used to	o monito	r the p	ressure drop.		
Type of filter cleaning									
Manual Cleaning			e			verse	Air Jets		
			ng Flow			ier			
Describe the equipment provi	ded if dry o	il free air is requir	ed for	r collector operation	า				
	-	·							
Cleaning Initiated By									
		Frequency if tim	er ac	tuated	11				
Expected pressure drop	range		in.	of water 0	ther Spe	ecity			
Does air cleaning device emp	oloy hopper	heaters, hopper v	vibrat	ors or hopper level	detector	rs? If y	yes, describe.		
Describe the warning/alarm s	ystem that	protects against c	perat	tion when the unit is	s not me	eting o	design requirements.		
Emissions Data			-						
Pollutant		Inlet		Outlet		Re	emoval Efficiency (%)		

Section C - Air Cleaning Device (Continued)								
6. Wet Collection Equ	ipment							
Equipment Specification	S							
Manufacturer		Туре		Model No).			
Design Inlet Volume (SCF	Design Inlet Volume (SCFM) Relative Particulate/Gas Velocity (ejector scrubbers only)							
Describe the internal feat limiters, etc.).	tures (e.g., var	iable throat, gas	/liquid diffusion plates, s	spray nozz	zles, liquid redistributors, bed			
Describe pH monitoring ar	nd pH adjustme	nt systems, if app	blicable.					
Describe mist eliminator o	r separator (typ	e, configuration,	backflush capability, freq	uency).				
Attach particulate size effic	Attach particulate size efficiency curve.							
Operating Parameters								
Inlet volume of gases handled (ACFM) Outlet volume of gases handled (ACFM)								
	@	°F	@	°F	% Moisture			
Liquid flow rates. Description recirculating solution, make Describe scrubber liquid s etc.)	ribe equipment eup water, blee upply system (a	t provided to me ed flow, etc.) amount of make-	easure liquid flow rates	to scrubł	per (e.g., quenching section,			
State pressure drop range (in water) across scrubber (e.g., venturi throat, packed bed, etc.) only. Describe the equipment provide to measure the pressure drop. Do not include duct or de-mister losses.								
Describe the warning/alarr	Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.							
Emissions Data				<u>_</u>				
Pollutant	I	nlet	Outlet		Removal Efficiency (%)			

Section C - Air Cleaning Device (Continued)									
7. Electrostatic Precip	7. Electrostatic Precipitator								
Equipment Specification	S								
Manufacturer		Model No			U Wet	Dry e-Stage Two-Stage			
Gas distribution grids	Gas distribution grids Yes No Design Inlet Volume (SCFM)								
Maximum operating temperature (°F)									
Total collecting surface area sq. ft. Collector plates size length ft. x width ft.									
Number of fields Number of collector plates/field									
Spacing between collector	plates	inc	ches.						
Maximum gas velocity	1	ft./sec.	Minim	um gas treatment tin	ne:	sec.			
Total discharge electrode Number of discharge elect	length rodes	ft.	Numb	er of collecting electr	ode rappers				
Rapper control Magnetic Pneumatic Other Describe in detail									
Operating Parameters									
Inlet gas temperature (°F) State pressure drop range (inches water gauge) across									
Outlet gas temperature (°F)				collector only					
	Describe the equipment								
Volume of gas handled (A	CFM)			Dust resistivity (ol	hm-cm). Wi	Il resistivity vary?			
Power requirements									
Number and size of Trans	former Rectifier	sets by ele	ctrical f	ield					
Field No.	No. of S	Sets	Ea	ch Transformer KVA	KV Ave.	Each Rectifier /Peak Ma DC			
					-				
Current Density		Corona Po	ower		Corona P	ower Density			
Micro ampe	res/ft ² .		Wa	atts/1000 ACFM		Watts/ft ² .			
Will a flue gas conditioning	g system be em	ployed? If y	/es, des	scribe it.					
Does air cleaning device e	mploy hopper l	heaters, hop	per vib	rators or hopper leve	el detectors?	If yes, describe.			
Describe the warning/alarr	n system that p	protects aga	inst ope	eration when unit is r	ot meeting o	design requirements.			
Emissions Data	_								
Pollutant	I	nlet		Outlet		Removal Efficiency (%)			

	Section C - Air Cleaning Device (Continued)							
8. Adsorption Equipn	nent							
Equipment Specification	S							
Manufacturer	Тур)e		Model No.				
		i						
Design Inlet Volume (SCF	M)	Adsorber	nt charge per adsorber	vessel and number of adsorber vessels				
Length of Mass Transfer Z	Cone (MTZ), supplied	l by the manuf	facturer based upon la	boratory data.				
Adsorber diameter (ft.) and	d area ft².)		Adsorption bed dep	oth (ft.)				
Adsorbent information								
Adsorbent type and physic	cal properties.							
Working capacity of adsorbent (%) Heel percent or unrecoverable solvent weight % in the adsorbent after regeneration.								
Operating Parameters								
Inlet volume of gases han	dled(ACFM) @	°F					
Adsorption time per adsor	ption bed		Breakthrough capao Lbs. of solvent / 100	city: 0 lbs. of adsorbent =				
Vapor pressure of solvents	s at the inlet tempera	ature	Available steam in p applicable)	pounds to regenerate carbon adsorber (if				
Percent relative saturation	of each solvent at th	ne inlet tempe	rature					
Attach any additional data	including auxiliary e	quipment and	operation details to the	oroughly evaluate the control equipment.				
Describe the warning/alarr	n system that protec	ets against ope	eration when unit is not	t meeting design requirements.				
Emissions Data								
Pollutant	Inlet		Outlet	Removal Efficiency (%)				

	Section C - Air Cleaning Device (Continued)							
9. Absorption Equipment								
Equipment Specification	S							
Manufacturer		Туре			Model No	0.		
Design Inlet Volume (SCF	M)		То	Tower height (ft.) and inside diameter (ft.)				
Packing type and size (if a	pplicable)		He	Height of packing (ft.) (if applicable)				
Number of trays (if applica	ble)		Nu	Number of bubble caps (if applicable)				
Configuration	t Г	Cross flow		Cocurrent flor	w			
Describe pH and/or other	monitoring and	controls.						
Absorbent information								
Absorbent type and conce	ntration.		Re	tention time (sec.	.)			
Attach equilibrium data for	absorption (if a	applicable)						
Attach any additional information recirculating, system capa and recirculation.	ormation regar city, etc.) to the	ding auxiliary equ proughly evaluate t	lipmen he con	t, absorption so trol equipment. I	lution sup Indicate th	pply system (once through or le flow rates for makeup, bleed		
Operating Parameters								
Volume of gas handled (A	CFM) Inle	t temperature (°F)		Pressure drop Describe the m	o (in. of nonitoring	water) and liquid flow rate. equipment.		
State operating range for p	oH and/or abso	rbent concentratio	n in sc	ubber liquid.				
Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.								
Emissions Data								
Pollutant		nlet		Outlet		Removal Efficiency (%)		

	Section C - Air Cleaning Device (Continued)								
10. Selective Catalytic Reduction (SCR) Selective Non-Catalytic Reduction (SNCR)									
Non-Selective Catalytic Reduction (NSCR)									
Equipment Specifications									
Manufacturer		Туре		Model No	Ο.				
Design Inlet Volume (SCF	Design Inlet Volume (SCFM) Design operating temperature (°F)								
Is the system equipped w details.	Is the system equipped with process controls for proper mixing/control of the reducing agent in gas stream? If yes, give details.								
Attach efficiency and other pertinent information (e.g., ammonia slip)									
Operating Parameters									
Volume of gases handled		(ACFM) @	°F						
Operating temperature ra	nge for the SCI	R/SNCR/NSCR sy	stem (°F) From		°F To	°F			
Reducing agent used, if ar	ıy		Oxidation catalyst u	used, if any	1				
State expected range of us	sage rate and c	oncentration.							
Service life of catalyst			Ammonia slip (ppm)					
Describe fully with a sketch giving locations of equipment, controls systems, important parameters and method of operation.									
Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.									
Emissions Data	Emissions Data								
Pollutant	I	nlet	Outlet		Removal E	Efficiency (%)			

Section C - Air Cleaning Device (Continued)									
11. Oxidizer/Afterburners									
Equipment Specifications									
Manufacturer		Туре 🗌	The	ermal	Catalytic	Model No.			
Design Inlet Volume (SCFM) Combustion chamber chamber volume, etc.)					dimensions (ength, cross-sectional area, effective			
Describe design features, which will ensure mixing in combustion chamber.									
Describe method of pre applicable).	eheating incon	ning gases ((if	Describ applica	e heat exchar ble).	ger system used for heat recovery (if			
Catalyst used	Life of catalys	atalyst Ex			emperature rise lyst (°F)	Dimensions of bed (in inches). Height: Diameter or Width: Depth:			
Are temperature sensing devices being provided to measure the temperature rise across the catalyst? Yes No If yes, describe.									
Describe any temperature or sketch.	sensing and/o	r recording dev	vice	es (incluc	ling specific loca	ation of temperature probe in a drawing			
Burner Information									
Burner Manufacturer		Model No.				Fuel Used			
Number and capacity of b	urners	Rated capac	city	(each)		Maximum capacity (each)			
Describe the operation of	the burner	1		Attach	dimensioned dia	agram of afterburner			
Operating Parameters			I						
Inlet flow rate (ACFM)		°F		Outlet f	low rate (ACFN	l)°F			
State pressure drop range water).	across catalyti	c bed (in. of		Describ the use	e the method a d catalyst.	dopted for regeneration or disposal of			
Describe the warning/alarr	n system that p	protects agains	st o	peration	when unit is no	t meeting design requirements.			
Emissions Data	Emissions Data								
Pollutant		nlet			Outlet	Removal Efficiency (%)			

