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Office of Air Quality
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Indianapolis, IN 46204-2251

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WAELZ SUSTAINABLE PRODUCTS, LLC – MUNCIE, INDIANA
NEW SOURCE CONSTRUCTION PERMIT TITLE V APPLICATION

Date April 10, 2019

To Whom it May Concern:

Ramboll is submitting the enclosed new source construction permit Title V application to the Indiana Department of Environmental Management (IDEM) on behalf of our client, Waelz Sustainable Products, LLC (WSP), for their proposed facility in Muncie, Indiana.

WSP is proposing to construct a facility located at 5401 West Kilgore Avenue, Muncie, Delaware County, Indiana. WSP is submitting this construction permit application to IDEM prior to beginning construction of any emission unit, in accordance with Title 326 Air Pollution Control Division of the Indiana Administrative Code (326 IAC) 2-5.1-3.

Enclosed is one original application packet and one copy of the application. If you have any questions, please feel free to contact Mr. Craig Hogarth, Heritage Environmental Services, at (317) 486-2783 or me at (919) 765-8027.

Yours sincerely

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WAELZ SUSTAINABLE PRODUCTS, LLC NEW SOURCE CONSTRUCTION PERMIT TITLE V APPLICATION

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APPENDICES

1. INTRODUCTION

Waelz Sustainable Products, LLC (WSP) is proposing to construct a facility located at 5401 West Kilgore Avenue, Muncie, Delaware County, Indiana. The facility will use two Waelz Kilns (Kiln 1 and Kiln 2) to produce Waelz Zinc Oxide (WZO)[1] and Waelz Iron Product (WIP) primarily from Electric Arc Furnace (EAF) dust generated from steel mini-mills.

The following summarizes the proposed equipment to be constructed at the facility:

- Two (2) Waelz Kilns (Kiln 1 and Kiln 2)[2];
- One (1) Feed Dryer;
- Eight (8) Product Collectors and Baghouses associated with the kilns and process buildings;
- Nine (9) Bin Vent filters associated with the facility processes;
- Two (2) diesel-fired emergency generators rated at 2,000 horsepower (hp); and
- Several insignificant activities to include a 10,000-gallon diesel storage tank, water heaters, and space heaters.

The facility will not have a facility-wide potential to emit (PTE) greater than 250 tons per year for any pollutant, and thus will be classified as a minor source with respect to Prevention of Significant Deterioration (PSD). However, the facility will have a facility-wide PTE greater than the Title V major source thresholds, and thus will be classified as a Title V major source. As part of this application, WSP is requesting a combined kiln annual throughput limit of 360,000 tons per year (tpy), as well as a facility-wide PTE limit for lead (Pb) of 0.5 tpy. WSP proposes to demonstrate compliance with the facility-wide Pb limit via source testing of the kilns and feed dryer, as well as recordkeeping for material throughput of the applicable equipment.

WSP is submitting this new source construction Title V permit application to IDEM prior to beginning construction of any emission unit, in accordance with Title 326 Air Pollution Control Division of the Indiana Administrative Code (326 IAC) 2-5.1-3. The facility will be classified as a Major Source under the Title V Operating Permit program per 326 IAC 2-7-2. The IDEM permit application forms are included in **Appendix A**.

A description of the process is provided in Section 2 and methodologies used to quantify potential emissions are summarized in Section 3. Section 4 includes a detailed applicability analysis of both federal and state regulations.

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[1] WZO also may be referred to as Crude Zinc Oxide (CZO).

[2] The new facility will be constructed in two phases, with Kiln 1 construction and operation occurring first, to be followed thereafter by Kiln 2.

2. FACILITY DESCRIPTION

The WSP facility in Muncie, Delaware County, Indiana will use two Waelz Kilns (Kiln 1 and Kiln 2) to produce WZO and WIP primarily from EAF dust generated from steel mini-mills. The following sections describe the facility's primary operations. A site location map, site layout diagram, and process flow diagram are included in **Appendix B**.

2.1 Main Process Description

The majority of incoming raw material will be EAF dust, with a small amount of other zinc-bearing secondary materials for metals recovery. The incoming raw material is herein referred to as "EAF dust", as EAF dust will comprise approximately 90% of the incoming raw material. The material will be delivered by covered bottom-dump railcars or dump trucks and unloaded inside the Receiving Building (RB1), which will be maintained under negative pressure by a baghouse (RBBH1) with a design flow rate of 140,000 cubic feet per minute (cfm). Promptly upon receiving EAF dust, water will be added to the raw material to begin the conditioning and blending processes (i.e., the chemical reaction). When conditioning and blending are completed, the material will be mixed and blended for a homogenous mixture of zinc-bearing materials from all customers.

After blending, the material will be transferred by four surge hoppers (RM1 through RM4), a series of belt conveyors and a screw conveyor to the Pelletizing Building (PB1). Each surge hopper will be equipped with a bin vent filter (RMBV1 through RMBV4) with an exhaust flow rate of 3,145 cfm. In the Pelletizing Building, the conditioned EAF dust will be transferred to one of two cone pelletizers (CP1 and CP2) to create properly-sized pellets. Emissions from both cone pelletizers will be controlled by a 140,000 cfm baghouse (PBBH1). EAF dust pellets leaving either cone pelletizer will be transferred to a natural gas-fired feed dryer (DRY1) with a heat input capacity of 17 million British thermal units per hour (MMBtu/hr). The feed dryer, which will have emissions control from a 140,000 cfm baghouse (PBBH2), will remove excess moisture from the feed pellets. The baghouses for the cone pelletizers and feed dryer (PBBH1 and PBBH2, respectively) will also be used to maintain the Pelletizing Building under negative pressure. Following the dryer, the pellets will be transferred to a curing area in the Pellet Receiving Building prior to subsequent charging to the downstream kilns. The Pellet Receiving Building will not be maintained under negative pressure as the raw material will already in a pellet form that will not form dust.

A carbon source (e.g., metallurgical coke breeze, anthracite, petroleum coke) will be received by truck or railcar in the Carbon Building (CB1), which will be maintained under negative pressure by a 140,000 cfm baghouse (CBBH1). The material will be loaded into grating that falls into surge hoppers in the Pellet Receiving Building that will feed each kiln. The carbon source will be delivered by discharge chutes and mixed with the cured EAF pellets prior to introduction into kilns. This process will provide the necessary carbon to generate a reducing atmosphere in the material bed of the kiln.

The Waelz Kilns will be large rotating drums, approximately 180 feet long and up to 13.5 feet in diameter, each of which will be fired by a natural gas-fired 50 MMBtu/hr burner located at the material discharge end. Heated air flows from the burner (discharge) will end toward the feed end, countercurrent to the material flow. The primary feed material will be EAF dust and other zinc-bearing secondary materials. The kilns will also be fed spent baghouse filter media, maintenance shop wastes (i.e., dust, contaminated personal protective equipment, etc.), and miscellaneous EAF dust-bearing residuals from the site's operations for the recovery of their zinc value. The feed material will undergo a series of complex reduction and reoxidation reactions as it traverses the kiln. The oxidation reactions will be sufficiently exothermic as to provide the majority of the heat required by the process. The natural gas burners for the kilns will each have a large turn-down ratio and are only operated for limited durations at full fire, generally only at startup to begin the process. From

time to time, it will not be necessary to fire the burners at all for extended periods of operation. The maximum combined material throughput for the two kilns is 360,000 tons per year.

Two baghouses (TBBH1 and TBBH2), each 140,000 cfm, located in the Transition Buildings (TB1 and TB2) will be associated with the two Waelz Kilns, Kiln 1 and Kiln 2, respectively, to provide additional capture and control at the transition location kiln discharge points. These baghouses will provide redundant ventilation beyond that already provided by the kiln process draft.

Zinc oxide-rich dust will be carried by the kiln air flow toward the feed end and is then passed through a series of settling chambers. The heavier material, middling WZO, will settle out in this chamber and will be collected and returned pneumatically to the feed tube by bucket elevators creating a closed loop system.

The lighter material that passes through the settling chamber will be collected in two large product collectors: PC1 will be a baghouse with an exhaust flow rate of 200,000 cfm dedicated to Kiln 1, and PC2 will be a baghouse with an exhaust flow rate of 200,000 cfm dedicated to Kiln 2. The material collected in these product collectors will be the WZO product, which will be collected and sold as a final product. The WZO product will be transferred from the product collection baghouse to one of five final product silos, two of which will be used to transfer product to railcars or trucks (FP1 and FP2) and three of which will be used to package the product into supersacks (FP3 through FP5). Emissions from each silo will be controlled by a 3,145-cfm bin vent filter (FPBV1 through FPBV5).

The slag-like solids, WIP, that will exit the kilns at the discharge (burner) end will be very rich in iron (approximately 50 percent) and will leave the kilns at a temperature between 900 and 1,100 °C. This heated material will be transferred to a 100-foot-long rotary cooler, which will also be maintained under suction by the kiln exhaust system and controlled by the WZO product collectors (PC1 and PC2). Once cooled, the WIP will be transferred to the WIP Building (WB1) prior to sale as a product. The WIP Building will be maintained under negative pressure by the two Transition Building baghouses (TBBH1 and TBBH2).

2.2 Ancillary Emitting Equipment

The facility will operate two diesel-fired emergency generators, each with a rated capacity of 2,000 horsepower (hp). One emergency generator (EG1) will be used to provide emergency power to the two kilns, and the second emergency generator (EG2) will be used to allow the baghouse-controlled suction to be maintained on the two kilns and coolers during power outages. A single 10,000-gallon diesel fuel oil storage tank will be installed to provide fuel to both emergency generators.

Additionally, two natural gas-fired water heaters and three natural gas-fired space heaters will be installed at the facility. Each of these heaters will have a heat input capacity of 0.5 MMBtu/hr or less.

3. EMISSIONS CALCULATIONS

Air emissions from the WSP facility will consist of particulate matter (PM); PM less than 10 microns in diameter (PM_{10}); PM less than 2.5 microns in diameter ($PM_{2.5}$); condensable PM; nitrogen oxides (NO_X); carbon monoxide (CO); sulfur dioxide (SO_2); volatile organic compounds (VOCs); Pb; and hazardous air pollutants (HAPs). The following sections describe the methodologies used to determine the facility's potential emissions. Detailed emissions calculations are provided in **Appendix C**.

3.1 Waelz Kilns

Potential annual emissions for all criteria pollutants, except for condensable PM, from the Waelz Kilns were estimated using stack test data from a similar facility. A contingency factor of 50 percent (%) was conservatively applied to the stack test data for all pollutants tested, except CO. The stack test data used for CO emissions was already assumed to represent the maximum potential to emit scenario for the WSP facility. Potential annual emissions for condensable PM from the Waelz Kilns was conservatively assumed to be 50% of the filterable PM portion. Total potential short term and annual emissions were calculated using the rated capacity of the kilns.

