

April 2, 2021

Mr. Mike Adhanom New Jersey Department of Environmental Protection (NJDEP) Air Quality Permitting and Planning Bureau of Stationary Sources Preconstruction Permits Section 401 E. State Street, 2nd Floor P.O. Box 420 Mail Code 401-02 Trenton, New Jersey 08625-0420 mike.adhanom@dep.nj.gov

RE: Camden Iron & Metal, Inc. (P.I. No 51893) Air Permit Application for Yard Operations

Dear Mr. Adhanom:

Trinity Consultants, Inc. (Trinity) is submitting this air permit application on behalf of Camden Iron & Metal, Inc. (CIM) for their Front St. & Pine St. (i.e., Pier facility) location in Camden, NJ 08104. As discussed during our February 10, 2021 pre-application meeting, this application is for the existing yard operations, where scrap metal is transferred onto ships/vessels for further transport. The application includes the following:

- The existing yard operations as E1;
- One emission point for outdoor air emissions as PT1; and
- ▶ Emission Unit U1 (OS1) for the single operating scenario of scrap metal and material handling.

The RADIUS file is included as **Attachment 1**.

SOURCE DESCRIPTION & BACKGROUND

CIM currently operates a scrap metal staging and loading facility (P.I. # 51893) in Camden, NJ. At the facility, the ferrous metals are transferred onto ships/vessels for further transport. On June 30, 2020, CIM received a Notice of Violation (NOV) related to compliance inspections at the Pier facility on December 12, 2019 and February 19, 2020. The NOV alleged the installation and operation of "a material handling source operation that emits one or more air contaminants directly to the outdoor air" without first obtaining an air permit. The document specifically identifies the front end loaders, industrial claw grabber and industrial magnet as those material handling processes with the ability to "process" in excess of 50 pounds of scrap metal (and/or other materials) in any one hour. As previously discussed with the NJDEP, CIM does not agree that the equipment (all of which is mobile) identified in the aforementioned NOV, or the operation as a whole, requires a preconstruction air permit pursuant to New Jersey's Subchapter 8 regulations. However, CIM has worked with Trinity to develop and submit the enclosed air permit application for the facility at NJDEP's request.

EMISSIONS QUANTIFICATION

Any emissions generated at the Pier facility are fugitive in nature, relating to the on-site movement and handling of various materials including, but not limited to, ferrous metals. The most prevalent material handling activity at the facility is the loading of ferrous metals onto ships/vessels for subsequent transport and sale.

While fugitive dust from particulate matter is not anticipated to travel beyond the facility's property line, particulate matter emission rates have been developed in association with this application. Trinity utilized the "drop operation" calculation methodology from within AP-42 Section 13.2.4 (Aggregate Handling and Storage Piles) to determine potential emissions of particulate matter. Details regarding the specific drop operation equation and the selected variables can be found in the attached calculation sheet. Trinity has assumed that all materials brought into the Pier facility are "dropped" two times (i.e., once upon arriving at the location and another upon being transloaded). These two unique events are included in the calculation sheet as "Truck/Material Unloading" and "Ship Loading".

Trinity has utilized an anticipated "typical" monthly facility throughput of 55,000 tons and incorporated at 50% safety factor for a maximum monthly throughput of 82,500. The 55,000 ton monthly throughput is the worst case average monthly throughput expressed for either the CIM Pier location or the Kaighn Ave. location (which is the subject of a separate permit application). Similarly, the maximum hourly throughput of 800 TPH is the worst case hourly throughput expressed for either the CIM Pier facility or the Kaighn Ave. location.

The potential to emit associated with the Pier facility is 3.27 TPY of TSP, PM10 and PM2.5. Considering that the AP-42 Section 13.2.4 drop operation calculation was developed for aggregates with up to 19% silt content (i.e., dusty material), the calculations use a 50% factor on top of the monthly anticipated throughput and that water will be used (as necessary) to minimize dust formation, this potential to emit estimate should be considered extremely conservative.