Section C - Air Cleaning Device (Continued)										
12. Flares										
Equipment Specifications										
Manufacturer		Type 🗌 Ele	Type Elevated flare Ground flare Model No. Other Describe							
Design Volume (SCFM)		Dimensions of Diameter	Dimensions of stack (ft.) Diameter Height							
Residence time (sec.) and temperature (°F)	l outlet	Turn down ratio)		Burner details					
Describe the flare design (air/steam-assisted or nonassisted), essential auxiliaries including pilot flame monitor of proposed flare with a sketch.										
Describe the operation of the flare's ignition system.										
Describe the provisions to	introduce auxi	liary fuel to the fla	re.							
Operation Parameters										
Detailed composition of th	ne waste gas	Heat content			Exit velocity					
Maximum and average ga	s flow burned	(ACFM)	Operating	temperature	(°F)					
Describe the warning/alarr	m system that	protects against c	peration w	nen unit is not	meeting design requi	rements.				
Emissions Data										
Pollutant		Inlet		Outlet	Removal Ef	ficiency (%)				

Section C - Air Cleaning Device (Continued)								
13. Other Control Equi	pment							
Equipment Specification	S							
Manufacturer		Туре		Model No.				
Design Volume (SCFM) Capacity								
Describe pH monitoring ar	nd pH adjustme	nt, if any.						
Indicate the liquid flow rate	e and describe e	equipment provide	ed to measure pressure	drop and flow rate, if any.				
Attach efficiency curve and	Attach efficiency curve and/or other efficiency information.							
Attach any additional date	Attach any additional date including auxiliary equipment and operation details to thoroughly evaluate the control equipment.							
Operation Parameters								
Volume of gas handled								
AC	CFM @	°F	%	Moisture				
Describe fully giving important parameters and method of operation.								
Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.								
Emissions Data								
Pollutant	I	nlet	Outlet	Removal Efficiency (%)				

Section C - Air Cleaning Device (Continued)

14. Costs

Indicate cost associated with air cleaning device and its operating cost (attach documentation if necessary) NA

Device	Direct Cost	Indirect Cost	Total Cost	Annual Operating Cost

15. Miscellaneous

Describe in detail the removal, handling and disposal of dust, effluent, etc. from the air cleaning device including proposed methods of controlling fugitive emissions.

Attach manufacturer's performance guarantees and/or warranties for each of the major components of the control system (or complete system).

Attach the maintenance schedule for the control equipment and any part of the process equipment that if in disrepair would increase air contaminant emissions.

Section D - Additional Information		
Will the construction, modification, etc. of the sources covered by this application increase the facility? If so, describe and quantify.	se emissions from o	ther sources at
See Plan Approval application.		
If this project is subject to any one of the following, attach a demonstration to show con	npliance with applica	able standards.
a. Prevention of Significant Deterioration permit (PSD), 40 CFR 52?	🛛 YES	
b. New Source Review (NSR), 25 Pa. Code Chapter 127, Subchapter E?	☐ YES	⊠ NO
c. New Source Performance Standards (NSPS), 40 CFR Part 60? (If Yes, which subpart)	🗌 YES	⊠ NO
 d. National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61? (If Yes, which subpart) 	🗌 YES	NO 🛛
e. Maximum Achievable Control Technology (MACT) 40 CFR Part 63? (If Yes, which part)	☐ YES	NO 🛛
Attach a demonstration showing that the emissions from any new sources will be the m of best available technology (BAT).	ninimum attainable t	hrough the use
See Plan Approval application.		
Provide emission increases and decreases in allowable (or potential) and actual emission applicable PSD pollutant(s) if the facility is an existing major facility (PSD purposes).	ons within the last fiv	ve (5) years for
See Plan Approval application.		

Section D - Additional Information (Continued)

Indicate emission increases and decreases in tons per year (tpy), for volatile organic compounds (VOCs) and nitrogen oxides (NOx) for NSR applicability since January 1, 1991 or other applicable dates (see other applicable dates in instructions). The emissions increases include all emissions including stack, fugitive, material transfer, other emission generating activities, quantifiable emissions from exempted source(s), etc.

		Indiaata Vee		VO	C _c	N	0v
		indicate res		VU Emission		IN	
		Of NO II		Emission	One ditable	F	One ditta hala
		emission		increases	Creditable	Emission	
		increases and		in	emission	increases	emission
		decreases		potential	decreases	in	decreases
Permit	-	were used		to emit	in actual	potential	in actual
number	Date	previously for			emissions	to emit	emissions
(if applicable)	issued	netting	Source I. D. or Name	(tpy)	(tpy)	(tpy)	(tpy)
			See Plan Approval				
			Application				

If the source is subject to 25 Pa. Code Chapter 127, Subchapter E, New Source Review requirements,

a. Identify Emission Reduction Credits (ERCs) for emission offsets or demonstrate ability to obtain suitable ERCs for emission offsets. See Plan Approval application.

b. Provide a demonstration that the lowest achievable emission rate (LAER) control techniques will be employed (if applicable). NA

c. Provide an analysis of alternate sites, sizes, production processes and environmental control techniques demonstrating that the benefits of the proposed source outweigh the environmental and social costs (if applicable). NA

Attach calculations and any additional information necessary to thoroughly evaluate compliance with all the applicable requirements of Article III and applicable requirements of the Clean Air Act adopted thereunder The Department may request additional information to evaluate the application such as a standby plan, a plan for air pollution emergencies, air quality modeling, etc. See Plan Approval application.

Section E - Compliance Demonstration						
Note: Complete this section if source is not a Title V facility. Title V facilities must complete Addendum A.						
Method of Compliance Type: Check all that apply and complete all appropriate sections below						
Monitoring Testing Reporting						
Recordkeeping Work Practice Standard						
Monitoring:						
a. Monitoring device type (Parameter, CEM, etc):						
b. Monitoring device location:						
c. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:						
Testing:						
a. Reference Test Method: Citation						
b. Reference Test Method: Description						
Recordkeeping:						
Describe what parameters will be recorded and the recording frequency:						
Reporting:						
a. Describe what is to be reported and frequency of reporting:						
b. Reporting start date:						
Work Practice Standard:						
Describe each:						

Section F - Flue and Air Contaminant Emission									
1. Estimated Atmos	pheric Emissi	ons*							
		Max	imum emis	sion rate				Calculation/	
Pollutant	specify u	nits	lbs/hr		1	tons/yr.	E	stimation Method	
PM									
PM10									
SOx									
СО									
NOx									
VOC				2	2		VOC	content of polymer	r
Others: (e.g., HAPs)			-						
* These emissions mus schedule for maximum	t be calculated limits or restr	d based on icted hours	the requester of operation	ed operat and /or r	ting so restrict	chedule and ted through	d/or proces put. Desci	s rate e.g., operativities how the emission	ting sion
values were determine	d. Attach calc	ulations.							
2. Stack and Exhaus	bor								
		to this stack		of flow	ovhou	ustad to ata			
List Source(s) of source	ID exhausted			% OF HOW	exnat		CK.		
Stack height above grad Grade elevation (ft.)	de (ft.)	Sta	ck diameter	(ft) or Ou	ıtlet dı	uct area (sc	ı. ft.)	f. Weather Cap □ YES □ N	NO
Distance of discharge to	o nearest prope	erty line (ft.).	Locate on	topograpł	hic ma	ap.			
Does stack height meet	Good Enginee	ring Practice	(GEP)?						
If modeling (estimating) and other obstructions.	of ambient air	r quality imp	acts is need	led, attac	h a si	ite plan with	n buildings	and their dimensic	ons
Location of stat	ck** ude		Latitude				Long	tude	
Point of Origi	in	Degrees	Minutes	Second	ds	Degrees	Minutes	Seconds	
Stack exhaust Volume ACF	Stack exhaust Volume ACFM Temperature °F Moisture %								
Indicate on an attached sheet the location of sampling ports with respect to exhaust fan, breeching, etc. Give all necessary dimensions.									
Exhauster (attach fan cu	rves)		in. of	f water			HP @	RPM	Л.
** If the data and collection method codes differ from those provided on the General Information Form-Authorization Application, provide the additional detail required by that form on a separate form.									

Section G - Attachments	
Number and list all attachments submitted with this application below:	



Addendum A: Source Applicable Requirements

Describe and cite all applicable requirements pertaining to this source. <u>Note:</u> A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.