Potential annual emissions for all HAPs from the Waelz Kilns were estimated using data from either stack testing, mass balance, or laboratory analyses of the dust metal content, depending on the HAP, for a similar facility's most recent toxics release inventory (TRI) report. Potential HAPs from natural gas combustion by the burners on the Waelz kilns were estimated using the North Carolina's Department of Air Quality (NC DAQ) Natural Gas Combustion Spreadsheet and AP-42, Fifth Edition, Volume 1, Chapter 1.4 - Natural Gas Combustion, 07/98. The emission factors for acetaldehyde, acrolein, and ammonia were cited in the NC DAQ spreadsheet as being sourced from the USEPA's WebFIRE database.

Because both Waelz Kilns are nearly identical sources with similar air emissions, WSP is requesting a combined throughput limit such that the total annual throughput from both Waelz Kilns is limited to 360,000 tons per year. Note that the most recent stack tests (2018) from WSP's sister facility in Alabama showed emission rates of 0.06 pounds per ton of VOC, which would result in total VOC emissions for the year of significantly less than 25 tons.

3.2 Process Building Baghouses and Bin Vents

Multiple baghouses and bin vent filters will be used to control emissions of PM and Pb from the WSP facility's processes and product recovery. The Kiln 1 and 2 product collectors (PC1 and PC2) are utilized for collection of the WZO product and are therefore considered integral to the process. The bin vents (FPBV1 through FPBV5, RMBV1 through RMBV4) are utilized for product recovery during transfer of WZO and are therefore considered integral to the process. All other baghouses (RBBH1, CBBH1, PBBH1, PBBH2, TBBH1, and TBBH2) are not integral to the process but rather used for emission controls. WSP is requesting federally enforceable permit conditions that require the facility to operate and maintain the baghouses and bin vents discussed herein.

Potential annual emissions from the baghouses were based on an assumed post-control exit grain loading rate of 3.00×10^{-3} for filterable PM and 4.50×10^{-3} for condensable PM, if applicable. The exit grain loading for Pb was based on source test results from a similar facility in 2008 and represents a post-controlled emission rate. The results were scaled to account for the exhaust flow rate proposed for the WSP facility compared to the baghouses at the source tested facility. A maximum of 8,760 hours of operation per year was assumed for each baghouse.

Potential annual emissions from the bin vents were based on an assumed post-control exit grain loading rate of 3.00×10^{-3} for filterable PM. Emissions from the bin vent filters controlling potential lead-containing raw materials, including the bin vents associated with the WZO silos, are estimated using expected grain loading and a two percent lead content. Potential annual emissions for all HAPs

from the baghouses and bin vents were estimated using data from either stack testing, mass balance, or laboratory analyses of the dust metal content, depending on the HAP, for a similar facility. A maximum of 8,760 hours of operation per year was assumed for each bin vent.

3.3 Feed Dryer

Emissions from the feed dryer will result from products of natural gas combustion and EAF pellet throughput. The emissions will be controlled by baghouse PBBH2.

Emissions from the natural gas-fired dryer were estimated using emission factors from the U.S. Environmental Protection Agency's (EPA's) AP-42, Section 1.4, *Natural Gas Combustion*. Potential annual emissions were conservatively estimated based on the burner operating at its maximum heat input capacity continuously (i.e., 8,760 hours per year).

PM and Pb emissions from the EAF pellet throughput will be included with the PBBH2 baghouse emissions, described in the previous section.

3.4 Emergency Generators

Emissions from the two diesel-fired emergency generators (EG1 and EG2) were estimated using the emission factors from EPA's AP-42, Section 3.4, *Large Stationary Diesel and All Stationary Dual-fuel Engines*. The potential emission calculations utilized a maximum assumed sulfur content of the diesel fuel used of no more than 0.05 percent (500 ppm), and the total annual operation of each emergency generator was assumed to be no more than 500 hours per year.

Emissions for Pb were estimated using the emission factor for No. 2 fuel oil combustion from AP-42, Section 1.3, *Fuel Oil Combustion*. The Pb emission factor was converted from lb/10^{12} Btu to lb/hp-hr using an average brake-specific fuel consumption (BSFC) of 7,000 Btu/hp-hr, per AP-42, Section 3.3, Table 3.3-1.

3.5 Trivial and Insignificant Sources

Emissions from the fuel oil storage tank associated with the generators were estimated using EPA's TANKS 4.09D software, which incorporates the equations from AP-42, Section 7.1, *Organic Liquid Storage Tanks*. Calculation outputs from the TANKS software are included in **Appendix C**.

Emissions from the WSP facility's natural gas-fired water heaters and space heaters were calculated using emission factors from EPA's AP-42, Section 1.4, *Natural Gas Combustion*.

3.6 Potential Emissions Summary

A summary of the facility-wide potential emissions from the WSP facility is provided in **Table 1**.

Table 1. Facility-Wide Potential Emissions

Pollutant	Facility-Wide Potential Emissions (tpy)	Title V Major Source Threshold (tpy)	Above Title V Major Source Threshold?	PSD Major Source Threshold (tpy)	Above PSD Major Source Threshold?
CO	169.20	100	**Yes**	250	No
NO_X	140.02	100	**Yes**	250	No
PM [(a)]	176.02	100	**Yes**	250	No
PM_{10}	163.20	100	**Yes**	250	No
$PM_{2.5}$	160.78	100	**Yes**	250	No
SO_2	19.35	100	No	250	No
VOC	17.35	100	No	250	No

Pb	< 0.5	100	No	250	No
HAP	4.42	10 (single)/ 25 (total)	No	250	No

Notes:
(a) $PM/PM_{10}/PM_{2.5}$ emissions represent total PM emissions.

Note that the EAF dust processed by the WSP facility will contain a variety of metals. Typical lead concentrations in the EAF dust will be approximately one percent, which has been in decline over the last decade, and typical lead concentrations in the WZO product will be approximately five percent. These concentrations will be inherent to the process. As part of this application, WSP is proposing a facility-wide Pb emission limit of 0.5 tpy.

4. FEDERAL AND STATE REGULATORY APPLICABILITY

The following sections outline applicability of the WSP facility to certain federal and state air regulations. Specifically, potentially applicable requirements under Title V of the Clean Air Act Amendments, New Source Review (NSR), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Compliance Assurance Monitoring (CAM), Chemical Accident Prevention Provisions, Protection of Stratospheric Ozone, and 326 IAC are discussed herein.

4.1 Title V Operating Permits

The Title V operating permits program, promulgated in 40 CFR 70, requires a facility to obtain a Title V operating permit if it has potential emissions of a regulated criteria pollutant exceeding 100 tpy, of any single HAP exceeding 10 tpy, or of the aggregate of all HAP exceeding 25 tpy. As shown in Table 1, the WSP facility will be a Title V major source with respect to PM, NO_x and CO emissions. As such, WSP is submitting this application for an initial Title V Permit.

4.2 New Source Review

The federal NSR permitting program regulates emissions from major stationary sources of regulated air pollutants. The federal NSR is comprised of two elements: Nonattainment NSR (NNSR) and PSD. NNSR permitting is applicable in areas that have been designated as nonattainment for a regulated pollutant under the National Ambient Air Quality Standards (NAAQS). PSD permitting applies in areas that have been designated as attainment or unclassifiable. The WSP facility is located in Delaware County, which has been designated as attainment or unclassifiable for all criteria pollutants except for the area of the City of Muncie that is bounded to the North by West 26th Street/Hines Road, to the east by Cowan Road, to the south by West Fuson Road, and to the west by a line running south from the eastern edge of Victory Temple's driveway to South Hoyt Avenue and then along South Hoyt Avenue. This area is classified as nonattainment for the 2008 lead NAAQS. The site is located at 5401 West Kilgore Avenue (Appendix B), which is not within the lead nonattainment area.

The PSD major source threshold for each regulated criteria pollutant is 250 tpy, unless the facility falls under one of the listed 28 sources for which there is a lower PSD major source threshold.[3] Fugitive air emissions are not required to be included in the determination of a facility's PSD major source status unless the facility's operations are on the list of 28 source categories.[4]

The WSP facility will be categorized under Standard Industrial Classification (SIC) code 3341, *Secondary Smelting and Refining of Nonferrous Metals*. However, it has been long recognized within EPA guidance that SIC codes are not a determining factor for PSD industry classification, and despite its SIC code, WSP is not a "secondary metal production plant" for the purposes of PSD classification. The key factors in classifying the facility outside of this listed category are:

- The facility's raw material is not scrap metal;
- The facility does not involve any process steps where metal is managed in a molten state;
- The facility's products are not metal ingots or finished metal goods.

Facilities with the above-listed characteristics were intended by Congress and EPA to be included in the "secondary metal production plant" category for PSD applicability purposes. An early compilation of PSD policy determinations issued by EPA Region 4 in 1981 answered a question as to whether an iron foundry was a secondary metal production plant by stating that it would only fall under this classification "if it uses scrap metal to produce iron." This indicates support for looking at the raw materials as one of the determining factors.

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[3] 40 CFR 52.21(b)(1)(i)(a)
[4] 40 CFR 52.21(b)(1)(iii)

The most comprehensive definition of secondary nonferrous metals processing provided by EPA appears in 40 CFR 63 Subpart TTTTTT, *NESHAP for Area Sources: Secondary Nonferrous Metals Processing*. The definitions governing applicability of this rule include the following:[5]

> *Secondary nonferrous metals processing facility* means a brass and bronze ingot making, secondary magnesium processing, or secondary zinc processing plant that uses furnace melting operations to melt post-consumer nonferrous metal scrap to make products including bars, ingots, blocks, or metal powders.
>
> *Furnace melting operation* means the collection of processes used to charge post-consumer nonferrous scrap material to a furnace, melt the material, and transfer the molten material to a forming medium.

WSP's operations will not include any "furnace melting operations," because there will be no use of post-consumer scrap, no melting of material in furnaces, and no transfers of molten material. While definitions of applicability for NESHAP and NSPS categories do not necessarily apply as governing definitions for PSD industry classification, it is well recognized in guidance that, absent other determinations or definitions, NESHAP and NSPS categorization can be an important factor in assessing PSD classification.

Provided the available guidance and past determinations, WSP's operations will not be "secondary metal production" for the purposes of PSD classification, and the appropriate major source threshold for PSD applicability purposes is 250 tpy. WSP's facility-wide potential emissions are less than the PSD major thresholds. As such, the WSP facility is a minor source with respect to the PSD permitting program.

4.3 New Source Performance Standards

NSPS, promulgated in 40 CFR 60, provide emissions standards for criteria pollutant emissions from new, modified, and reconstructed sources. The following sections discuss the potentially applicable NSPS standards to the WSP facility's operations.