AIR PERMIT APPLICATION CONTENTS

As outlined and agreed to with the NJDEP on February 10, 2021, the air permit application will include the following:

- One single source identified as Yard Operations (E1);
- One single emission point indicating "outdoor air emissions" (PT1); and
- One emission unit and operating scenario utilizing the aforementioned source and emission point (U1/OS1)

In addition to the above subject items for the application, the following was agreed to with the NJDEP:

- While the facility will utilize water spray to minimize particulate emissions, water is not being included as a control device within the application. Water will however be included in the related Dust Management Plan;
- CIM understands that the Dust Management Plan for the facility (attached to this application) will be included as a condition of the final permit; and
- The application and final permit will include the pollutants PM10, PM2.5 and TSP (as equivalent). It is unlikely that PM2.5 levels will be near the magnitude of filterable particulate matter (e.g., TSP).

REGULATORY APPLICABILITY ANALYSIS

The following section documents only the state regulation applicability determinations for the proposed permit application, as there are no federal air quality regulations that apply.

New Jersey Administrative Code

N.J.A.C. 7:27-6 Control and Prohibition of Particles from Manufacturing Process

N.J.A.C. 7:27-6.2(a) sets forth control or emission rate requirements for particulate emissions that are emitted to the outdoor air from a stack or chimney associated with a manufacturing process. The particulate emissions contemplated in this application are fugitive in nature, cannot be directed to a stack or chimney, and are not associated with a manufacturing operation as defined in Subchapter 6. Accordingly, Subchapter 6 particulate emission standards do not apply to this facility/operation.

N.J.A.C. 7:27-16 Control and Prohibition of Air Pollution by Volatile Organic Compounds

Subchapter 16 establishes the requirements and procedure for the control and prohibition of Volatile Organic Compounds (VOCs) from source operations. The scrap metal movement operation does not emit any VOCs, making this subchapter non-applicable.

N.J.A.C. 7:27-17 Control and prohibition of air pollution by Toxic Substances and Hazardous Air Pollutants

N.J.A.C. 7:27-17 (Subchapter 17) applies to any source or equipment that has the potential to emit any Group 1 or Group 2 air toxic (TXS) at a rate greater than 0.1 lb/hr. Consistent with the emissions quantified for this application and discussions with the NJDEP, Hazardous Air Pollutant (HAP) emissions are not anticipated to be generated during these material handling activities. Therefore, Subchapter 17 reporting thresholds have not been evaluated.

N.J.A.C. 7:27-8.12 State of the Art (SOTA)

Particulate Matter emissions are below the 5.0 TPY applicability threshold for SOTA. Therefore, SOTA does not apply to this submittal.

If you have any questions or comments about the information presented in this letter and application, please do not hesitate to contact me at mtrupin@trinityconsultants.com or 609.318.5500 x1755.

Sincerely,

TRINITY CONSULTANTS

han P. Spin

Michael A. Trupin

Mr. Mike Adhanom - Page 4 April 2, 2021

Principal Consultant

Attachments

cc: Ms. Cynthia McKeown

ATTACHMENT 1 RADIUS File

New Jersey Department of Environmental Protection Reason for Application

Permit Being Modified

Permit Class: Number: 0

Description CIM currently operates a scrap metal staging and loading facility (P.I. # 51893) in of Modifications: Camden, NJ. At the facility, the ferrous metals are transferred onto ships/vessels for further transport. On June 30, 2020, CIM received a Notice of Violation (NOV) related to compliance inspections at the Pier facility on December 12, 2019 and February 19, 2020. The NOV alleged the installation and operation of "a material handling source operation that emits one or more air contaminants directly to the outdoor air" without first obtaining an air permit. The document specifically identifies the front end loaders, industrial claw grabber and industrial magnet as those material handling processes with the ability to "process" in excess of 50 pounds of scrap metal (and/or other materials) in any one hour. As previously discussed with the NJDEP, CIM does not agree that the equipment (all of which is mobile) identified in the aforementioned NOV, or the operation as a whole, requires a preconstruction air permit pursuant to New Jersey's Subchapter 8 regulations. However, CIM has worked with Trinity to develop and submit the enclosed air permit application for the facility at NJDEP's request. As outlined and agreed to with the NJDEP on February 10, 2021, the air permit application will include the following:

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- One emission unit and operating scenario utilizing the aforementioned source and emission point (U1/OS1)

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- The application and final permit will include the pollutants PM10, PM2.5 and TSP (as equivalent). It is unlikely that PM2.5 levels will be near the magnitude of filterable particulate matter (e.g., TSP).

New Jersey Department of Environmental Protection Facility Profile (General)

Facility Name (AIMS): Camden Iron & Metal, Inc.

Street FRONT ST & PINE ST Address: CAMDEN, NJ 08104

Mailing 201 NORTH FRONT ST Address: CAMDEN, NJ 08102 Facility ID (AIMS): 51893

State Plane Coordinates:

X-Coordinate:

Y-Coordinate:

Units:

Datum:

Source Org.:

Source Type:

County: Camden Location Description: Industry: Primary SIC: Secondary SIC: NAICS: 423930

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New Jersey Department of Environmental Protection Facility Profile (General)

Contact Type: Air Permit Information Contact		
Organization:		Org. Type:
Name: Cynthia McKeown		NJ EIN:
Title: Environmental, Health & Safety Manager		
Phone: (856) 365-7500 x	Mailing	
Fax: () - x	Address:	
Other: () - x		
Туре:		
Email: Cynthia.Mckeown@emrgroup.com		
Contact Type: Consultant		
Organization:		Org. Type:
Name: Michael Trupin		NJ EIN:
Title: Principal Consultant		
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Contact Type: Fees/Billing Contact		
Organization:		Org. Type:
Name: Cynthia McKeown		NJ EIN:
Title: Environmental, Health & Safety Manager		
Phone: (856) 365-7500 x	Mailing	
Fax: () - x	Address:	
Other: () - x		
Туре:		

Email: Cynthia.Mckeown@emrgroup.com

Dags 2 of 2

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New Jersey Department of Environmental Protection Facility Profile (General)

Contact Type: Responsible Official

Organization:

Name: Stephen Deacon

Title: COO

Phone: (856) 365-7500 x

Fax: () - x

Other: () - x

Type:

Email: stephen.deacon@emrgroup.com

Org. Type: NJ EIN:

Mailing Address:

New Jersey Department of Environmental Protection Facility Profile (Permitting)

1. Is this facility classified as a small business by the USEPA?	No
2. Is this facility subject to N.J.A.C. 7:27-22?	No
3. Are you voluntarily subjecting this facility to the requirements of Subchapter 22?	No
4. Has a copy of this application been sent to the USEPA?	No
5. If not, has the EPA waived the requirement?	No
6. Are you claiming any portion of this application to be confidential?	No
7. Is the facility an existing major facility?	No
8. Have you submitted a netting analysis?	No
9. Are emissions of any pollutant above the SOTA threshold?	No
10. Have you submitted a SOTA analysis?	No
11. If you answered "Yes" to Question 9 and "No" to Question 10, explain why a SOTA analysis was not required	

12. Have you provided, or are you planning to provide air contaminant modeling? No

Dags 1 of 1

New Jersey Department of Environmental Protection Equipment Inventory

Equip.	Facility's	Equipment	Equipment Type	Certificate	Install	Grand-	Last Mod.	Equip.
NJID	Designation	Description		Number	Date	Fathered	(Since 1968)	Set ID
E1	Yard Ops	Yard Operations	Other Equipment					

000000 E1 (Other Equipment) Print Date: 3/31/2021

Make:			
Manufacturer:			
Model:			
Equipment Type:	Recycled Ma	terial Handling Equipment	
Capacity:			800.00
Units:	tons/hr		-
Description:			
Have you attached a diagram showing the location and/or the configuration of this		Have you attached any manuf.'s data or specifications to aid the Dept.	
		in its review of this	Yes
	No	application?	No