Citation Number	Citation Limitation	Limitation Used
	See Section 4 of the Plan Approval Application	



Addendum 1 Method Of Compliance Worksheet

SEC	SECTION 1. APPLICABLE REQUIREMENT							
Fede	ral Tax Id:	85-4084783-	Firm Name	Cleveland-Cliffs Steelton LLC				
Plant	t Code:		Plant Name	ne: Cleveland-Cliffs Steelton LLC/Steelton				
Appl	Applicable Requirement for: (please check only one box below)							
	A group of s	ources, Group	ID:					
\square	A single sou	ırce, Unit ID:	URM	И1				
	Alternative S	Scenario, Scer	nario Name:					
Citat	ion #:							
Com	pliance Metho	od based upon	:	Applicable Requirement Gap Filling Requirement				
Meth	od of Compli	ance Type: (C	heck all that	at applies and complete all appropriate sections below)				
	Monitorin	g	Testing	ng Reporting				
\boxtimes	Record K	eeping	Work P	Practice Standard				
Section 2: Monitoring								
1. Monitoring device type (stack test, CEM, etc.):								
2. Monitoring device location:								
Desc	Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:							
3. ⊢	low will data	be reported:						

2700-PM-AQ0018 Addendum 1	6/2003		
Section 3:	Testing		
1. Reference	Test Method Description:		
2. Reference	Test Method Citation:		

Section 4: Record Keeping

Describe what parameters will be recorded and the frequency of recording:
Records of polymer use
in the head hardening

system.

Section 5: Reporting

Describe what is to be reported and the frequency of reporting:

1. Reporting start date:

Section 6: Work Practice Standard

Describe any work practice standards:





AIR POLLUTION CONTROL ACT COMPLIANCE REVIEW FORM

Fully and accur	ately provide the following information, as specified. Attach additional sheets as necessary.						
Type of Compl	Type of Compliance Review Form Submittal (check all that apply)						
🛛 Original Fi	Original Filing Date of Last Compliance Review Form Filing:						
Amended	Filing/						
Type of Submi	ttal						
New Plan	Approval I New Operating Permit I Renewal of Operating Permit						
	of Plan Approval Change of Ownership Periodic Submission (@ 6 mos)						
	SECTION A. GENERAL APPLICATION INFORMATION						
Name of Applie (non-corporati Cleveland-Cliffs	cant/Permittee/("applicant") ons-attach documentation of legal name) s Steelton LLC						
Address	215 S Front St						
_	Steelton, PA 17113						
Telephone	(717) 986-2593 Taxpayer ID# 85-4084783-1						
Permit, Plan A	pproval or Application ID#						
Identify the for box) Individual Municipali Proprietors Public Cor Private Co Describe below Steel mini-mill p machinery mark	m of management under which the applicant conducts its business (check appropriate						

SECTION B. GENERAL INFORMATION REGARDING "APPLICANT"

If applicant is a corporation or a division or other unit of a corporation, provide the names, principal places of business, state of incorporation, and taxpayer ID numbers of all domestic and foreign parent corporations (including the ultimate parent corporation), and all domestic and foreign subsidiary corporations of the ultimate parent corporated or unincorporated) and privately held corporations. (A diagram of corporate relationships may be provided to illustrate corporate relationships.) Attach additional sheets as necessary.

Unit Name	Principal Places of Business	State of Incorporation	Taxpayer ID	Relationship to Applicant
Steelton	Steelton		85-4084783-1	Applicant

SECTION C. SPECIFIC INFORMATION REGARDING APPLICANT AND ITS "RELATED PARTIES"

Pennsylvania Facilities. List the name and location (mailing address, municipality, county), telephone number, and relationship to applicant (parent, subsidiary or general partner) of applicant and all Related Parties' places of business, and facilities in Pennsylvania. Attach additional sheets as necessary.

Unit Name	Street Addr	ress	County and Municipality	Telephone No.	Relationship to Applicant	
Cleveland-Cliffs Steelton LLC	200 Public Square, Cleveland, OH 44114		Cuyahoga County and Cleveland	(216) 694- 5700	Parent	
Provide the names subsidiary corporat	and business add ions, if any.	resses of a	ll general partners o	f the applicant	and parent and	
Nai	me	Business Address				
NA						

Name		Business Address				
George Downey	2	215 S Front St, Steelton, F	PA			
Plan Approvals or)epartment or an a parties that are curr	Operating Permits. pproved local air pollu rently in effect or have	List all plan approva ution control agency un been in effect at any tir	ls or operating pern der the APCA to the a ne 5 years prior to the	nits issued by th applicant or relate date on which th		
Plan Approvals or Department or an a parties that are curr form is notarized. ssuance and expira	Operating Permits. pproved local air pollu rently in effect or have This list shall includ ation dates. Attach add	List all plan approva ition control agency un been in effect at any tir e the plan approval an ditional sheets as neces	Is or operating pern der the APCA to the a ne 5 years prior to the od operating permit n ssary.	nits issued by the applicant or relate date on which the numbers, location		
Plan Approvals or Department or an a parties that are curr form is notarized. ssuance and expira Air Contamination Source	Operating Permits. pproved local air pollu- rently in effect or have This list shall includ- ation dates. Attach ado Plan Approval/ Operating Permit#	List all plan approva ution control agency un been in effect at any tir e the plan approval an ditional sheets as neces Location	Is or operating pern der the APCA to the a ne 5 years prior to the id operating permit n sary. Issuance Date	hits issued by the applicant or relate date on which the numbers, location Expiration Date		
Plan Approvals or Department or an a parties that are curr form is notarized. ssuance and expirat Air Contamination Source Multiple	Operating Permits. pproved local air pollu- rently in effect or have This list shall includ- ation dates. Attach add Plan Approval/ Operating Permit# Title V 22-05012	List all plan approva ution control agency un been in effect at any tir e the plan approval an ditional sheets as neces <u>Location</u> Steelton, PA	Is or operating perm der the APCA to the a ne 5 years prior to the operating permit n sary. Issuance Date 11/20/2017	hits issued by the applicant or related ate on which the numbers, location Expiration Date 11/30/2022		
Plan Approvals or Department or an a parties that are curr orm is notarized. ssuance and expira Air Contamination Source	Operating Permits. pproved local air pollu- rently in effect or have This list shall includ- ation dates. Attach add Plan Approval/ Operating Permit# Title V 22-05012	List all plan approva ution control agency un been in effect at any tir e the plan approval an ditional sheets as neces <u>Location</u> Steelton, PA	Is or operating pern der the APCA to the a ne 5 years prior to the id operating permit n sary. Issuance Date 11/20/2017	hits issued by the applicant or related edate on which the numbers, location Expiration Date 11/30/2022		
Plan Approvals or Department or an a parties that are curr orm is notarized. ssuance and expira Air Contamination Source Multiple	Operating Permits. pproved local air pollu- rently in effect or have This list shall includ- ation dates. Attach add Plan Approval/ Operating Permit# Title V 22-05012	List all plan approva ution control agency un been in effect at any tir e the plan approval an ditional sheets as neces Location Steelton, PA	Is or operating perm der the APCA to the a ne 5 years prior to the operating permit n sary. Issuance Date 11/20/2017	hits issued by the applicant or related ate on which the numbers, location Expiration Date 11/30/2022		
Plan Approvals or Department or an a parties that are curr orm is notarized. ssuance and expira Air Contamination Source	Operating Permits. pproved local air pollu- rently in effect or have This list shall includ- ation dates. Attach add Plan Approval/ Operating Permit# Title V 22-05012	List all plan approva ution control agency un been in effect at any tir e the plan approval an ditional sheets as neces Location Steelton, PA	Is or operating perm der the APCA to the a ne 5 years prior to the od operating permit n sary. Issuance Date 11/20/2017	nits issued by the applicant or related edate on which the numbers, location Expiration Date 11/30/2022		
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Plan Approvals or Department or an a parties that are curr form is notarized. ssuance and expira Air Contamination Source Multiple	Operating Permits. pproved local air pollu- rently in effect or have This list shall includ- ation dates. Attach add Plan Approval/ Operating Permit# Title V 22-05012	List all plan approva ution control agency un been in effect at any tir e the plan approval an ditional sheets as neces Location Steelton, PA	Is or operating perm der the APCA to the a ne 5 years prior to the operating permit n sary. Issuance Date 11/20/2017	nits issued by the applicant or related edate on which the numbers, location Expiration Date 11/30/2022		
Plan Approvals or Department or an a parties that are curr form is notarized. ssuance and expira Air Contamination Source Multiple	Operating Permits. pproved local air pollu- rently in effect or have This list shall includ- ation dates. Attach add Plan Approval/ Operating Permit# Title V 22-05012	List all plan approva ution control agency un been in effect at any tir e the plan approval an ditional sheets as neces Location Steelton, PA	Is or operating pern der the APCA to the a ne 5 years prior to the id operating permit n issary. Issuance Date 11/20/2017	nits issued by the applicant or related ate on which the numbers, location Expiration Date 11/30/2022		
Plan Approvals or Department or an a parties that are curr form is notarized. issuance and expira Air Contamination Source Multiple	Operating Permits. pproved local air pollu- rently in effect or have This list shall includ- ation dates. Attach add Plan Approval/ Operating Permit# Title V 22-05012	List all plan approva Ition control agency un been in effect at any tir e the plan approval an ditional sheets as neces Location Steelton, PA	Is or operating perm der the APCA to the a ne 5 years prior to the id operating permit n sary. Issuance Date 11/20/2017	nits issued by the applicant or related ate on which the numbers, location Expiration Date 11/30/2022		
Plan Approvals or Department or an a parties that are curr form is notarized. issuance and expira Air Contamination Source Multiple	Operating Permits. pproved local air pollu- rently in effect or have This list shall includ- ation dates. Attach add Plan Approval/ Operating Permit# Title V 22-05012	List all plan approva ution control agency un been in effect at any tir e the plan approval an ditional sheets as neces Location Steelton, PA	Is or operating perm der the APCA to the a ne 5 years prior to the id operating permit n isary. Issuance Date 11/20/2017	hits issued by the applicant or related edate on which the numbers, location Expiration Date 11/30/2022		

Compliance Background. (Note: Copies of specific documents, if applicable, must be made available to the Department upon its request.) List all documented conduct of violations or enforcement actions identified by the Department pursuant to the APCA, regulations, terms and conditions of an operating permit or plan approval or order by applicant or any related party, using the following format grouped by source and location in reverse chronological order. Attach additional sheets as necessary. See the definition of "documented conduct" for further clarification. Unless specifically directed by the Department, deviations which have been previously reported to the Department in writing, relating to monitoring and reporting, need not be reported.