4.3.1 40 CFR 60 Subpart A – General Provisions

NSPS Subpart A provides generally applicable requirements for testing, monitoring, notifications, and recordkeeping. Any source that is subject to another subpart under 40 CFR 60 is also subject to Subpart A, unless otherwise stated in the specific subpart.

4.3.2 40 CFR 60 Subpart Db – Industrial-Commercial-Institutional Steam Generating Units

NSPS Subpart Db is applicable to steam generating units constructed, modified, or reconstructed after June 19, 1984, with heat input capacities greater than 100 MMBtu/hr.[6] A steam generating unit is defined as a device that combusts any fuel and produces steam, heats water, or heats any heat transfer medium.[7] The feed dryer and the two Waelz Kilns will each have heat input capacities less than 100 MMBtu/hr. Further, the combustion sources will not be used to produce steam, heat water, or heat a transfer medium. Therefore, 40 CFR 60 Subpart Db is not applicable to the feed dryer or Waelz Kilns.

4.3.3 40 CFR 60 Subpart Dc – Small Industrial-Commercial-Institutional Steam Generating Units

NSPS Subpart Dc applies to steam generating units constructed, modified, or reconstructed after June 9, 1989, with a heat capacity between 10 MMBtu/hr and 100 MMBtu/hr.[8] The definition of a steam generating unit under the rule does not apply to the feed dryer or Waelz Kilns, as these units

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[5] 40 CFR 63.11472
[6] 40 CFR 60.40b(a)
[7] 40 CFR 60.41b
[8] 40 CFR 60.40c(a)

will not be used to produce steam, heat water, or heat a transfer medium.[9] As such, they are not subject to 40 CFR 60 Subpart Dc.

4.3.4 40 CFR 60 Subpart Kb – Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)

NSPS Subpart Kb applies to volatile organic liquid (VOL) storage tanks that were constructed after July 23, 1984, have a maximum storage capacity greater than or equal to 75 m^3 (19,813 gal), and meet the following criteria:[10]

- The storage tank has a storage capacity greater than or equal to 75 m^3 (19,813 gal) but less than 151 m^3 (39,890 gal), and stores a VOL with a maximum true vapor pressure greater than or equal to 15.0 kPa (2.2 psia); or
- The storage tank has a storage capacity greater than or equal to 39,890 gal and stores a VOL with a maximum true vapor pressure greater than or equal to 3.5 kPa (0.51 psia).

The facility's only VOL storage tank will be a 10,000-gallon diesel fuel storage tank. This tank will not be subject to NSPS Subpart Kb, as the storage capacity will be less than 19,813 gal, and diesel has a maximum true vapor pressure less than 2.2 psia.

4.3.5 40 CFR 60 Subpart IIII – Stationary Compression Ignition Internal Combustion Engines

Subpart IIII regulates stationary compression ignition (CI) internal combustion engines (ICEs) for which construction commenced after July 11, 2005, where the CI ICE is manufactured on or after July 1, 2006 for fire pump engines, or for which reconstruction or modification commences after July 11, 2005.[11] The WSP facility will operate two stationary emergency CI ICEs (EG1 and EG2). Both of WSP's CI ICEs to be purchased will have manufacture dates after July 2006. As such, NSPS Subpart IIII applies to the stationary emergency CI ICEs (EG1 and EG2).

The emergency generators will have a displacement less than 10L per cylinder and a maximum power rating less than 2,237 kW; therefore, the emergency generators must meet the emission standards for new nonroad CI engines in Table 1 to §89.112(a) and the opacity standards in §89.113 as required by §60.4205(b) and §60.4202(a)(2).

The emergency generators will be operated for no more than 100 hours per year for the purposes of maintenance and readiness checks [§60.4211(f)(2)]. Both engines will combust ultra-low sulfur diesel (15 parts per million [ppm]) as required by §60.4207(b) and specified in §80.510(b)(1)(i). WSP will operate and maintain the engines in accordance with the manufacturer's emission-related written instructions and will not change any emissions-related settings other than those that are permitted by the manufacturer [§60.4211(a)(1) and (2)]. WSP will purchase certified engines as required by §60.4211(c).

4.3.6 40 CFR 60 Subpart JJJJ – Stationary Spark Ignition Internal Combustion Engines

NSPS Subpart JJJJ is applicable to new, modified, and reconstructed stationary spark ignition (SI) ICE. Each of WSP's generators will be categorized as stationary CI ICE. As such, NSPS Subpart JJJJ does not apply.

4.4 National Emission Standards for Hazardous Air Pollutants

NESHAP, promulgated in 40 CFR 63, regulate emissions of HAP from specific source categories. A facility that has potential emissions exceeding 10 tpy for any individual HAP and/or emissions exceeding 25 tpy for the sum of all HAP is classified as a major source of HAP emissions. A facility that is not a major source of HAP is classified as an area source.

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[9] 40 CFR 60.41c
[10] 40 CFR 60.110b(a)-(b)
[11] 40 CFR 60.4200(a)(2)-(3)

The WSP facility is an *area source* as its potential HAP emissions will not exceed the major source thresholds. The following sections discuss the potentially applicable NESHAP standards to the WSP facility's operations.

4.4.1 40 CFR 63 Subpart A – General Provisions

NESHAP Subpart A provides generally applicable requirements for testing, monitoring, notifications, and recordkeeping. Any source that is subject to another subpart under 40 CFR 63 is also subject to Subpart A, unless otherwise stated in the specific subpart.

4.4.2 40 CFR 63 Subpart EEEE – Organic Liquids Distribution (Non-Gasoline)

NESHAP Subpart EEEE is applicable to organic liquids distribution operations, including organic liquid storage tanks, located at major sources of HAP emissions.[12] This regulation does not apply to the facility's diesel fuel storage tank, because the WSP facility is an area source of HAP emissions, and diesel fuel does not meet the definition of an organic liquid under this regulation.[13]

4.4.3 40 CFR 63 Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engines

NESHAP Subpart ZZZZ, also known as the RICE MACT, regulates new and existing stationary reciprocating internal combustion engines (RICE) at major and area sources of HAP emissions.[14] For engines located at an area source of HAP emissions, the engine is considered existing if construction or reconstruction commenced before June 12, 2006.[15] Otherwise, it is considered new or reconstructed, respectively.[16]

WSP will operate two stationary diesel-fired emergency generator engines (EG1 and EG2) that are affected sources under Subpart ZZZZ. Each of these engines will be constructed after 2006. As such, each engine will be categorized as a new RICE. The proposed emergency generators will be classified as a new emergency engine with a rating of more than 500 brake horsepower (bhp) located at an area source of HAP emissions. Therefore, the generators will be subject to limited requirements under Subpart ZZZZ, in accordance with §63.6590(b)(1)(i). The only requirements that apply to EG1 and EG2 will be the initial notification requirements of §63.6645(f).

4.4.4 40 CFR 63 Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters

Subpart DDDDD (5D), also known as the Major Source Boiler MACT, applies to boilers and process heaters located at major sources of HAP emissions.[17] The WSP facility's feed dryer and Waelz Kilns do not meet the definitions of boilers or process heaters under this regulation, and they will be located at an area source of HAP emissions. Therefore, Subpart 5D does not apply.

4.4.5 40 CFR 63 Subpart JJJJJJ – Industrial, Commercial, and Institutional Boilers Area Sources

Subpart JJJJJJ (6J), also known as the Area Source Boiler GACT, applies to new and existing boilers at area sources of HAP emissions.[18] The feed dryer and Waelz Kilns do not meet the definition of boilers under this regulation.[19] Further, even if the sources were classified as boilers, the burners for each of these sources fire exclusively natural gas, and gas-fired boilers are exempt from the Boiler GACT.[20] As such, Subpart 6J does not apply.

4.4.6 40 CFR 63 Subpart VVVVVV – Chemical Manufacturing Area Sources

Subpart VVVVVV (6V), *Chemical Manufacturing Area Sources (CMAS)*, applies to new and existing chemical manufacturing process units (CMPUs) that use or produce at least one of the HAPs listed in

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[12] 40 CFR 63.2330
[13] 40 CFR 63.2406
[14] 40 CFR 63.6590(a)
[15] 40 CFR 63.6590(a)(1)(iii)
[16] 40 CFR 63.6590(a)(2)(iii), 40 CFR 63.5909a)(3)(iii)
[17] 40 CFR 63.7485
[18] 40 CFR 63.11194(a)
[19] 40 CFR 63.11237
[20] 40 CFR 63.11195(e)

Table 1 of the rule in concentrations exceeding the thresholds listed in 40 CFR 63.11494(a)(2) and that are located at an area source of HAPs.[21] The regulation defines a CMPU as "all process vessels, equipment, and activities necessary to operate a chemical manufacturing process that produces a material or family of materials described by North American Industry Classification System (NAICS) code 325."[22]

NAICS code 325180 refers to basic inorganic chemical manufacturing which includes listings for the manufacturing of zinc oxide and processing of zinc compounds "...not specified elsewhere by process manufacturing." In contrast, WSP will classify its operations as NAICS code 331492, which refers to secondary smelting, refining, and alloying of nonferrous metal and includes recovering and refining of nonferrous metals except aluminum and copper from scrap, which can include certain zinc products.

In 2013, WSP's sister facility, Steel Dust Recycling, LLC (SDR), requested and received a determination from EPA Region 4 confirming that SDR's operations are most accurately described by NAICS code 331492 and that NESHAP Subpart 6V does not apply.[23]

4.4.7 40 CFR 63 Subpart TTTTTT – Secondary Nonferrous Metals Processing Area Sources

NESHAP Subpart TTTTTT (6T) regulates secondary nonferrous metals processing facilities that are area sources of HAP emissions.[24] As discussed in Section 4.2 of this report, the definition of a nonferrous metals processing facility under this regulation is one that uses a furnace melting operation to melt post-consumer nonferrous metal scrap to make products including bars, ingots, blocks, or metal powders.[25] WSP's operations do not include any "furnace melting operations," because there is no use of post-consumer scrap, no melting of material in furnaces, and no transfers of molten material. As such, Subpart 6T does not apply.

4.5 Compliance Assurance Monitoring

Compliance Assurance Monitoring (CAM) under 40 CFR 64 is applicable to emission units located at a Title V major source that use a control device to achieve compliance with an emission limit and whose pre-controlled emissions exceed the major source thresholds. A CAM plan is required to be submitted with the initial Title V operating permit application for emission units whose post-controlled emissions exceed the major source thresholds (i.e., large pollutant-specific emission units [PSEU]).[26] For emission units with post-controlled emissions below the major source thresholds, a CAM plan must be submitted with the first Title V permit renewal application.[27]

The post-controlled emissions for individual emission units located at the facility that use controls to meet emission limits will each be below the major source threshold and thus, if CAM is applicable, it will not need to be addressed until the first Title V permit renewal application.