Comments:

New Jersey Department of Environmental Protection Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam.	Height (ft.)	Dist. to Prop.	Exhaus	t Temp.	(deg. F)	Exh	aust Vol. (a	cfm)	Discharge Direction	PT Set ID
NJID	Designation			(in.)	(11.)	Line (ft)	Avg.	Min.	Max.	Avg.	Min.	Max.	Direction	Set ID
PT1	Air Em	Outdoor Air Emission	Surface											

Date: 3/31/2021

Daga 1 of 1

Camden Iron & Metal, Inc. (51893)

New Jersey Department of Environmental Protection Emission Unit/Batch Process Inventory

U1 Yard Ops Yard Operations

UOS	Facility's	UOS	Operation	Signif.	Control	Emission	SCC(s)	Annual Oper. Hours VO(Flow C (acfm)		ſemp. deg F)
NJID	Designation	Description	Туре	Equip.	Device(s)	Point(s)	SCC(S)	Min. Max. Rang	ge Min. N	Max. Mir	. Max.
OS1	Yard Ops	Scrap metal yard operation	ons Normal - Steady State	E1		PT1	3-99-999-89	0.0 8,760.0		0	0 100.0

000000 U1 OS1 (Raw Material) Print Date: 3/31/2021								
Raw Material CAS Number Physical State Molecular Weight (lbs/lbs-mole) Does the Material Contain VOC? Weight Fraction (%) Vapor Pressure @ 70°F (mmHg) Organic Density Units								
Ferrous Metal & Related Materia 💌		Solid 💌		No	100.00			

Camden Iron & Metal, Inc. (51893)

Date: 3/31/2021

New Jersey Department of Environmental Protection Potential to Emit

Subject Item: U1 Yard Ops

Operating Scenario: OS0 Summary

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)				3.27000000	tons/yr	No
PM-2.5 (Total)				3.27000000	tons/yr	No
TSP				3.27000000	tons/yr	No

Subject Item: U1 Yard Ops

Operating Scenario: OS1

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)				2.64000000	lb/hr	No
PM-2.5 (Total)				2.64000000	lb/hr	No
TSP				2.64000000	lb/hr	No

ATTACHMENT 2

Potential to Emit Calculations

Potential To Emit Calculations

Camden Iron & Metal, Inc. Front & Pine - Camden, NJ

Uncontrolled PM Emission F	actor ¹	
Particle Size Multiplier - k	0.74	
Mean Wind Speed (mph) - U ²	8.3	E = k(0.0032)
Material Moisture Content (%) - M ³	2.525	
Emission Factor - Loading (lb/ton) - E	0.0033	

Assumptions ⁴	
Average Shipping (tons/month)	82,500
Anticipated Max Hourly Throuhgput (tons/hour) ⁵	800

Potential To Emit (PTE)								
Activity	(lb/hr)	(tons/yr)						
Truck/Material Unloading	2.64	1.63						
Ship Loading	2.64	1.63						
TOTAL =		3.27						

<u>Notes:</u> ¹ Equation 1 from AP-42 chapter 13.2.4 is used to develop emission factor. Selected Particle Size is conservative at < 30 um. ² Mean wind speed is from National Weather Service data for 2020 (https://w2.weather.gov/climate/index.php?wfo=phi)

³ Average moisture contect is used from AP-42 13.2.4 (0.25-4.8 %).

⁴ Assumptions were received from EMR via email. Used anticipated monthly throughput from either Kaighn Ave. or CIM Pier Facility (plus 50% safety factor).

 $\left(\frac{U}{5}\right)^{1.3}$

 $\left(\frac{M}{2}\right)^{1.4}$

(pound [lb]/ton)

⁵ Anticipated Max Hourly Throughput is based on input from the facility. Used the maximum anticipated hourly throughput for either Kaighn Ave. or CIM Pier.