Date	Location	Plan Approval/ Operating Permit#	Nature of Documented Conduct	Type of Department Action	Status: Litigation Existing/Continuing or Corrected/Date	Dollar Amount Penalty
11/30/21	Steelton	22-05012	CEMS report corrected and resubmitted as requested	Inspection	Corrected/11/19/21	\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$

List all incidents of deviations of the APCA, regulations, terms and conditions of an operating permit or plan approval or order by applicant or any related party, using the following format grouped by source and location in reverse chronological order. This list must include items both currently known and unknown to the Department. Attach additional sheets as necessary. See the definition of "deviations" for further clarification.

Date	Location	Plan Approval/ Operating Permit#	Nature of Deviation	Incident Status: Litigation Existing/Continuing Or Corrected/Date
CONTINUING		la		

<u>CONTINUING OBLIGATION</u>. Applicant is under a continuing obligation to update this form using the Compliance Review Supplemental Form if any additional deviations occur between the date of submission and Department action on the application.

VERIFICATION STATEMENT

Subject to the penalties of Title 18 Pa.C.S. Section 4904 and 35 P.S. Section 4009(b)(2), I verify under penalty of law that I am authorized to make this verification on behalf of the Applicant/Permittee. I further verify that the information contained in this Compliance Review Form is true and complete to the best of my belief formed after reasonable inquiry. I further verify that reasonable procedures are in place to ensure that "documented conduct" and "deviations" as defined in 25 Pa Code Section 121.1 are identified and included in the information set forth in this Compliance Review Form.

) 00000 Signature eoral

122/2021 Date

George Downey

Name (Print or Type)

Operations Manager

Title



The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "ARCELORMITTAL STEELTON LLC", CHANGING ITS NAME FROM "ARCELORMITTAL STEELTON LLC" TO "CLEVELAND-CLIFFS STEELTON LLC", FILED IN THIS OFFICE ON THE TWENTY-THIRD DAY OF DECEMBER, A.D. 2020, AT 1:34 O`CLOCK P.M.



3644073 8100 SR# 20208745860

Jeffrey W. Bullock, Secretary of State

Authentication: 202201544 Date: 01-02-21

Page 1

You may verify this certificate online at corp.delaware.gov/authver.shtml

CERTIFICATE OF AMENDMENT OF CERTIFICATE OF FORMATION

ArcelorMittal Steelton LLC (the "<u>Company</u>"), a limited liability company organized and existing under the Delaware Limited Liability Company Act, as amended, DOES HEREBY CERTIFY:

<u>FIRST:</u> That the members of the management board of the Company, by the unanimous written consent of its members, adopted resolutions proposing and declaring advisable the following amendment to the Certificate of Formation of the Company.

RESOLVED, that the Company's Certificate of Formation be amended so that Article FIRST thereof shall read in its entirety as follows:

FIRST: The name of the Company is:

Cleveland-Cliffs Steelton LLC

<u>SECOND</u>: That in lieu of a meeting, the sole member has given its written consent to said amendment in accordance with the provisions of the Delaware Limited Liability Company Act.

THIRD: That the aforesaid amendment was duly adopted in accordance with the applicable provisions of the Delaware Limited Liability Company Act.

IN WITNESS WHEREOF, the Company has caused this Certificate of Amendment to be executed by its duly authorized officer this 23rd day of December, 2020.

ARCELORMITTAL STEELTON LLC

Turk Bv:

Paul M. Liebenson Assistant Secretary

State of Delaware Secretary of State Division of Corporations Delivered 01:34 PM 12/23/2020 FILED 01:34 PM 12/23/2020 SR 20208745860 - File Number 3644073



Emission Reduction Credit (ERC) Registry Application

- This ERC Registry Application may be used by a major or non-major facility.
- ERCs may be created only if the ERC Registry Application is filed within one year of actual emission reductions.
- Read instructions for the ERC Registry Application prior to completing this form.

Section 1 - Identity and Location of Air Contamination Source

1A. Facility/Corporation Information

Facility Name:	Facility Address:
Cleveland Cliffs Steelton LLC	215 S Front St, Steelton, PA 17113
Telephone Number: (717) 986-2454	Fax Number: (717)986-2240
1B. Facility Operation	ator Information
(Complete if operator is c	lifferent from company)
Operator's Name: Same	Company Address:
Federal ID Number:	
Telephone Number:	Fax Number:
1C. Plant/Facili	ty Information
Plant Name: Cleveland Cliffs Steelton LLC/Steelton	Plant Address:
Federal ID Number: 85-4084783-1	215 S Front St, Steelton, PA 17113
Telephone Number: (717) 986-2454	Fax Number: (717)986-2240
Municipality/Township: Steelton Borough	County: Dauphin
1D. Facil	ity Type
X Major Facility Non-Major Facility	Permit No. (Title V/RACT/Synthetic Minor): 22-05012
1E. Contact Person	for this Application
Name: Rav Aialli	Mailing Address:
Title: Manager Engling and all	139 Modena Road, Coatesville, PA 19320
Telephone Number:	Fax Number:
(610) 383-2097	
1F. Certificati	on Statement
I,, certify under penalty	of law as provided in 18 Pa. C.S.A. § 4904 and 35 P.S.
§ 4009(b)(2)) that I am authorized to make this Certification on be	ehalf of the facility identified in this application and based on

§ 4009(b)(2)) that I am authorized to make this Certification on behalf of the facility identified in this application and based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate and complete. I further certify that the emission reductions will be maintained as set forth in this application and that the emission reductions were not previously used in netting transactions, alternative emissions limitations, acid rain allowances or to generate other emission reduction credits.

General Manager

Section 2 - ERC-Generating Source Information

2A. Type of Source: 35" Mill Reheat Furnaces 3 & 4	 2B. Plan Approval\Permit Number: <u>22-05012C</u> Note: A permit is required for any source that is continuing to operate
2C. Manufacturer of Source: NA	2D. Model Number: NA
2E. Date of Installation of the Source:	2F. Air Cleaning Device NA
2G. Source ID/Designation 301	2H. Hourly Rated Capacity
2I. Annual Throughput:	2J. Other Information:

Provide the following information for the ERC-generating source

Section 3 - ERC Generation Techniques

Check appropriate box(es) to identify applicable ERC-generating technique(s)

- \mathbf{X} Shutdown of a source at an existing facility
- Shutdown of an existing facility
- Permanent curtailment of production or operation hours
- Improved control measures including improved control of fugitive emissions
- Installation of an air pollution control devise beyond regulatory requirements
- Use of lower volatile organic compound (VOC) coatings than required
- New technology and/or materials (not required by applicable law)
- Process equipment modifications (not required by applicable law)
- Incidental emissions reduction of nonhazardous air pollutants
- Economic Incentive Program
- Other:

Section 4 - Intended use of ERCs

Check appropriate box(es) to specify intended use of ERCs

X Netting/Offsetting

Banking/Trading/Selling Purposes

Section 5 – Emissions Reduction Initiation Date

Section 6 - Baseline Emission Rate Summary

Baseline emission rate (expressed in lbs/hr or tons/yr) is based on the lower of actual or allowable emissions calculated over two (2) calendar years immediately preceding the reduction unless otherwise approved by the Department.

Calendar	Hours of	VO	С	NO	X	Other	
Year	Operation	lbs/hr	TPY	lbs/hr	TPY	lbs/hr	TPY
2019			0.53		96.54		
2020			0.43		78.83		
Average:			0.51		87.68		
Average Actu corrected with SIP limitation *RACT/MACT/L	al Emissions applicable as * AER/BACT, etc.		0.51		87.68		
Revised Allow Emissions aft reductions:	vable er emission		0		0		
Available ER	Cs:		0.51		87.68		
Emission rates after reduction:							
VOC:		Lbs/Hour		Tons/Year			
NOx: _ Other: _		Lbs/Hour Lbs/Hour		Tons/Year Tons/Year			

Do the above baseline emission estimates agree with emission statements submitted for PEDS/AIMS and any fees that have been paid, if applicable?

Yes I No If "No", submit request to amend emissions inventory along with this application.

Is the facility subject to any proposed maximum achievable control technology standards for hazardous air pollutants (MACT)? If yes, specify federal citation including Subpart.

Yes Subpart: ____

X No

Section 7 - Emission Quantification Methods

Check appropriate box(es) for method(s) used to determine the baseline emission rate. Attach copies of source tests, summaries of records, measurements or calculation methods used to estimate the baseline emissions.