4.6 Chemical Accident Prevention Provisions

The Chemical Accident Prevention Provisions, promulgated in 40 CFR 68, provide requirements for the development of risk management prevention (RMP) plans for regulated substances. Applicability to 40 CFR 68 requirements is based on the types and amounts of chemicals stored at a facility. WSP has reviewed the list of regulated substances in Subpart F and has determined that the WSP facility will not store any subject chemicals in quantities requiring an RMP. As such, the facility is not subject to the requirements of 40 CFR 68.

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[21] 40 CFR 63.11494(a)
[22] 40 CFR 63.11494(b)
[23] Letter from Carol L. Kemker (EPA Region 4) to Art Rowland (WSP) dated August 19, 2013.
[24] 40 CFR 63.11462(a)
[25] 40 CFR 63.11472
[26] §64.5(a)
[27] §64.5(b)

4.7 Protection of Stratospheric Ozone

The requirements in 40 CFR 82, Protection of Stratospheric Ozone, regulate the use of ozone depleting substances (ODS) and certain ODS substitutes. The only subpart under this rule that is potentially applicable to the facility's operations is Subpart F – Recycling and Emissions Reduction. WSP will comply with the applicable requirements under this regulation by servicing, maintaining, or repairing appliances that contain refrigerants which are Class I or Class II ODS or their non-exempt substitutes.

4.8 Indiana Administrative Code Title 326 – Air Pollution Control Division

326 IAC establishes regulations applicable at the emission unit level and at the facility level. The state regulations also include general requirements for facilities, such as the requirement to obtain construction and operating permits. Source-specific standards in 326 IAC that are potentially applicable to the WSP facility's emission units are discussed in the following sections.

4.8.1 326 IAC Article 5 – Opacity Regulations

This regulation limits opacity from process sources to no more than 40 percent in any six-minute averaging period and not more than 60 percent for more than a cumulative total of fifteen minutes in a six-hour period.[28] This limitation is applicable to the WSP facility's emission sources. Compliance will be demonstrated through the use of the WSP facility's baghouses.

4.8.2 326 IAC Article 6 – Particulate Rules

Article 6 limits particulate emissions from facility sources. The WSP facility is located in Delaware County, which does not have any county-specific PM emission limitations.

Rule 2 of this article provides a PM emission limitation for indirect heating sources. This is not applicable to the facility as all fuel-burning equipment will be direct-fired sources and thus do not fall under this definition.

Rule 3, also known as the process weight rule (PWR), limits PM emissions from manufacturing processes. This rule is applicable to all sources at the WSP facility. The following equations are used to determine the PM emission limits for WSP's manufacturing processes:

$$E = 4.10 \times P^{0.67}; for\ P < 30$$

$$E = 55.0 \times P^{0.11} - 40;\ for\ 30 \leq P$$

where:

E = Pounds of PM emitted per hour (lb/hr)

P = Process weight rate (tons/hr)

The WSP facility will comply with this rule through the use of baghouses and bin vent filters.

Rule 4 provides standards for fugitive dust emissions and prohibits visible fugitive dust emissions beyond the property line. WSP will take reasonable precautions to limit its fugitive dust emissions.

Rule 5 outlines fugitive PM emission limitations. Additionally, 326 IAC 6-5-3 requires new sources of fugitive PM emissions requiring a permit to submit a fugitive PM emissions control plan or request for an exemption with their permit application.[29] As detailed in the PTE calculations in **Appendix C**, fugitive emissions at the facility are minimal and only associated with paved road dust. As such, as part of this application, the WSP facility is requesting an exemption from the requirement to submit a fugitive PM emissions control plan.

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[28] 326 IAC 5-1-2(1)

[29] 326 IAC 6-5-3(b)

4.8.3 326 IAC Article 7 – Sulfur Dioxide Rules

This regulation limits the SO_2 emissions from facility sources. The WSP facility will be located in Delaware County, which does not have any county-specific SO_2 emission limitations. The requirements of 326 IAC 7 are only applicable to emission units with potential SO_2 emissions greater than 25 tpy or 10 tph. Because the WSP facility has SO_2 potential emissions less than those thresholds, Article 7 does not apply.

4.8.4 326 IAC Article 8 – Volatile Organic Compound Rules

This regulation establishes VOC emission standards from facility sources. Pursuant to 326 IAC 8-1-6, if the facility-wide VOC PTE is greater than 25 tpy, the facility shall reduce VOC emissions using Best Available Control Technology (BACT). The WSP facility's VOC emissions are less than 25 tpy, and therefore, the facility is not required to conduct a BACT analysis for VOC.

Under Rule 9 of this Article, WSP will be subject to the reporting and recordkeeping requirements for storage of VOCs in the proposed 10,000-gallon diesel storage tank.[30] WSP expects to comply with this requirement.

4.8.5 326 IAC Article 9 – Carbon Monoxide Emission Rules

Article 9 establishes CO emission limits for all stationary sources that began operating after March 21, 1972. Pursuant to 326 IAC 9-1-1(b), sources that are subject to a CO emission limit in 40 CFR 60 or 40 CFR 63 are exempt from this rule.[31] In addition, 326 IAC 9-1-2 lists specific sources that are subject to CO emission limits; WSP's operations are not one of the list facility types. Therefore, 326 IAC 9 does not apply to WSP.

4.8.6 326 IAC Article 10 – Nitrogen Oxides Rules

This regulation limits the NO_X emissions for specific source categories and counties. There are no county-specific NO_X emission limits for sources in Delaware County. Further, the WSP facility will not operate any of the listed source categories in Rule 2 or Rule 3 that are subject to emission limitations. As such, 326 IAC 10 does not apply.

4.8.7 326 IAC Article 14 – Emissions Standards for Hazardous Air Pollutants

Article 14 provides HAP emission standards for specific sources. Because the WSP facility is not one of the sources listed in 326 IAC 14, this regulation does not apply.

4.8.8 326 IAC Article 15 – Lead Rules

Article 15 provides lead emission standards for specific sources. Because the WSP facility is not one of the sources listed in 326 IAC 15-1-2(a)(1), this regulation does not apply.

4.8.9 326 IAC Article 20 – Hazardous Air Pollutants

Article 20 provides HAP emission standards for specific sources. Rule 13.1 applies to secondary lead smelters. As discussed in Section 4.2 of this permit application, WSP's operations do not fall under the definition of secondary metal smelting facility. In addition, no other rules under Article 20 apply to WSP's operations. Thus, this regulation does not apply.

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30 326 IAC 8-9-1(a)

31 326 IAC 9-1-1(b)

APPENDIX A
IDEM PERMIT APPLICATION FORMS

OAQ AIR PERMIT APPLICATION – FORMS CHECKLIST

State Form 51607 (R5 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permit Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this checklist is to help the applicant and IDEM, OAQ ensure that the air permit application packet is administratively complete. This checklist is a required form.
- Check the appropriate box indicating whether each application form is applicable for the current permit application. The source must submit only those forms pertinent to the current permit application.
- Place this checklist between the cover sheet and all subsequent forms and attachments that encompass your air permit application packet.

Part A: General Source Data

Applicable?	Form ID	Title of Form	State Form Number	When should this form be included in my application packet?
☒ Y ☐ N	COVER	Application Cover Sheet	50639	Include for every application, modification, and renewal, including source specific operating agreements (SSOA).
☒ Y ☐ N	CHECKLIST	Forms Checklist	51607	Include for every application, modification, and renewal, including SSOA.
☒ Y ☐ N	GSD-01	Basic Source Level Information	50640	Include for every application, modification, and renewal, including SSOA.
☒ Y ☐ N	GSD-02	Plant Layout Diagram	51605	Include for every new source application, and modification.
☒ Y ☐ N	GSD-03	Process Flow Diagram	51599	Include one for every process covered by the application.
☒ Y ☐ N	GSD-04	Stack / Vent Information	51606	Include for every new source application, and modification.
☒ Y ☐ N	GSD-05	Emissions Unit Information	51610	Include for every process covered by the application.
☒ Y ☐ N	GSD-06	Particulate Emissions Summary	51612	Include if the process has particulate emissions (PM).
☒ Y ☐ N	GSD-07	Criteria Pollutant Emissions Summary	51602	Include if the process has criteria pollutant emissions.
☒ Y ☐ N	GSD-08	HAP Emissions Summary	51604	Include if the process has hazardous air pollutant emissions (HAP).
☒ Y ☐ N	GSD-09	Summary of Additional Information	51611	Include if the additional information is included.
☒ Y ☐ N	GSD-10	Insignificant Activities	51596	Include if there are unpermitted insignificant activities.
☐ Y ☒ N	GSD-11	Alternative Operating Scenario	51601	Include if an AOS is requested.
☐ Y ☒ N	GSD-12	Affidavit of Nonapplicability	51600	Include if the standard notification requirements do not apply.
☒ Y ☐ N	GSD-13	Affidavit of Applicability	51603	Include if the standard notification requirements apply.
☒ Y ☐ N	GSD-14	Owners and Occupants Notified	51609	Include if the standard notification requirements apply.
☒ Y ☐ N	GSD-15	Government Officials Notified	51608	Include if the standard notification requirements apply.
☐ Y ☒ N	RENEWAL	Renewal Checklist	51755	Include with every operating permit renewal packet.

Continued on Next Page

Part B: Process Information				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	AEF-01	Alternate Emission Factor Request	51860	Submit if you are requesting to use an emission factor other than AP-42.
☒ Y ☐ N	PI-01	Miscellaneous Processes	52534	Include one form for each process for which there is not a specific PI form.
☒ Y ☐ N	PI-02A	Combustion Unit Summary	52535	Include one form to summarize all combustion units *(unless SSOA).*
☒ Y ☐ N	PI-02B	*Combustion:* Boilers, Process Heaters, & Furnaces	52536	Include one form for each boiler, process heater, or furnace *(unless SSOA).*
☐ Y ☒ N	PI-02C	*Combustion:* Turbines & Internal Combustion Engines	52537	Include one form for each turbine or internal combustion engine *(unless SSOA).*
☐ Y ☒ N	PI-02D	*Combustion:* Incinerators & Combustors	52538	Include one form for each incinerator or combustor *(unless SSOA).*
☒ Y ☐ N	PI-02E	*Combustion:* Kilns	52539	Include one form for each kiln *(unless SSOA).*
☒ Y ☐ N	PI-02F	*Combustion:* Fuel Use	52540	Include one form for each combustion unit *(unless SSOA).*
☒ Y ☐ N	PI-02G	*Combustion:* Emission Factors	52541	Include one form for each combustion unit *(unless SSOA).*
☒ Y ☐ N	PI-02H	*Combustion:* Federal Rule Applicability	52542	Include one form for each combustion unit *(unless SSOA).*
☒ Y ☐ N	PI-03	Storage and Handling of Bulk Material	52543	Include if the process involves the storage and handling of bulk materials.
☐ Y ☒ N	PI-04	Asphalt Plants	52544	Include for each asphalt plant process (*unless general permit*).
☐ Y ☒ N	PI-05	Brick / Clay Products	52545	Include for each brick and/or clay products process.
☐ Y ☒ N	PI-06	Electroplating Operations	52546	Include for each electroplating process.
☐ Y ☒ N	PI-07	Welding Operations	52547	Include for each welding process.
☐ Y ☒ N	PI-08	Concrete Batchers	52548	Include for each concrete batcher *(unless SSOA).*
☐ Y ☒ N	PI-09	Degreasing	52549	Include for each degreasing process *(unless SSOA).*
☐ Y ☒ N	PI-10	Dry Cleaners	52550	Include for each dry cleaning process
☐ Y ☒ N	PI-11	Foundry Operations	52551	Include for each foundry process
☐ Y ☒ N	PI-12	Grain Elevators	52552	Include for each grain elevator *(unless SSOA).*
☐ Y ☒ N	PI-13	Lime Manufacturing	52553	Include for each lime manufacturing process.
☐ Y ☒ N	PI-14	Liquid Organic Compound Storage	52554 (doc)	Include if the process involves the storage of liquid organic compounds.
☐ Y ☒ N	PI-14ALT	Alternate version of Liquid Organic Compound Storage	52555 (xls)	Include if the process involves the storage of liquid organic compounds and there are several storage vessels.
☐ Y ☒ N	PI-15	Portland Cement Manufacturing	52556	Include for each Portland cement manufacturing process.
☐ Y ☒ N	PI-16	Reinforced Plastics & Composites	52557	Include for each reinforced plastics and composites process.