ATTACHMENT 3

Fugitive Dust Plan

Dust Management Plan for Camden Iron & Metal, Inc.

Pier Facility

July 2020

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- Appendix B: Visual Inspection Checklist for Entire Site

EXECUTIVE SUMMARY

The purpose of this Dust Management Plan is to document the dust control mechanisms to minimize fugitive dust emissions from the Camden Iron & Metal, Inc (CIM) Pier facility in Camden, New Jersey. Specifically, this plan will address the following: 1. Procedures for visual inspections; 2. Dust management procedures; 3. Corrective actions; and 4. A checklist of sources and areas to be checked for visible emissions. All personnel involved in the implementation of the dust management plan will be trained on the contents of this plan, including the checklist of all items to be inspected, inspection procedures, dust management procedures, and corrective actions for expected malfunctions.

The CIM Pier facility receives and stores prepared ferrous metals for sale to consumers. As such, the dust management strategies are detailed and consist of a range of proactive and reactive strategies. A significant effort in planning, implementation and monitoring is undertaken to ensure effective dust control is achieved for all components of the plan including the dust emission sources including stockpile and roadways. Specific dust controls employed by CIM to minimize dust generation include:

- *Applying water to stockpiles;*
- Sweeping roadways; and
- Wetting roadways.

1. INTRODUCTION

CIM Pier (Pier) facility is located at Front and Pine Streets in Camden, New Jersey. The Pier facility receives ferrous metal product i.e. including shredder iron and steel, prepared plate and structural steel and number 1 steel. These materials are brought via tractor trailers or rail cars and then stockpiled until they are loaded onto vessels.

1.1 DUST EMISSIONS

1.1.2 Facility Wide

All roadways will be cleaned with a mechanical sweeper or manual sweeping at a minimum of once per operating day to prevent dust from tracking. A water truck will be used daily as necessary to wet roadways to keep dust from becoming airborne.

1.2 PURPOSE OF PLAN

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

2. PLAN REQUIREMNTS

The Pier's Dust Management Plan includes the following:

- 1. Procedures for Visual Inspections;
- 2. Dust Management Procedures;
- 3. Corrective Actions; and
- 4. A Checklist of Sources and Areas to be checked for Visible Emissions.

3. PROCEDURES FOR VISUAL INSPECTIONS

The Checklist form for Daily Visual Inspections for Fugitive Dust Emissions is located in Appendix B,

The Daily Visual Inspections for Fugitive Dust Emissions Form will be used to conduct a visual inspection of the areas noted on the forms as follows when the facility is open:

The designated individual assigned to conduct a visual inspection once per operating day of the Facility Wide operations will complete the form in Appendix B after observing the following areas 1. Entrance/Inbound scale and mark the box for satisfactory (S) or unsatisfactory (U); (U); 2. Site roadways and mark the box for satisfactory(S) or unsatisfactory (U); and 3. Stockpiles and mark the box for satisfactory (U). All unsatisfactory (U) boxes checked require corrective actions see Section 4 Corrective Actions for information to be complete. Finally the form should be signed and dated with time of the inspection.

4. DUST MANAGEMENT PROCEDURES

The nature of the residue and the deposition and drying process results in a range of differing materials and surface textures that have the potential to become dusty under windy conditions. As such the dust management systems in place are complex and consist of a range of both proactive and reactive strategies.

CIM employs specific dust controls to minimize dust generation. These include:

4.1 Water Sprays;4.2 Mechanical Sweeper or Manual Sweeping;4.3 Water Truck4.4 Other Operational Controls

Further discussion on these methods is provided in this section.

4.1 Water Sprays

Water sprays will be used on the stockpiles to wet down material. In addition water sprays will be used during vessel loading as necessary.

4.2 Mechanical Sweeper or Manual Sweeping

The Pier will utilize a mechanical sweeper to clean all paved roadways once per operating day to prevent tracking of dirt and debris from the facility. When the mechanical sweeper is being repaired manual sweeping will be used to prevent tracking.