	Performance test data on same	unit			
	Performance test data on similar unit				
	Continuous emission monitori	ng data			
	Equipment vendor emission d	ata and guarantees			
Χ	Emission factors from technica	l reference or article			
	AP-42 Emission Factors	Table Number:			
	EPA Test Data Document	Document Number:			
	Other:				

Section 8 - Emission Characteristics

(a) Hours of Operation:	(b) Hourly Rate (specify unit):				
(c) Stack Height (from ground level):	(d) Stack Inside Diameter:				
(e) Exhaust Volume:	(f) Exhaust Temperature:				
(g) Seasonal Period (months) Operated: to					
Is the affected source in compliance with all applicable requirements?					
X Yes In No If "No", attach a list of the violation(s), date(s) and location(s) specified in the Notice of Violation.					

Provide the following information to determine the ambient impact of the emissions reduction

List all attachments provided to evaluate this ERC Registry Application.

Emissions Calculations in Appendix B

OFFICIAL USE ONLY				
Regional Office:	Date Received:			
Reviewed By:	Date Reviewed:			
Plan Approval Number:	Date Submitted:			
Previous Netting Transaction Date and Plan Approv	val Number:			
Comments:				
Central Office NSR Section:				
Reviewed By:	Entry Date:			
Comments:				

Appendix B – Emissions Calculations

Company:		Cleveland-Clif	fs Steelton LLC
Facility:		Steelton, PA	
Project		Steelton Mod	ernization Project
Date:		12/21/2021	

1. Pre-Project Record (40 CFR § 52.21 (r)(6), 25 Pa.Code § 127.203a (a)(1))

(A) Description of the Project

The steel mill at Steelton, Pennsylvania was the first plant in the United States to produce steel for railroad rails. Cleveland-Cliffs is proposing a project to install a Universal Rail Mill for rolling rail products. The state-of-the art Universal Rail Mill process will modernize the product finishing process and reduce cost. This will enable the quality of the rail product to meet the customer demand.

(B) Identification of Affected Emission Units

Existing Affected Emission Units: Steelmaking; WBF New Affected Emissions Units: Universal Rail Mill

(C) Description of Applicability Test

Applicability Test:

Hybrid Test - Consisting of Actual-to-Projected-Actual Emissions (ATPA) for existing units and PTE for new units

(i) Baseline Actual Emissions (BAE) (40 CFR § 52.21 (b)(48,), 25 Pa.Code § 127.20	13a (a)(4))	
BAE Time Period:	Jan-2017	to	Dec-2018
BAE Production Rate	295,215	tons per year	

Plan Approval Application Submittal Date 5 Year Lookback Period

Jan-2022 Plan Approval application date determines the 5 year lookback period date for the project.

Dec-2021

Jan-2017	to	

Baseline Actual Emissions (tons/year)							
Emissions Unit	PM10	PM2.5	SO2	NOx	VOC	CO	CO2e
DCEAF Furnace	3.49	2.59	10.19	11.98	7.15	168.67	33,670
Ladle Refining Furnace							
Meltshop Fugitives	0.77	0.77	0.00	0.00	0.00	0.00	0
VDG @ Steelmaking	0.00	0.00	0.00	0.00	0.00	14.09	0
Walking Beam Furnace	2.01	2.01	0.16	22.06	0.29	1.93	31,626
EAF Ladle Preheaters #1-#4	0.17	0.17	0.01	2.26	0.12	1.90	2,698
Burn Off Oven	0.00	0.00	0.00	0.01	0.00	0.01	14
Caster Tundish Preheaters & Dryer	0.08	0.08	0.01	1.42	0.03	0.85	1,215
Caster Cutting Torches #1-#6	0.01	0.01	0.00	0.12	0.01	0.10	146
Caster Vents	0.00	0.00	0.00	0.00	4.21	0.00	0
Scrap Prep	0.33	0.33	0.00	0.00	0.00	0.00	0
Scrap Prep	0.03	0.03	0.00	0.52	0.02	0.31	442
Road Dust Emissions	4.23	0.42	0.00	0.00	0.00	0.00	0

(ii) (a) Potential to Emit (PTE) (40 CFR § 52.21 (b)(4), 25 Pa.Code § 121.1)

	Potential To Emit (tons/year)					
Emissions Unit					VOC	
Universal Rail Mill					2.00	

(ii) (b) Projected Actual Emissions (PAE) (40 CFR § 52.21 (b)(41), 40 CFR 51 App S.II.A.24, 25 Pa.Code § 127.203a (a)(5))

Future Production Rate for affected emissions units:

768,000 tons of steel/year Steelmaking - Maximum production rate in the five year period after the implementation of the Project. Monitoring for five year period is required because the project will not increase the design capacity of the unit. Jan-2024 Projected Project Completion Date Dec-2028 5 Year Period Period for projection: Jan-2024 to

Projected Actual Emissions (tons/year)							
Emissions Unit	PM10	PM2.5	SO2	NOx	VOC	CO	CO2e
DCEAF Furnace	9.08	6.73	26.51	31.16	18.59	438.79	87,593
Ladle Refining Furnace							
Meltshop Fugitives	2.01	2.01	0.00	0.00	0.00	0.00	0
VDG @ Steelmaking	0.00	0.00	0.00	0.00	0.00	38.40	0
Walking Beam Furnace	4.44	4.44	0.35	48.65	0.64	49.06	69,754
EAF Ladle Preheaters #1-#4	0.45	0.45	0.04	5.88	0.32	4.94	7,020
Burn Off Oven	0.00	0.00	0.00	0.03	0.00	0.03	37
Caster Tundish Preheaters & Dryer	0.20	0.20	0.02	3.70	0.07	2.22	3,160
Caster Cutting Torches #1-#6	0.02	0.02	0.00	0.32	0.02	0.27	381
Caster Vents	0.00	0.00	0.00	0.00	11.90	0.00	0
Scrap Prep	0.87	0.87	0.00	0.00	0.00	0.00	0
Scrap Prep	0.07	0.07	0.01	1.35	0.05	0.81	1,150
Road Dust Emissions	11.01	1.10	0.00	0.00	0.00	0.00	0

(iii) Excludable Emissions (EE) (40 CFR § 52.21 (b)(41)(ii)(c), 25 Pa.Code § 127.203a (a)(5)(i)(C))

Excludable Emissions unrelated to the project

Steelmaking Historical Performance							
Maximum production that is unrelated to the project:	494,054 tons/year						
Based on annualized production rate from maximum monthly performance during Feb-2017.							
Additional Production Unit Could have Accommodated:	198,838 tons/year						
Period of Jan-2017 - Dec-2018 - 24 Month BAE period.							
	Excludable Emissi	ons (tons/year)					
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Pollutant	PM10	PM2.5	SO2	NOx	VOC	СО	CO2e
DCEAF Furnace	2.35	1.74	6.86	8.07	4.81	113.60	22,678
Ladle Refining Furnace							
Meltshop Fugitives	0.52	0.52	0.00	0.00	0.00	0.00	0
VDG @ Steelmaking	0.00	0.00	0.00	0.00	0.00	9.94	0
Walking Beam Furnace	0.47	0.47	0.04	5.13	0.07	5.17	7,354
EAF Ladle Preheaters #1-#4	0.12	0.12	0.01	1.52	0.08	1.28	1,817
Burn Off Oven	0.00	0.00	0.00	0.01	0.00	0.01	10
Caster Tundish Preheaters & Dryer	0.05	0.05	0.00	0.96	0.02	0.58	818
Caster Cutting Torches #1-#6	0.01	0.01	0.00	0.08	0.00	0.07	99
Caster Vents	0.00	0.00	0.00	0.00	3.08	0.00	0
Scrap Prep	0.22	0.22	0.00	0.00	0.00	0.00	0
Scrap Prep	0.02	0.02	0.00	0.35	0.01	0.21	298
Road Dust Emissions	3.93	0.39	0.00	0.00	0.00	0.00	0

Explanation of excludable emissions:

Cleveland-Cliffs analyzed the historical performance for the Meltshop emissions units. This analysis was carried out by reviewing monthly production rates in the time period prior to the proposed date construction is expected to start on the WBF project. Production rate in Feb 2017 represented the peak amount of steel produced in the five-year period preceding the proposed project. At the time, in response to market demand, the Meltshop was operated unconstrained close to its peak capability to ship blooms offsite. In the selected BAE, Cleveland-Cliffs **could have achieved this level of production rate on annual basis because there were no changes made to the units in that timeframe**. Also, this additional amount of steel production rate in the BAE period is unrelated to the proposed project and is only due to market drivers, since the unit achieved the peak production rate for an entire month. Therefore, emission related to this portion are unrelated to the proposed change and unit could have accommodate the same.

(iv) Project Emissions Increase (PEI) = PTE + (PAE - BAE - EE) (Step 1)

Consistent with 25 Pa.Code §127.203a (a)(1)(i)(A) for project affected existing emissions unit only increases in NOx and VOC emissions are included in this step. i.e. no decreases are included here.