Continue Next Page

Part B: Process Information				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	PI-17	Blasting Operations	52558	Include for each blasting process *(unless SSOA).*
☐ Y ☒ N	PI-18	Mineral Processing	52559	Include if the process involves mineral processing *(unless SSOA).*
☐ Y ☒ N	PI-19	Surface Coating & Printing Operations	52560	Include for each surface coating or printing process *(unless SSOA).*
☐ Y ☒ N	PI-20	Woodworking / Plastic Machining	52561	Include for each woodworking or plastic machining process *(unless SSOA).*
☐ Y ☒ N	PI-21	Site Remediation	52570	Include for each soil remediation process.
☐ Y ☒ N	PI-22	Ethanol Plants *(Under Development)*	None	Include for each ethanol plant.

Part C: Control Equipment				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☒ Y ☐ N	CE-01	Control Equipment Summary	51904	Include if add-on control equipment will be used for the process.
☒ Y ☐ N	CE-02	Particulates – Baghouse / Fabric Filter	51953	Include for each baghouse or fabric filter.
☐ Y ☒ N	CE-03	Particulates – Cyclone	52620	Include for each cyclone.
☐ Y ☒ N	CE-04	Particulates – Electrostatic Precipitator	52621	Include for each electrostatic precipitator.
☐ Y ☒ N	CE-05	Particulates – Wet Collector / Scrubber / Absorber	52622	Include for each wet collector, scrubber, or absorber.
☐ Y ☒ N	CE-06	Organics – Flare / Oxidizer / Incinerator	52623	Include for each flare, oxidizer, or incinerator.
☐ Y ☒ N	CE-07	Organics – Adsorbers	52624	Include for each adsorber.
☐ Y ☒ N	CE-08	Organics – Condenser	52625	Include for each condenser.
☐ Y ☒ N	CE-09	Reduction Technology	52626	Include for each control device using reduction technology (e.g., SCR, SNCR).
☐ Y ☒ N	CE-10	Miscellaneous Control Equipment	52436	Include one form for equipment for which there is not a specific CE form.

Continued on Next Page

Part D: Compliance Determination for Part 70 Sources				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☒ Y ☐ N	CD-01	Emissions Unit Compliance Status	51861	Include for every Title V application, including modifications.
☒ Y ☐ N	CD-02	Compliance Plan by Applicable Requirement	51862	Include for every Title V application, including modifications.
☐ Y ☒ N	CD-03	Compliance Plan by Emissions Unit	51863	Include for every Title V application, including modifications.
☒ Y ☐ N	CD-04	Compliance Schedule and Certification	51864	Include for every Title V application, including modifications and renewal.
☐ Y ☒ N	FED-03	Compliance Assurance Monitoring	53377	Include for every Title V application, including modifications.

Part E: Best Available Control Technology				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	BACT-01	Analysis of Best Available Control Technology	None	Include for every BACT application.
☐ Y ☒ N	BACT-01a	Background Search: Existing BACT Determinations	None	Include for every BACT application.
☐ Y ☒ N	BACT-01b	Cost/Economic Impact Analysis	None	Include for every BACT application.
☐ Y ☒ N	BACT-02	Summary of Best Available Control Technology	None	Include for every BACT application.
☐ Y ☒ N	PSD / EO-01	PSD / Emission Offset Checklist	None	Include for every PSD application and every NSR application that requires emission offsets.

Part F: Emission Credit Registry				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	EC-01	Generation of Emission Credits	51783	Include if the modification results in emission reductions.
☐ Y ☒ N	EC-02	Transfer of Emission Credits	51784	Submit whenever registered emission credits are transferred.
☐ Y ☒ N	EC-03	Use of Emission Credits	51785	Include if the modification requires the use of emission credits for offsets.
☐ Y ☒ N	EC-04	Emission Credit Request	51906	Submit if you are looking for emission credits for offsets.

Continue Next Page

Part G: Plantwide Applicability Limits				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	PAL-01	Actuals Plantwide Applicability Limit	52451	Include if the modification results in emission reductions.
☐ Y ☒ N	PAL-02	Revised Plantwide Applicability Limit	52452	Submit whenever registered emission credits are transferred.
☐ Y ☒ N	PAL-03	Plantwide Applicability Limit Renewal	52453	Include if the modification requires the use of emission credits for offsets.
☐ Y ☒ N	PAL-04	Request for Termination of Plantwide Applicability Limit	52454	Submit if you are looking for emission credits for offsets.

Part H: Air Toxics				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☒ Y ☐ N	FED-01	Summary of Federal Requirements – NSPS & NESHAP	53512	Include for each 40 CFR Part 60 NSPS, 40 CFR Part 61 NESHAP, and 40 CFR Part 63 NESHAP applicable to the process.
☒ Y ☐ N	FED-02	MACT Pre-Construction Review	51905	Include if constructing or modifying a process subject to a Part 63 NESHAP.
☐ Y ☒ N	No Form ID	MACT Initial Notification	None	This form is available on the U.S. EPA website. Completed notifications should be submitted to the IDEM Compliance Branch.

Part I: Special Permits				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	INTERIM	Interim Approval	None	Submit if you are applying for interim operating approval.
☐ Y ☒ N	ASPHALT	Asphalt General Permit	None	Submit if you are applying for or modifying an asphalt plant general permit.
☐ Y ☒ N	NOXBTP	NO_x Budget Permit	None	Submit if you are a power plant or if you have opted in to the NO_x budget trading program.
☐ Y ☒ N	ACIDRAIN	Phase 2 Acid Rain Permit	None	Submit if you are applying for, modifying, or renewing a Phase 2 Acid Rain permit.

Continued on Next Page

Part J: Source Specific Operating Agreements (SSOA)				
Applicable?	**Form ID**	**Title of Form**	**State Form Number**	**When should this form be included in my application packet?**
☐ Y ☒ N	OA-01	Summary of Application and Existing Agreements	53438	Submit if you are applying for or modifying a Source Specific Operating Agreement.
☐ Y ☒ N	OA-02	Industrial / Commercial Surface Coating Operations -OR- Graphic Arts Operations (326 IAC 2-9-2.5)	53439	Submit if you are applying for or modifying a SSOA for industrial or commercial surface coating operations not subject to 326 IAC 8-2; or graphic arts operations not subject to 326 IAC 8-5-5.
☐ Y ☒ N	OA-03	Surface Coating or Graphic Arts Operations (326 IAC 2-9-3)	53440	Submit if you are applying for or modifying a SSOA for surface coating or graphic arts operations.
☐ Y ☒ N	OA-04	Woodworking Operations (326 IAC 2-9-4)	53441	Submit if you are applying for or modifying a SSOA for woodworking operations.
☐ Y ☒ N	OA-05	Abrasive Cleaning Operations (326 IAC 2-9-5)	53442	Submit if you are applying for or modifying a SSOA for abrasive cleaning operations.
☐ Y ☒ N	OA-06	Grain Elevators (326 IAC 2-9-6)	53443	Submit if you are applying for or modifying a SSOA for grain elevators.
☐ Y ☒ N	OA-07	Sand And Gravel Plants (326 IAC 2-9-7)	53444	Submit if you are applying for or modifying a SSOA for sand and gravel plants.
☐ Y ☒ N	OA-08	Crushed Stone Processing Plants (326 IAC 2-9-8)	53445	Submit if you are applying for or modifying a SSOA for crushed stone processing plants.
☐ Y ☒ N	OA-09	Ready-Mix Concrete Batch Plants (326 IAC 2-9-9)	53446	Submit if you are applying for or modifying a SSOA for ready-mix concrete batch plants.
☐ Y ☒ N	OA-10	Coal Mines And Coal Preparation Plants (326 IAC 2-9-10)	53447	Submit if you are applying for or modifying a SSOA for coal mines and coal preparation plants.
☐ Y ☒ N	OA-11	Automobile Refinishing Operations (326 IAC 2-9-11)	53448	Submit if you are applying for or modifying a SSOA for automobile refinishing operations.
☐ Y ☒ N	OA-12	Degreasing Operations (326 IAC 2-9-12)	53449	Submit if you are applying for or modifying a SSOA for degreasing operations.
☐ Y ☒ N	OA-13	External Combustion Sources (326 IAC 2-9-13)	53450	Submit if you are applying for or modifying a SSOA for external combustion sources.
☐ Y ☒ N	OA-14	Internal Combustion Sources (326 IAC 2-9-14)	53451	Submit if you are applying for or modifying a SSOA for internal combustion sources.

AIR PERMIT APPLICATION COVER SHEET

State Form 50639 (R4 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this cover sheet is to obtain the core information needed to process the air permit application. This cover sheet is required for all air permit applications submitted to IDEM, OAQ. Place this cover sheet on top of all subsequent forms and attachments that encompass your air permit application packet.
- Submit the completed air permit application packet, including all forms and attachments, to **IDEM Air Permits Administration** using the address in the upper right hand corner of this page.
- IDEM will send a bill to collect the filing fee and any other applicable fees.
- Detailed instructions for this form are available on the Air Permit Application Forms website.