4.3 Water Truck

A water truck will be used in conjunction with the mechanical sweeper or manual sweeping to control dust on paved roadways, inbound and outbound scales and facility entrance.

4.4 Other Operational Controls

CIM is constantly improving operations and is dedicated to minimizing our impact on the environment To this end we will be researching and investigating future methods to control or minimize fugitive dust emissions. The Dust Management Plan will be revised as necessary to include new technologies.

5. CORRECTIVE ACTIONS

All unsatisfactory conditions observed during the Daily Visual Inspection need to be reported to the site operations supervisor and require a corrective action. The Pier facility corrective actions are described below:

5.1 Facility Wide Corrective Actions

Corrective actions for facility operations include sweeping wetting of paved roadways and other areas to prevent the dirt and debris from becoming airborne and applying water sprays to stockpiles when necessary.

6. TRAINING

All site personnel responsible for implementation of the Dust Management Plan include supervising operations and for conducting the Daily Visual Inspection for Fugitive Dust will be trained on the contents of this plan. All personnel above will be provided with Daily Visual Inspections for Fugitive Dust form which includes a checklist of areas to be inspected and a review of corrective actions for each emission source. Refresher training will be conducted once every two years or when changes are made to the Dust Management Plan. Training documentation can be found in Appendix A of the Dust Management Plan logbook and includes names of individuals trained and the dates that training occurred.

VERIFICATION OF TRAINING

DUST MANAGEMENT PLAN

Date _____

I have received the training on the Dust Management Plan visual inspection procedures, dust management procedures and corrective actions as conducted by Cynthia McKeown of **CIM** I understand the importance of the procedures and have received an answer to all questions I have asked. I understand the training I have received is essential in protecting the environment.

Printed Name	Signature	Department

CAMDEN IRON & METAL INC DAILY VISUAL INSPECTION FOR FUGITIVE DUST FACILITY WIDE

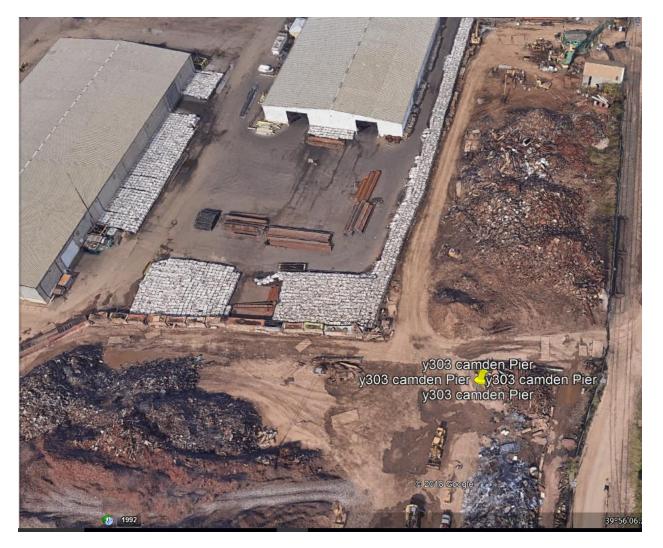
(S=Satisfactory, U=Unsatisfactory –requires comment and immediate corrective action)

This form must be completed and signed with date and time on a daily basis. The areas listed below will be visually inspected for fugitive dust and results will be noted. All areas noted U=Unsatisfactory requires a comment and corrective action. All areas where unsatisfactory conditions are noted should be reported to Supervisor or Designated Employee immediately. Please file completed form in the Dust Management Plan logbook/designated electronic file

	S	\mathbf{U}
1. ENTRANCE/INBOUND SCALE		
2. SITE ROADWAYS		
3. STOCKPILES		
4.CORRECTIVE ACTIONS:		

Signature:	Date:	Time:	

Figure 1



CAMDEN IRON & METAL, INC PIER FACILITY

FIGURE 2	
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	TRANSIT SHE
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