	Project Emissions	Increase (PEI) (to	ns/year)				
Pollutant	PM10*	PM2.5	SO2	NOx	VOC	CO	CO2e*
Universal Rail Mill					2.00		
DCEAF Furnace	3.24	2.40	9.45	11.12	6.63	156.52	31,245
Ladle Refining Furnace	0.00	0.00	0.00	0.00	0.00	0.00	0
Meltshop Fugitives	0.72	0.72	0.00	0.00	0.00	0.00	0
VDG @ Steelmaking	0.00	0.00	0.00	0.00	0.00	14.37	0
Walking Beam Furnace	1.96	1.96	0.15	21.46	0.28	41.95	30,774
EAF Ladle Preheaters #1-#4	0.16	0.16	0.01	2.10	0.12	1.76	2,504
Burn Off Oven	0.00	0.00	0.00	0.01	0.00	0.01	13
Caster Tundish Preheaters & Dryer	0.07	0.07	0.01	1.32	0.03	0.79	1,127
Caster Cutting Torches #1-#6	0.01	0.01	0.00	0.11	0.01	0.10	136
Caster Vents	0.00	0.00	0.00	0.00	4.61	0.00	0
Scrap Prep	0.31	0.31	0.00	0.00	0.00	0.00	0
Scrap Prep	0.03	0.03	0.00	0.48	0.02	0.29	410
Road Dust Emissions	2.85	0.29	0.00	0.00	0.00	0.00	0
Total	9.34	5.94	9.63	36.60	13.70	215.78	66,209
PSD/NNSR Significant Rate	15	10	40	40	40	100	75,000
Whether Significant?	No	No	No	No	No	Yes	No
*PM analysis is not included here since PM10 represents	more conservative ca	alculation of emissi	ons increase.				
** co2a and substitute for data maining such at her CUCa such in a	A A A A A A A A A A A A A A A A A A A						

(v) Net Emissions Increase (NEI) (Step 2)

Since NOx and VOC emissions increases are below the significant rate, net emissions increase calculations consistent with 25 Pa.Code § 127.203a (a)(1)(ii) are not required.

(vi) De minimis Analysis (Step 3)

Consistent with 25 Pa.Code § 127.203a (a)(2)(ii) for NOx and VOC emissions, a de minimis emissions increase calculation is provided below. Ten year contemporaneous period -> Jan-12 up to Dec-21

Net Emissions Increase (NEI) (tons/year)		
	NOx	VOC
URL Project	36.6	0 13.70
Creditable Increases		
WBF Project (2015)	58.4	41 6.54
Creditable Decreases		
Curtailment of soaking pit batteries*	-43.3	-1.51
Shutdown of 35" Mill Reheat Furnaces #3 & #4 (Planned)	-87.6	-0.51
		_
Total	(25.0	0) 19.22

* NOx and VOC emissions decreases for soaking pit batteries for Jan 2013-Dec 2014 period from the 2016 application for the WBF Project.

Conclusion:

Based on the above analysis, the proposed project will be a major modification for PSD for CO only and a minor modification for Non-attainment NSR requirements.

Cleveland-Cliffs Steelton LLC Calculation of Emissions from the Universal Rail Mill

URM Operation

Polymer/Water mixture application rate Polymer concentration VOC content of polymer Projected rail production rate

Polymer/water mixture application Polymer usage VOC emissions 1.7 lb/ton of rail produced
20% by weight
88.4 ppm (ALS - method 8260B)
720,000 tons of rail/year
1,224,000 lb/year

244,800 lb/year 2.00 ton/year (rounded up)

Cleveland-Cliffs Steelton LLC Steelmaking Operations Calculation of Annual Change in Production/Throughput Rate

		Annual	Baseline	Additional	Projected		
		Production/	Actual	Accommodated	Production		
Emission	Emission	Throughput	Production	Production			
Unit	Location	Change		Ozone		Units	Comments
	DCEAF Furnace	273,946	295,215	198,838	768,000	molten steel	
	Ladle Refining Furnace		267,004	198,838	768,000	molten steel	
	Ingot Teeming (unaffected)				48,000		Assumed ingot teeming rate
	VDG Ingot Teeming (steam degassing) (unaffected)				48,000		Same as ingot teeming rate
	35" Reheat Furnace		175,807			MCF NG	35 Reheat Furnaces to be shutdown. Baseline based on 2019 & 2020 data.
Steelmaking	No.1 Walking Beam Furnace		529,558	123,143	1,168,000	MCF NG	Permit limit or based on historical heat rate
Operations	Hot Bloom Rolling Operation						
	Hot Rail/Bar Rolling Operation						
	VDG @ Steelmaking (tank degassing)	287,324	281,837	198,838	768,000	molten steel	No change in steel production
	Caster Vents	240,590	271,571	207,839	720,000	steel	No Change in steel capacity
	RR Car Ingot Heaters					MCF NG	No Increase
	Rail Stenciling					gallons	No Increase
	Compressed Air Systems					gallons	No Increase
	Road Dust Emissions	273,946	295,215	198,838	768,000	molten steel	

24-Month Baseline Throughput (tons/yr) for all regulated NSR pollutants		295,215 Period from Jan-2017 to Dec-2018
For the existing emissions units, peak monthly rate achieved during	Feb-2017	is used as what the existing unit could accommodate and is also unrelated to the project.
1-Month Peak Throughput (tons/yr)		494,054 Based on Feb-2017 performance of Steelmaking
Adjustment factor for excludable production for Ozone OTR:		0.402
Annual rail production after modernization (tons/year)		720,000 Based on the information from Steelton project documents as 60,000 tons/month of molten steel

Cleveland-Cliffs Steelton LLC Emission Factors

LINSSION FACE

Baseline

	Emission Location	PM10 EF	PM2.5 EF	SO2 EF	NOx EF	VOC EF	CO EF	CO2e EF	Units	Source of Emission Factor
501A	DCEAF Furnace	0.024	0.018	0.069	0.081	0.048	1.14	228.11	lb/ton	Calculated from the stack test or CEMS based
501B	Ladle Refining Furnace									emission rate reported in 2018 AIMS.
										collected shows stack emissions of 5.43 TPY and
	Meltshop Fugitives	0.005	0.005						lb/ton	fugitive emissions of 1.2 TPY. Thus assume
500							0.100			fugitive emissions as 22% of stack.
500	VDG @ Steelmaking	7.6	7.6				0.100			From 2018 AIMS
311	Walking Beam Furnace	7.6	7.6	0.6	83.3	1.1	7.3	119,442	Ib/MMcf	From 2018 AIMS
109	EAF Ladle Preheaters #1-#4	7.6	7.6	0.6	100	5.5	84	119,442	Ib/MMct	From 2018 AIMS
113	Burn Off Oven	7.6	7.6	0.6	100	5.5	84	119,442	ID/IVIIVICT	From 2018 AIMS
114 & 110	Caster Fundish Preneaters & Dryer	7.6	7.0	0.6	140	2.8	84	119,442	ID/IVIIVICI	From 2018 AIMS
124	Caster Vents	7.0	7.0	0.0	100	0.031	04	115,442	lb/ton	From 2018 AIMS
138	Scran Pren	03	03			0.051			lb/ton	From 2018 AIMS
138	Scrap Prep	7.6	7.6	0.6	140	55	84	119 442	lb/MMcf	From 2018 AIMS
100				010	110	0.0	01	110)112		Emission factors from AP-42 Table 13.2.2-2 for
924	Road Dust Emissions (controlled)	0.29	0.03						Ib/VMT	unpaved haul roads with watering application.
Proiected										
,	Emission	51446 55								
	Location	PM10 EF	PM2.5 EF	SO2 EF	NOX EF	VOC EF	COEF	CO2e EF	Units	Source of Emission Factor
501A	DCEAF Furnace	0.024	0.010	0.050	0.001	0.040	1 1 1 2	220.11	11. 4	Calculated from the stack test or CEMS based
501B	Ladle Refining Furnace	0.024	0.018	0.069	0.081	0.048	1.143	228.11	ib/ton	emission rate reported in 2018 AIMS
										collected shows stack emissions of 5.43 TPV and
	Meltshop Fugitives	0.005	0.005						lb/ton	fugitive emissions of 1.2 TPV. Thus assume
										fugitive emissions as 22% of stack
500	VDG @ Steelmaking						0.100			From 2018 AIMS
211	Walking Deems Funness	7.0	7.0	0.0	02.2	1 1	84.0	110 442	14/0404-6	From 2018 AIMS except CO. CO based on AP-42
311	waiking Beam Furnace	7.6	7.6	0.6	83.3	1.1	84.0	119,442	ID/IVIIVICT	EF for NG
109	EAF Ladle Preheaters #1-#4	7.6	7.6	0.6	100.0	5.5	84.0	119,442	lb/MMcf	From 2018 AIMS
113	Burn Off Oven	7.6	7.6	0.6	100.0	5.5	84.0	119,442	lb/MMcf	From 2018 AIMS
114 & 116	Caster Tundish Preheaters & Dryer	7.6	7.6	0.6	140.0	2.8	84.0	119,442	lb/MMcf	From 2018 AIMS
118	Caster Cutting Torches #1-#6	7.6	7.6	0.6	100.0	5.5	84.0	119,442	lb/MMcf	From 2018 AIMS
124	Caster Vents					0.031			lb/ton	From 2018 AIMS
138	Scrap Prep	0.3	0.3	0.0	140.0		84.0	110 442	Ib/ton	From 2018 AIMS
138	эстар мер	/.b	7.b	0.6	140.0	5.5	84.0	119,442	ID/IVIIVICT	From 2018 AIMS
924	Road Dust Emissions (controlled)	0.29	0.03						lb/VMT	unpoyed ball roads with watering application
										unpaved nati roads with watering application.