FOR OFFICE USE ONLY

PERMIT NUMBER:

DATE APPLICATION WAS RECEIVED:

Received
State of Indiana
APR 11 2019
Dept of Environmetal Management
Office of Air Quality

1. Tax ID Number:

PART A: Purpose of Application

Part A identifies the purpose of this air permit application. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

2. Source / Company Name: Waelz Sustainable Products, LLC **3. Plant ID:** –

4. Billing Address: 5401 West Kilgore Aveue

City: Muncie **State:** IN **ZIP Code:** 47304 –

5. Permit Level: ☐ Exemption ☐ Registration ☐ SSOA ☐ MSOP ☐ FESOP ☑ TVOP ☐ PBR

6. Application Summary: *Check all that apply. Multiple permit numbers may be assigned as needed based on the choices selected below.*

☑ Initial Permit
☐ Review Request
☐ Interim Approval
☐ Site Closure
☐ Renewal of Operating Permit
☐ Revocation of Operating Permit
☐ Relocation of Portable Source
☐ Emission Reduction Credit Registry
☐ Asphalt General Permit
☐ Alternate Emission Factor Request
☐ Acid Deposition (Phase II)

☐ Transition (between permit levels) *From:* *To:*

☐ Administrative Amendment:
☐ *Company Name Change*
☐ *Correction to Non-Technical Information*
☐ *Other (specify):*
☐ *Change of Responsible Official*
☐ *Notice Only Change*

☐ Modification:
☐ *New Emission Unit or Control Device*
☐ *New Applicable Permit Requirement*
☐ *Prevention of Significant Deterioration*
☐ *Minor Source Modification*
☐ *Minor Permit Modification*
☐ *Other (specify):*
☐ *Modified Emission Unit or Control Device*
☐ *Change to Applicability of a Permit Requirement*
☐ *Emission Offset*
☐ *MACT Preconstruction Review*
☐ *Significant Source Modification*
☐ *Significant Permit Modification*

7. Is this an application for an initial construction and/or operating permit for a **"Greenfield" Source**? ☑ Yes ☐ No

8. Is this an application for construction of a new emissions unit at an **Existing Source**? ☐ Yes ☑ No

Continued on Next Page

PART B: Pre-Application Meeting

Part B specifies whether a meeting was held or is being requested to discuss the permit application.

9. Was a meeting held between the company and IDEM prior to submitting this application to discuss the details of the project?

☐ No ☑ Yes: *Date:* November 7, 2018

10. Would you like to schedule a meeting with IDEM management and your permit writer to discuss the details of this project?

☑ No ☐ Yes: *Proposed Date for Meeting:*

PART C: Confidential Business Information

Part C identifies permit applications that require special care to ensure that confidential business information is kept separate from the public file.

Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in the Indiana Administrative Code (IAC). To ensure that your information remains confidential, refer to the IDEM, OAQ information regarding submittal of confidential business information. For more information on confidentiality for certain types of business information, please review IDEM's Nonrule Policy Document Air-031-NPD regarding Emission Data.

11. Is any of the information contained within this application being claimed as **Confidential Business Information**?

☑ No ☐ Yes

PART D: Certification Of Truth, Accuracy, and Completeness

Part D is the official certification that the information contained within the air permit application packet is truthful, accurate, and complete. Any air permit application packet that we receive without a signed certification will be deemed incomplete and may result in denial of the permit.

For a Part 70 Operating Permit (TVOP) or a Source Specific Operating Agreement (SSOA), a "responsible official" as defined in 326 IAC 2-7-1(34) must certify the air permit application. For all other applicants, this person is an "authorized Individual" as defined in 326 IAC 2-1.1-1(1).

☑ *I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete.*

Nigel Morrsion	President
Name *(typed)*	Title
NCMorrsion	4/8/2019
Signature	Date

ORIGINAL

ORIGINAL

OAQ GENERAL SOURCE DATA APPLICATION
GSD-01: Basic Source Level Information

State Form 50640 (R5 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Received
State of Indiana
APR 11 2019
Department of Environmental Management
Office of Air Quality

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of GSD-01 is to provide essential information about the entire source and all pollutant emissions. GSD-01 is a required form.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

PART A: Source / Company Location Information

1. **Source / Company Name**: Waelz Sustainable Products, LLC
2. **Plant ID**: –
3. **Location Address**: 5401 West Kilgore Avenue
   City: Muncie | **State**: IN | **ZIP Code**: 47304 –
4. **County Name**: Delaware
5. **Township Name**: Mount Pleasant
6. **Geographic Coordinates**:
   Latitude: 40.181027 | **Longitude**: -85.448685
7. **Universal Transferal Mercadum Coordinates** *(if known)*:
   Zone: | **Horizontal**: | **Vertical**:
8. **Adjacent States**: Is the source located within 50 miles of an adjacent state?
   ☐ No ☒ Yes – *Indicate Adjacent State(s):* ☐ Illinois (IL) ☐ Michigan (MI) ☒ Ohio (OH) ☐ Kentucky (KY)
9. **Attainment Area Designation**: Is the source located within a non-attainment area for any of the criteria air pollutants?
   ☒ No ☐ Yes – *Indicate Nonattainment Pollutant(s):* ☐ CO ☐ Pb ☐ NO_x ☐ O_3 ☐ PM ☐ PM_{10} ☐ $PM_{2.5}$ ☐ SO_2
10. **Portable / Stationary**: Is this a portable or stationary source? ☐ Portable ☒ Stationary

PART B: Source Summary

11. **Company Internet Address** *(optional)*:
12. **Company Name History**: Has this source operated under any other name(s)?
    ☒ No ☐ Yes – *Provide information regarding past company names in Part I, Company Name History.*
13. **Portable Source Location History**: Will the location of the portable source be changing in the near future?
    ☒ Not Applicable ☐ No ☐ Yes – *Complete Part J, Portable Source Location History, and Part K, Request to Change Location of Portable Source.*
14. **Existing Approvals**: Have any exemptions, registrations, or permits been issued to this source?
    ☒ No ☐ Yes – *List these permits and their corresponding emissions units in Part M, Existing Approvals.*
15. **Unpermitted Emissions Units**: Does this source have any unpermitted emissions units?
    ☒ No ☐ Yes – *List all unpermitted emissions units in Part N, Unpermitted Emissions Units.*
16. **New Source Review**: Is this source proposing to construct or modify any emissions units?
    ☐ No ☒ Yes – *List all proposed new construction in Part O, New or Modified Emissions Units.*
17. **Risk Management Plan**: Has this source submitted a Risk Management Plan?
    ☒ Not Required ☐ No ☐ Yes → Date submitted: EPA Facility Identifier: – –

Continued on Next Page

PART C: Source Contact Information

IDEM will send the original, signed permit decision to the person identified in this section. This person MUST be an employee of the permitted source.

18. Name of Source Contact Person: Craig Hogarth

19. Title *(optional)*: Director of Safety & Compliance

20. Mailing Address: 7901 West Morris Street

City: Indianapolis	**State**: IN	**ZIP Code**: 46231 –

21. Electronic Mail Address *(optional)*: craig.hogarth@heritage-enviro.com

22. Telephone Number: (317) 486 – 2783	**23. Facsimile Number** *(optional)*: ( ) –

PART D: Authorized Individual/Responsible Official Information

IDEM will send a copy of the permit decision to the person indicated in this section, if the Authorized Individual or Responsible Official is different from the Source Contact specified in Part C.

24. Name of Authorized Individual or Responsible Official: Nigel Morrison

25. Title: President

26. Mailing Address: 3719 West 96th Street

City: Indianapolis	**State**: IN	**ZIP Code**: 46268 –

27. Telephone Number: (317) 847 – 4955	**28. Facsimile Number** *(optional)*: ( ) –

29. Request to Change the Authorized Individual or Responsible Official: Is the source officially requesting to change the person designated as the Authorized Individual or Responsible Official in the official documents issued by IDEM, OAQ? *The permit may list the title of the Authorized Individual or Responsible Official in lieu of a specific name.*

☒ No ☐ Yes – ***Change Responsible Official to:***

PART E: Owner Information

30. Company Name of Owner: Waelz Sustainable Products, LLC

31. Name of Owner Contact Person: Craig Hogarth

32. Mailing Address: 7901 West Morris Street

City: Indianapolis	**State**: IN	**ZIP Code**: 46231 –

33. Telephone Number: (317) 486 – 2783	**34. Facsimile Number** *(optional)*: ( ) –

34. Operator: Does the "Owner" company also operate the source to which this application applies?

☐ No – *Proceed to Part F below.*	☒ Yes – *Enter "SAME AS OWNER" on line 35 and proceed to Part G below.*

PART F: Operator Information

35. Company Name of Operator: Same as owner

36. Name of Operator Contact Person:

37. Mailing Address:

City:	**State**:	**ZIP Code**: –

38. Telephone Number: ( ) –	**39. Facsimile Number** *(optional)*: ( ) –

Continued on Next Page

PART G: Agent Information

40. Company Name of Agent: Ramboll US Corporation

41. Type of Agent: ☒ Environmental Consultant ☐ Attorney ☐ Other (specify):

42. Name of Agent Contact Person: Rachel Velthuisen

43. Mailing Address: 6 Davis Drive, Suite 139

City: Research Triangle Park	**State**: NC	**ZIP Code**: 27709 –

44. Electronic Mail Address *(optional)*: rvelthuisen@ramboll.com

45. Telephone Number: (919) 765 – 8027	**46. Facsimile Number** *(optional)*: ( ) –

47. Request for Follow-up: Does the "Agent" wish to receive a copy of the preliminary findings during the public notice period (if applicable) and a copy of the final determination? ☐ No ☒ Yes

PART H: Local Library Information

48. Date application packet was filed with the local library: on or before 4/20/2019

49. Name of Library: Muncie Public Library

50. Name of Librarian *(optional)*:

51. Mailing Address: 1901 S Liberty Street

City: Muncie	**State**: IN	**ZIP Code**: 47305 –

52. Internet Address *(optional)*:

53. Electronic Mail Address *(optional)*:

54. Telephone Number: (765) 747 – 8200	**55. Facsimile Number** *(optional)*: ( ) –

PART I: Company Name History *(if applicable)*

Complete this section only if the source has previously operated under a legal name that is different from the name listed above in Section A.

56. Legal Name of Company	**57. Dates of Use**
	to
	to
	to
	to
	to
	to
	to
	to
	to
	to

58. Company Name Change Request: Is the source officially requesting to change the legal name that will be printed on all official documents issued by IDEM, OAQ?

☐ No ☐ Yes – ***Change Company Name to***:

Continued on Next Page

PART J: Portable Source Location History *(if applicable)*

Complete this section only if the source is portable and the location has changed since the previous permit was issued. The current location of the source should be listed in Section A.

59. Plant ID	60. Location of the Portable Source	61. Dates at this Location
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to
–		to

PART K: Request to Change Location of Portable Source *(if applicable)*

Complete this section to request a change of location for a portable source.