Cleveland-Cliffs Steelton LLC Baseline Actual Emissions (BAE)

		Baseline Time Period Baseline production rate:	Jan-17 295,215	to tons/year	Dec-18					
	Emission Location	Annual Production/ Throughput	Units	PM10 (TPY)	PM2.5 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	CO2e (TPY)
501A	DCEAF Furnace	295,215	Tons	3 49	2 59	10 19	11 98	7 15	168 67	33 670
501B	Ladle Refining Furnace			5.15	2.55	10.15	11.50	7.15	100.07	33,070
	Meltshop Fugitives	295,215	Tons	0.77	0.77	0.00	0.00	0.00	0.00	0
500	VDG @ Steelmaking	281,837	Tons	0.00	0.00	0.00	0.00	0.00	14.09	0
311	Walking Beam Furnace	529,558	MCF	2.01	2.01	0.16	22.06	0.29	1.93	31,626
109	EAF Ladle Preheaters #1-#4	45,183	MCF	0.17	0.17	0.01	2.26	0.12	1.90	2,698
113	Burn Off Oven	240	MCF	0.00	0.00	0.00	0.01	0.00	0.01	14
114 & 116	Caster Tundish Preheaters & Dryer	20,337	MCF	0.08	0.08	0.01	1.42	0.03	0.85	1,215
118	Caster Cutting Torches #1-#6	2,451	MCF	0.01	0.01	0.00	0.12	0.01	0.10	146
124	Caster Vents	271,571	Tons					4.21		
138	Scrap Prep	2,220	Tons	0.33	0.33					
138	Scrap Prep	7,401	MCF	0.03	0.03	0.00	0.52	0.02	0.31	442
924	Road Dust Emissions	295,215	Tons	4.23	0.42					

Cleveland-Cliffs Steelton LLC Projected Actual Emissions (PAE)

Time Period Projected production rate: 768,000 tons/year Maximum emissions in any one 12-month period in five year period starting on the date unit resumes regular operation

	Emission Location	Annual Production/ Throughput	Units	РМ10 (ТРҮ)	PM2.5 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	CO2e (TPY)
501A	DCEAF Furnace	768,000	Tons	9.08	6 73	26 51	31 16	18 50	138 70	87 503
501B	Ladle Refining Furnace			5.08	0.75	20.51	51.10	10.55	430.75	07,555
	Meltshop Fugitives	768,000	Tons	2.01	2.01	0.00	0.00	0.00	0.00	0
500	VDG @ Steelmaking	768,000	Tons	0.00	0.00	0.00	0.00	0.00	38.40	0
311	Walking Beam Furnace	1,168,000	MCF	4.44	4.44	0.35	48.65	0.64	49.06	69,754
109	EAF Ladle Preheaters #1-#4	117,542	MCF	0.45	0.45	0.04	5.88	0.32	4.94	7,020
113	Burn Off Oven	624	MCF	0.00	0.00	0.00	0.03	0.00	0.03	37
114 & 116	Caster Tundish Preheaters & Dryer	52,908	MCF	0.20	0.20	0.02	3.70	0.07	2.22	3,160
118	Caster Cutting Torches #1-#6	6,376	MCF	0.02	0.02	0.00	0.32	0.02	0.27	381
124	Caster Vents	768,000	Tons					11.90		
138	Scrap Prep	5,775	Tons	0.87	0.87					
138	Scrap Prep	19,253	MCF	0.07	0.07	0.01	1.35	0.05	0.81	1,150
924	Road Dust Emissions	768,000	Tons	11.01	1.10					

Cleveland-Cliffs Steelton LLC Excludable Emissions (EE)

Excludable pro	oduction rate: te that the existing units could have a	198,838 ccommodated and unr	tons/year elated to the pro	Calculated by for Feb-2017 posed changes	y subtracting b s under the pro	oaseline prod oject.	uction from th	ne annualized	monthly rate	•
	Emission Location	Annual Production/ Throughput	Units	PM10 (TPY)	PM2.5 (TPY)	SO2 (TPY)	NOx (TPY)	VOC (TPY)	CO (TPY)	CO2e (TPY)
501A	DCEAF Furnace	198,838	Tons	2 35	1 74	6 86	8 07	4 81	113 60	22 678
501B	Ladle Refining Furnace			2.55	1.74	0.80	0.07	4.01	115.00	22,078
	Meltshop Fugitives	198,838	Tons	0.52	0.52	0.00	0.00	0.00	0.00	0
500	VDG @ Steelmaking	198,838	Tons	0.00	0.00	0.00	0.00	0.00	9.94	0
311	Walking Beam Furnace	123,143	MCF	0.47	0.47	0.04	5.13	0.07	5.17	7,354
109	EAF Ladle Preheaters #1-#4	30,432	MCF	0.12	0.12	0.01	1.52	0.08	1.28	1,817
113	Burn Off Oven	162	MCF	0.00	0.00	0.00	0.01	0.00	0.01	10
114 & 116	Caster Tundish Preheaters & Dryer	13,698	MCF	0.05	0.05	0.00	0.96	0.02	0.58	818
118	Caster Cutting Torches #1-#6	1,651	MCF	0.01	0.01	0.00	0.08	0.00	0.07	99
124	Caster Vents	198,838	Tons					3.08		
138	Scrap Prep	1,495	Tons	0.22	0.22					
138	Scrap Prep	4,985	MCF	0.02	0.02	0.00	0.35	0.01	0.21	298
924	Road Dust Emissions	198,838	Tons	3.93	0.39					

Cleveland-Cliffs Steelton LLC Steelmaking Actual Emissions for Reductions Per Creditability Requirements in 2 Years Prior to Shutdown Jan-19

Actual Emissions Time Period

Dec-20 to

For creditable decreases from 35" Mill Reheat Furnace (25 Pa.Code § 127.207 (4)(i)(A)) use calendar years immediately preceding the emissions reductions. *i.e.* 2019-20.

	NOx											
Emission	Emission	Annual	Units	Emission				Control	Controlled	Annual Em	nissions	
Unit	Location	Production/ Throughput	(tons)	Factor	Units			Efficiency	Emission Factor	(tons/yr)		Source of Emission Factor
1	35" Mill Reheat Furnace #3 & #4	175,807	MCF	997.5	lb/mmcf					87.68		Stack Test Data & TV Permit

					V	oc					
Emission	Emission	Annual	Units	Emission			Control	Controlled	Annual E	missions	
Unit	Location	Production/ Throughput	(tons)	Factor	Units		Efficiency	Emission Factor	(tons/yr)		Source of Emission Factor
	35" Mill Reheat Furnace #3 & #4	175,807	MCF	5.775	lb/mmcf				0.51		FIRE

Emission Location	2017	2018	2019	2020
35" Mill Reheat Furnace #3 & #4 (MCF)			193,568	158,046
NOx (TPY)	0.00	0.00	96.54	78.83
VOC (TPY)	0.00	0.00	0.56	0.46

Unpaved haul road truck traffic fugitive emissions summary

	PM10 (TPY) PM	2.5(TPY)
Baseline		
Raw material transfers	3.05	0.30
Product transfers	1.06	0.11
Industrial gases transfers	0.13	0.01
BAE Haul Roads	4.23	0.42
Projection		
Raw material transfers	7.93	0.79
Product transfers	2.76	0.28
Industrial gases transfers	0.33	0.03
PAE Haul Roads	11.01	1.10
Excludable		
Raw material transfers	2.05	0.21
Product transfers	0.71	0.07
Industrial gases transfers	0.08	0.01
EE Haul Roads	2.85	0.29
PEI	3.93	0.39

Trucks for Raw Material Transport on Unpaved Road (Fugitives)

Parameter	Baseline	Projection	Excludable	Units	Source / Basis
Number of truck trips	20,665	53,760	13,919	trip/year	From Truck Analysis sheet
Truck travel distance round trip	1.00	1.00	1.00	miles	Plant data 1/2 mile one way
Empty Truck Weight	17	17	17	tons	Plant data
Loaded Truck Weight	39	39	39	tons	Plant data
Mean Vehicle Weight (W)	28.0	28	28	tons	Plant data
Average hourly daytime traffic	7	18	5	trip/hour	Calculated assuming 5-day week and 12 hour shifts
Miles per vear	20.665	53,760	13.919	VMT/vr	
Silt Content (s)	6.0	6.0	6.0	wt. %	AP-42: Table 13.2.2-1: 11/06 - For Iron and Steel Production
PM particle size factor (k)	4.9	4.9	4.9	Ib/VMT	AP-42: Table 13.2.2-2: 11/06
PM10 particle size factor (k)	1.5	1.5	1.5	lb/VMT	AP-42: Table 13.2.2-2: 11/06
PM2.5 particle size factor (k)	0.15	0.2	0.2	lb/VMT	AP-42: Table 13.2.2-2: 11/06
Days with > 0.01 " of precipitation (N)	120	120.0	120.0	davs/vr	AP-42; Figure 13.2.2-1; 11/06 - NW Indiana
Annual Uncontrolled PM Emission Factor	5.53	5.53	5.53	lb/VMT	AP-42, Ch. 13.2.2, Eqn. 1a and 2; 11/06
Annual Uncontrolled PM10 Emission Factor	1.47	1.47	1.47	lb/VMT	AP-42, Ch. 13.2.2, Eqn. 1a and 2; 11/06
Annual Uncontrolled PM2.5 Emission Factor	0.15	0.15	0.15	lb/VMT	AP-42, Ch. 13.2.2, Eqn. 1a and 2; 11/06
Annual PM Emissions	57.16	148.69	38.50	tons/yr	
Annual PM10 Emissions	15.23	39.63	10.26	tons/yr	
Annual PM2.5 Emissions	1.52	3.96	1.03	tons/yr	
Control Measure Efficiency	80%	80%	80%	-	Conservative value based on the watering application
Controlled Annual PM Emissions	11.43	29.74	7.70	tons/yr	0 11 11
Controlled Annual PM10 Emissions	3.05	7.93	2.05	tons/yr	
Controlled Annual PM2.5 Emissions	0.30	0.79	0.21	tons/yr	