62. Current Location:

Address:

City: | **State**: | **ZIP Code**: –

County Name:

63. New Location:

Address:

City: | **State**: | **ZIP Code**: –

County Name:

Continued on Next Page

PART L: Source Process Description

Complete this section to summarize the main processes at the source.

64. Process Description	65. Products	66. SIC Code	67. NAICS Code
Secondary Smelting and Refining of	Zinc Oxide and Iron Product	3341	331492
Nonferrous Metals.			
(See application narrative for more details)			

PART M: Existing Approvals *(if applicable)*

Complete this section to summarize the approvals issued to the source since issuance of the main operating permit.

68. Permit ID	69. Emissions Unit IDs	70. Expiration Date

PART N: Unpermitted Emissions Units *(if applicable)*

Complete this section only if the source has emission units that are not listed in any permit issued by IDEM, OAQ.

71. Emissions Unit ID	72. Type of Emissions Unit	73. Actual Dates		
		Began Construction	Completed Construction	Began Operation

PART O: New or Modified Emissions Units *(if applicable)*

Complete this section only if the source is proposing to add new emission units or modify existing emission units.

74. Emissions Unit ID	75. NEW	76. MOD	77. Type of Emissions Unit	78. Estimated Dates		
				Begin Construction	Complete Construction	Begin Operation
ALL	X		All emission units are new at the facility. Refer to form GSD-05 for a detailed list of new emission units.	8/1/2019	2/1/2021	3/1/2021

Continued on Next Page

OAQ GENERAL SOURCE DATA APPLICATION
GSD-02: Plant Layout Diagram

State Form 51605 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of GSD-02 is to provide a diagram of the entire plant site. This form and a Plant Layout diagram are required for all air permit applications. If you do not provide the necessary information, applicable to your source, the application process may be stopped.
- IDEM, OAQ has provided detailed instructions for this form and an example of a basic plant layout diagram on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Part A: Basic Plant Layout

Part A provides IDEM, OAQ with the appropriate information about all buildings and access-limiting features in and around the plant site. **Please use this table as a checklist.** You must provide scaled drawings, with the actual scale shown. All dimensions and units must be clearly indicated with a brief explanation of what is being shown. Include the following (*All measurements should be given in feet.*):

1.	☒ Building Location and Dimensions	***Because WSP is a new facility, exact structures and***
2.	☐ Property Lines and Access-Limiting Features	***locations are unavailable. After construction, WSP will***
3.	☐ Surrounding Building Location and Dimensions	***provide a revised Site Layout upon request.***
4.	☐ Distances to Property Lines and Access-Limiting Features	
5.	☐ UTM Location Coordinates	6. ☐ Compass (pointing North) 7. ☐ Scale

Part B: Stack Information

Part B provides IDEM, OAQ with the appropriate information about all stacks, roof monitors, control devices, and process vents at the plant site. **Please use this table as a checklist.** You must show the location of all applicable emission points and include all relevant stack and emissions unit identification numbers for each. In addition, you will need to identify each of these emission points under "Stack Identification" on form GSD-04, Stack/Vent Information. Include the following (*All measurements should be in feet.*):

8.	☒ Exhaust Stacks		***Because WSP is a new facility, exact structures and***
9.	☒ Process Vents		***locations are unavailable. After construction, WSP will***
10.	☐ Roof Monitors	☒ *No Roof Monitors*	***provide a revised Site Layout upon request.***
11.	☒ Control Devices	☐ *No Control Devices*	
12.	☐ Interior Vents	☒ *No Interior Vents*	☐ Doors and Windows *(for processes vented inside a building)*

Part C: Roadway Information

Part C provides IDEM, OAQ with the appropriate information about the roadways in and around the plant site. **Please use this table as a checklist.** Include the following (*All measurements should be in feet.*):

13.	☐ Adjacent Roadways ☐ Interior Roadways	***Because WSP is a new facility, exact structures and***
14.	☐ Roadway Surface Description (gravel, dirt, paved, etc.)	***locations are unavailable. After construction, WSP will***
15.	☐ Number of Lanes	***provide a revised Site Layout upon request.***

Continued on Next Page

Part D: Source Building Information

This table provides detailed information about each building at the plant site that is part of the source. If additional space is needed, you may make a copy of this table. (*All measurements should be given in feet.*)

16. Building ID	17. Building Description	18. Building Dimensions			19. Distance & direction to the nearest property line or access limiting feature (feet & compass coordinate)	20. Distance & direction to the nearest residence (feet & compass coordinate)
		Length (feet)	Width (feet)	Height (feet)		
B-1	Wip Building	219.82	114.83		TBD	TBD
B-2	Electric House Building	88.91	49.87		TBD	TBD
B-3	Maintenance Building	135.83	51.85		TBD	TBD
B-4	Air Compressor Building	62.99	54.46		TBD	TBD
B-5	Pelletazing Building	206.69	59.06		TBD	TBD
B-6	Carbon Receiving Building	114.17	246.06		TBD	TBD
B-7	Pelets Receiving Building	124.67	314.96		TBD	TBD
B-8	EAF Receiving Building	111.55	390.42		TBD	TBD
B-9	CCM	61.35	65.62		TBD	TBD
B-10	Warehouse Building	68.24	50.85		TBD	TBD
B-11	Office Building	101.71	68.90		TBD	TBD
B-12	Storage Finished Product	204.72	85.30		TBD	TBD
B-13	Mobile Equipment Maintenance Building	62.34	52.49		TBD	TBD
B-14	Security Room	29.53	13.12		TBD	TBD

Continue Next Page

Continued on Next Page

Part E: Surrounding Building / Residence Information

This table provides detailed information about each building or residence surrounding the plant site. If additional space is needed, you may make a copy of this table. (*All measurements should be given in feet.*)

21. Surrounding Building / Residence Description	22. Surrounding Building / Residence Property Dimensions			23. Distance & direction to the nearest property line or access limiting feature (feet & compass coordinate)	24. Building ID of nearest building on the plant site	25. Distance & direction to the nearest building on the plant site (feet & compass coordinate)
	Length (feet)	Width (feet)	Height (feet)			
TBD						

Continue Next Page

Part F: Plant Layout Diagram

This space provides a place for a hand drawn plant layout diagram. It is **optional** to use this space to create your plant layout, but you must include the diagram with your application. If you choose to submit the plant layout in a different format, state "plant layout attached" in the space provided, and submit the information with your completed application. IDEM, OAQ has provided an example of a basic plant layout diagram on the Air Permit Applications Forms website.

The site is located at 5401 West Kilgore Ave, Muncie, Indiana. Several figures are included in the application package, including a site layout diagram.

OAQ GENERAL SOURCE DATA APPLICATION
GSD-03: Process Flow Diagram

State Form 51599 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of GSD-03 is to provide a checklist for identifying the information to be included on each Process Flow diagram.
- Complete this form and submit a process flow diagram for each process included in your air permit application.
- IDEM, OAQ has provided detailed instructions for this form and an example of a basic process flow diagram on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Part A: Process Flow Diagram

Part A provides basic information to understanding the nature of the process. Please use this table as a checklist to indicate that you have included the following items on your process flow diagram (*All throughputs should be given in pounds per hour.*):

1. ☒ **Process Description:** See application narrative		
2. ☒ Process Equipment	3. ☒ Raw Material Input	4. ☒ Process Throughput
5. ☒ Additions ☐ Deletions ☐ Modifications		

Use the space below to briefly explain the impacts of the additional equipment, the reason for removing any equipment, and/or the reason for the proposed modification. (*If additional space is needed, please attach a separate sheet with the information and indicate in the space below that additional information is attached.*)

New facility.

Part B: Process Operation Schedule

Part B indicates the actual (or estimated actual) hours of operation for the process.

6. ☒ Process Operation Schedule 24 Hours per Day 7 Days per Week 52 Weeks Per Year

7. **Scheduled Downtime:** Use the space below to include as much information as is known about scheduled periods of downtime for this process. (*If additional space is needed, please attach a separate sheet with the information and indicate in the space below that additional information is attached.*)

Part C: Emissions Point Information

Part C provides information about each potential outlet of air pollutant emissions to the atmosphere. Please use this table as a checklist to indicate that you have included the following items on your process flow diagram (*All throughputs should be given in pounds per hour.*):

8. ☒ Stack / Vent Information
9. ☒ Pollutants Emitted
10. ☒ Air Pollution Control

Continued on Next Page

Part D: Process Flow Diagram

This space provides a place for a hand drawn process flow diagram. It is **optional** to use this space to create your process flow diagram, but you must include the diagram with your application. If you choose to submit the process flow diagram in a different format, state "process flow diagram attached" in the space provided, and submit the information with your completed application. IDEM, OAQ has provided an example of a basic process flow diagram on the Air Permit Applications Forms website.

The site is located at 5401 West Kilgore Ave, Muncie, Indiana. Several figures are included in the application package, including a site layout diagram.

OAQ GENERAL SOURCE DATA APPLICATION
GSD-04: Stack / Vent Information

State Form 51606 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to provide basic information about each stack or vent that has the potential to emit air pollutants. If you do not provide enough information to adequately describe each process vent and/or stack, the application process may be stopped. This form is required for all air permit applications.
- Detailed instructions for this form are available online on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Stack / Vent Information

This table provides detailed information about each stack or vent through which air pollutants could be released into the atmosphere. If an air stream is vented inside a building, the vent does not need to be listed on this form. If additional space is needed, you may make a copy of this form.

1. Stack / Vent ID	2. Type (V H W O)	3. Shape (C R O)	4. Outlet Dimensions (feet)	5. Height (feet)	6. Maximum Outlet Flow Rate (acfm)	7. Outlet Gas Temperature (Degrees F)	8. Related Stacks / Vents (B P O)
PC1	V	C	8.21	106.70	200000.00	320.0	
PC2	V	C	8.21	106.70	200000.00	320.0	
RBBH1	V	C	3.21	41.70	140000.00	77.0	
CBBH1	V	C	3.21	41.70	140000.00	77.0	
PBBH1	V	C	3.21	41.70	140000.00	77.0	
PBBH2	V	C	3.21	41.70	140000.00	77.0	
TBBH1	V	C	3.21	41.70	140000.00	140.0	
TBBH2	V	C	3.21	41.70	140000.00	140.0	
FPBV1	V	C	1.67	21.66	3145.00	212.0	
FPBV2	V	C	1.67	21.66	3145.00	212.0	
FPBV3	V	C	1.67	21.66	3145.00	212.0	
FPBV4	V	C	1.67	21.66	3145.00	212.0	
FPBV5	V	C	1.67	21.66	3145.00	212.0	
RMBV1	V	C	1.67	21.66	3145.00	77.0	
RMBV2	V	C	1.67	21.66	3145.00	77.0	
RMBV3	V	C	1.67	21.66	3145.00	77.0	
RMBV4	V	C	1.67	21.66	3145.00	77.0	

OAQ GENERAL SOURCE DATA APPLICATION
GSD-05: Emissions Unit Information

State Form 51610 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to provide basic information about each emissions unit that has the potential to emit air pollutants. This form is required for all air permit applications.
- Detailed instructions for this form are available online on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Emissions Unit Information

This table provides detailed information about each emissions unit that has the potential to emit air pollutants to the atmosphere. Accurate information is needed to determine the total potential to emit. If you do not provide enough information to adequately describe each emissions unit, the application process may be stopped. If additional space is needed, you may make a copy of this form.