1. Control of Open Fugitive Dust Sources, EPA-450/3-88-008, September 1988.

Trucks for Product Transport on Unpaved Road (Fugitives)

Parameter	Baseline	Projection	Excludable	Units	Source / Basis
Number of truck trips	4,723	12,288	3,181	trip/year	From Truck Analysis sheet
Truck travel distance round trip	1.50	1.50	1.50	miles	Plant data 0.75 mile one way
Empty Truck Weight	18	18	18	tons	Plant data
Loaded Truck Weight	40	40	40	tons	Plant data
Mean Vehicle Weight (W)	29.0	29	29	tons	Plant data
Average hourly daytime traffic	2	4	2	trip/hour	Calculated assuming 5-day week and 12 hour shifts
Miles per vear	7.085	18.432	4.772	VMT/vr	
Silt Content (s)	6.0	6.0	6.0	wt. %	AP-42: Table 13.2.2-1: 11/06 - For Iron and Steel Production
PM particle size factor (k)	4.9	4.9	4.9	lb/VMT	AP-42; Table 13.2.2-2; 11/06
PM10 particle size factor (k)	1.5	1.5	1.5	lb/VMT	AP-42; Table 13.2.2-2; 11/06
PM2.5 particle size factor (k)	0.15	0.2	0.2	lb/VMT	AP-42; Table 13.2.2-2; 11/06
Days with > 0.01" of precipitation (N)	120	120.0	120.0	days/yr	AP-42; Figure 13.2.2-1; 11/06 - NW Indiana
Annual Uncontrolled PM Emission Factor	5.62	5.62	5.62	lb/VMT	AP-42, Ch. 13.2.2, Eqn. 1a and 2; 11/06
Annual Uncontrolled PM10 Emission Factor	1.50	1.50	1.50	lb/VMT	AP-42, Ch. 13.2.2, Eqn. 1a and 2; 11/06
Annual Uncontrolled PM2.5 Emission Factor	0.15	0.15	0.15	lb/VMT	AP-42, Ch. 13.2.2, Eqn. 1a and 2; 11/06
Annual PM Emissions	19.91	51.79	13.41	tons/yr	
Annual PM10 Emissions	5.31	13.80	3.57	tons/yr	
Annual PM2.5 Emissions	0.53	1.38	0.36	tons/yr	
Control Measure Efficiency	80%	80%	80%	-	Conservative value based on the watering application
Controlled Annual PM Emissions	3.98	10.36	2.68	tons/yr	
Controlled Annual PM10 Emissions	1.06	2.76	0.71	tons/yr	
Controlled Annual PM2.5 Emissions	0.11	0.28	0.07	tons/yr	

1. Control of Open Fugitive Dust Sources, EPA-450/3-88-008, September 1988.

Trucks for Industrial Gases Transport on Unpaved Road (Fugitives)

Parameter	Baseline	Projection	Excludable	Units	Source / Basis
Number of truck trips	886	2,304	597	trip/year	From Truck Analysis sheet
Truck travel distance round trip	1.00	1.00	1.00	miles	Plant data 1/2 mile one way
Empty Truck Weight	14	14	14	tons	Plant data
Loaded Truck Weight	38	38	38	tons	Plant data
Mean Vehicle Weight (W)	25.9	26	26	tons	Plant data
Average hourly daytime traffic	1	1	1	trip/hour	Calculated assuming 5-day week and 12 hour shifts
Miles per vear	886	2.304	597	VMT/vr	
Silt Content (s)	6.0	6.0	6.0	wt. %	AP-42: Table 13.2.2-1: 11/06 - For Iron and Steel Production
PM particle size factor (k)	4.9	4.9	4.9	lb/VMT	AP-42: Table 13.2.2-2: 11/06
PM10 particle size factor (k)	1.5	1.5	1.5	lb/VMT	AP-42: Table 13.2.2-2: 11/06
PM2.5 particle size factor (k)	0.15	0.2	0.2	lb/VMT	AP-42: Table 13.2.2-2: 11/06
Days with > 0.01 " of precipitation (N)	120	120.0	120.0	davs/vr	AP-42; Figure 13.2.2-1; 11/06 - NW Indiana
Annual Uncontrolled PM Emission Factor	5.34	5.34	5.34	lb/VMT	AP-42, Ch. 13.2.2, Eqn. 1a and 2; 11/06
Annual Uncontrolled PM10 Emission Factor	1.42	1.42	1.42	lb/VMT	AP-42, Ch. 13.2.2, Eqn. 1a and 2; 11/06
Annual Uncontrolled PM2.5 Emission Factor	0.14	0.14	0.14	lb/VMT	AP-42, Ch. 13.2.2, Eqn. 1a and 2; 11/06
Annual PM Emissions	2.37	6.15	1.59	tons/yr	
Annual PM10 Emissions	0.63	1.64	0.42	tons/yr	
Annual PM2.5 Emissions	0.06	0.16	0.04	tons/yr	
Control Measure Efficiency	80%	80%	80%	-	Conservative value based on the watering application
Controlled Annual PM Emissions	0.47	1.23	0.32	tons/yr	U 11
Controlled Annual PM10 Emissions	0.13	0.33	0.08	tons/yr	
Controlled Annual PM2.5 Emissions	0.01	0.03	0.01	tons/yr	

1. Control of Open Fugitive Dust Sources, EPA-450/3-88-008, September 1988.

Appendix C – Copies of Pending Municipal Notifications

County and Municipal Notification Submittal

In this Appendix, we are providing copies of the planned County and municipal notifications. Pursuant to PADEP guidance (Document Number 275-2101-011), these County and municipal notification must be submitted at least 30 days prior to PADEP issuance of the Plan Approval. The Project is still undergoing internal approvals making public notifications misleading at this time. Therefore, Cleveland-Cliffs Steelton LLC seeks to rely on this attached PADEP guidance and submit the County and municipal notifications after achieving internal approvals and no later than 30 days prior to PADEP's issuance of the Plan Approval. We ask that the Plan Approval application be deemed complete contingent upon submission of proof of the required notifications and that PADEP process this application without delay. Date

Rose Paul Steelton Borough Secretary 123 North Front Street Steelton, PA 17113 Phone: (XXX) XXX-XXXX

Re: Notification – Plan Approval Application to Construct and Operate New Universal Rail Mill, Steelton, PA Cleveland-Cliffs Steelton, LLC

Dear Madam:

In accordance with the provisions of 25 Pa. Code § 127.413, we are required to notify you of our planned submittal to the Pennsylvania Department of Environmental Protection of a Plan Approval application to construct and operate a new Universal Rail Mill at Cleveland-Cliffs Steelton Facility. This project will also result in shutdown of existing 35" Mill Reheat Furnaces. We are also required to demonstrate that this notification provision has been met. Therefore, this letter is being sent to you by certified mail.

Cleveland-Cliffs Steelton, LLC owns and operates Steelton Facility located in Steelton Borough, Dauphin County, Pennsylvania. This facility is a steel mini-mill producing high-quality rails, specialty ingots and blooms to bars for the railroad, forging and machinery markets. The proposed changes to the facility consist of constructing and operating a new Universal Rail Mill operation equipped with state-of-the-art rolling mill and other operations. The new units will replace existing units that are less efficient and reliable. We are required to inform you that you have 30 days from the receipt of this notice to submit comments to the Department of Environmental Protection at 909 Elmerton Avenue, Harrisburg, PA 17113.

If you have any questions, please call me at (610) 383-2097. Thank you in advance for your cooperation in working with us on this matter.

Sincerely,

Ray Ajalli P.E. Manager Environmental Cleveland-Cliffs Plate LLC Date

Dauphin County Board of Commissioners Dauphin County Administration Building Fourth Floor 2 South Second Street Harrisburg, PA 17101

Re: Notification – Plan Approval Application to Construct and Operate New Universal Rail Mill, Steelton, PA Cleveland-Cliffs Steelton, LLC

Dear Sirs:

In accordance with the provisions of 25 Pa. Code § 127.413, we are required to notify you of our planned submittal to the Pennsylvania Department of Environmental Protection of a Plan Approval application to construct and operate a new Universal Rail Mill at Cleveland-Cliffs Steelton Facility. This project will also result in shutdown of existing 35" Mill Reheat Furnaces. We are also required to demonstrate that this notification provision has been met. Therefore, this letter is being sent to you by certified mail.

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Sincerely,

Ray Ajalli P.E. Manager Environmental Cleveland-Cliffs Plate LLC