1. Unit ID	2. Model Number	3. Serial Number	4. Description	5. Manufacturer	6. Installation Date	7. Maximum Capacity	8. Stack / Vent ID
KLN1	TBD	TBD	Kiln 1	TBD	08/2019	24.80 TPH	PC1
KLN2	TBD	TBD	Kiln 2	TBD	08/2019	24.80 TPH	PC2
RB1	TBD	TBD	EAF Receiving Building	N/A	08/2019	130.00 TPH	RBBH1
CB1	TBD	TBD	Carbon/Limestone Receiving Building	N/A	08/2019	100.00 TPH	CBBH1
PB1	TBD	TBD	Pelletizing Building	NA	08/2019	120.00 TPH	PBBH1, PBBH2
RM1	TBD	TBD	EAF Hopper 1 (Feed to Cone Pelletizer)	TBD	08/2019	80.00 TON	RMBV1
RM2	TBD	TBD	EAF Hopper 2 (Feed to Cone Pelletizer)	TBD	08/2019	80.00 TON	RMBV2
RM3	TBD	TBD	EAF Hopper 3 (Feed to Cone Pelletizer)	TBD	08/2019	80.00 TON	RMBV3
RM4	TBD	TBD	EAF Hopper 4 (Feed to Cone Pelletizer)	TBD	08/2019	80.00 TON	RMBV4
CP1	TBD	TBD	Cone Pelletizer 1	TBD	08/2019	60.00 TPH	PBBH1
CP2	TBD	TBD	Cone Pelletizer 2	TBD	08/2019	60.00 TPH	PBBH1
DRY1	NA	NA	Feed Dryer	TBD	08/2019	60.00 TPH	PBBH2
TB1	TBD	TBD	Kiln 1 Transition Building	NA	08/2019	24.80 TPH	TBBH1
TB2	TBD	TBD	Kiln 2 Transition Building	NA	08/2019	24.80 TPH	TBBH2
WB1	TBD	TBD	WIP Building	NA	08/2019	49.60 TPH	TBBH1, TBBH2

OAQ GENERAL SOURCE DATA APPLICATION
GSD-05: Emissions Unit Information
State Form 51610 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to provide basic information about each emissions unit that has the potential to emit air pollutants. This form is required for all air permit applications.
- Detailed instructions for this form are available online on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Emissions Unit Information

This table provides detailed information about each emissions unit that has the potential to emit air pollutants to the atmosphere. Accurate information is needed to determine the total potential to emit. If you do not provide enough information to adequately describe each emissions unit, the application process may be stopped. If additional space is needed, you may make a copy of this form.

1. Unit ID	2. Model Number	3. Serial Number	4. Description	5. Manufacturer	6. Installation Date	7. Maximum Capacity	8. Stack / Vent ID
FP1	TBD	TBD	Finished Product Silo No. 1 (Railway)	TBD	08/2019	200.00 TON	FPBV1
FP2	TBD	TBD	Finished Product Silo No. 2 (Railway)	TBD	08/2019	200.00 TON	FPBV2
FP3	TBD	TBD	Finished Product Silo No. 3 (Load Supersack)	TBD	08/2019	200.00 TON	FPBV3
FP4	TBD	TBD	Finished Product Silo No. 4 (Load Supersack)	TBD	08/2019	200.00 TON	FPBV4
FP5	TBD	TBD	Finished Product Silo No. 5 (Load Supersack)	TBD	08/2019	200.00 TON	FPBV5
EG1	TBD	TBD	Emergency Generator 1	TBD	08/2019	2000.00 HP	NA
EG2	TBD	TBD	Emergency Generator 2	TBD	08/2019	2000.00 HP	NA

OAQ GENERAL SOURCE DATA APPLICATION
GSD-06: Particulate Emissions Summary

State Form 51612 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permit Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to provide basic information about each source of particulate emissions. This form is required for all air permit applications.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Part A: Particulate Matter Emissions

Part A provides a summary of the type and amount of particulate emissions at the source. The state rules on particulate emissions are found in Title 326 of the Indiana Administrative Code, Article 6, Particulate Rules. If you do not provide enough information to adequately describe each source of particulate emissions, the application process may be stopped. If additional space is needed, you may make a copy of this table.

Emissions Point		Potential To Emit (tons per year)						
1. ID	2. Description	3. PM	4. PM-10	5. PM-2.5	6. TSP	7. Fugitive Dust	8. Fugitive PM	9. HAP PM
PC1	Kiln 1 Product collection baghouse [Emissions accounted under KLN1]							
KLN1	Kiln 1 Process Unit	17.85	17.85	17.85	26.78			1.56
PC2	Kiln 2 Product collection baghouse [Emissions accounted under KLN2]							
KLN2	Kiln 2 Process Unit	17.85	17.85	17.85	26.78			1.56
RBBH 1	EAF Receiving Building Baghouse	15.77	15.77	15.77				0.15
CBBH 1	Carbon/Limestone Receiving Building Baghouse	15.77	15.77	15.77				0.15
PBBH1	Pelletizing Building / Cone Pelletizers Baghouse	15.77	15.77	15.77				0.15
PBBH2	Pelletizing Building / Rotary Dryer Baghouse	15.77	15.77	15.77	23.65			0.15
TBBH1	Kiln 1 Transition Building / WIP Building Baghouse	15.77	15.77	15.77				0.17
TBBH2	Kiln 2 Transition Building / WIP Building Baghouse	15.77	15.77	15.77				0.17
EG1	Emergency Generator 1	0.35	0.35	0.35				0.00
EG2	Emergency Generator 2	0.35	0.35	0.35				0.00
FPBV1	Finished Product Silo No. 1 (Railway) Bin Vent Filter	0.35	0.35	0.35				0.01

Continued on Next Page

FPBV2	Finished Product Silo No. 2 (Railway) Bin Vent Filter	0.35	0.35	0.35				0.01
FPBV3	Finished Product Silo No. 3 (Load Supersack) Bin Vent Filter	0.35	0.35	0.35				0.01
FPBV4	Finished Product Silo No. 4 (Load Supersack) Bin Vent Filter	0.35	0.35	0.35				0.01
FPBV5	Finished Product Silo No. 5 (Load Supersack) Bin Vent Filter	0.35	0.35	0.35				0.01

Part B: Control of Particulate Emissions

Part C gathers information about how each source of particulate emissions is controlled. If you do not provide enough information to adequately describe how each source of particulate emissions is controlled, the application process may be stopped. If additional space is needed, you may make a copy of this table.

10. Emissions Point ID	11. Control Measure	12. Control Measure Description	13. Control Plan
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______

Air Permitting Rules 326 IAC 6-4 and 326 IAC 6-5 require fugitive dust to be controlled as needed to prevent dust from visibly crossing property lines. Parts C and D summarize sources of fugitive particulate emissions from process operations and unpaved roads.

PART C: Fugitive Dust *(if applicable)*

Part C identifies measures implemented for controlling fugitive particulate emissions from process operations and unpaved roads.

14. Dust Control Plans: *Check all that apply.* **15. Control Measures:**

☐ Conveying:	☐ Wet	☐ Dry
☐ Stock Piles:	☐ Open	☐ Covered
☐ Unpaved Roads: *Watered?*	☐ Yes	☐ No
☐ Other *(specify)*:		
☐ Other *(specify)*:		
☐ Other *(specify)*:		

PART D: Vehicular Traffic on Unpaved Roads *(if applicable)*

Part D gathers information on vehicular traffic patterns when the site contains unpaved roads. All data should be provided assuming peak hours of vehicular traffic. Two one-way trips equal one round trip. For external traffic (vehicles entering and leaving the property lines), the distance from the plant to the property line is the one-way trip distance.

16. Average Silt Content of Unpaved Roads: 0.00%

17. Vehicle Description	18. Max. No. round trips at peak hours (trips/hr)	19. Distance of one-way trip (miles/trip)	20. Max. vehicle speed (mph)	21. Max. gross vehicle weight *(fully loaded)* (tons)	22. Tare weight (tons)	23. No. of wheels on vehicle (wheels)
NA						

OAQ GENERAL SOURCE DATA APPLICATION
GSD-06: Particulate Emissions Summary

State Form 51612 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permit Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to provide basic information about each source of particulate emissions. This form is required for all air permit applications.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Part A: Particulate Matter Emissions

Part A provides a summary of the type and amount of particulate emissions at the source. The state rules on particulate emissions are found in Title 326 of the Indiana Administrative Code, Article 6, Particulate Rules. If you do not provide enough information to adequately describe each source of particulate emissions, the application process may be stopped. If additional space is needed, you may make a copy of this table.

Emissions Point		Potential To Emit (tons per year)						
1. ID	2. Description	3. PM	4. PM-10	5. PM-2.5	6. TSP	7. Fugitive Dust	8. Fugitive PM	9. HAP PM
RMBV 1	EAF Hopper No. 1 (Feed to Cone Pelletizer) Bin Vent Filter	0.35	0.35	0.35				0.02
RMBV 2	EAF Hopper No. 2 (Feed to Cone Pelletizer) Bin Vent Filter	0.35	0.35	0.35				0.02
RMBV 3	EAF Hopper No. 3 (Feed to Cone Pelletizer) Bin Vent Filter	0.35	0.35	0.35				0.02
RMBV 4	EAF Hopper No. 4 (Feed to Cone Pelletizer) Bin Vent Filter	0.35	0.35	0.35				0.02

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Part B: Control of Particulate Emissions

Part C gathers information about how each source of particulate emissions is controlled. If you do not provide enough information to adequately describe how each source of particulate emissions is controlled, the application process may be stopped. If additional space is needed, you may make a copy of this table.

10. Emissions Point ID	11. Control Measure	12. Control Measure Description	13. Control Plan
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______
	☐ No Control ☐ Dust Suppression ☐ Other: ______		☐ Yes ☐ No Date Submitted: ______

Air Permitting Rules 326 IAC 6-4 and 326 IAC 6-5 require fugitive dust to be controlled as needed to prevent dust from visibly crossing property lines. Parts C and D summarize sources of fugitive particulate emissions from process operations and unpaved roads.

PART C: Fugitive Dust *(if applicable)*

Part C identifies measures implemented for controlling fugitive particulate emissions from process operations and unpaved roads.

14. Dust Control Plans: *Check all that apply.*

15. Control Measures:

- ☐ Conveying: ☐ Wet ☐ Dry
- ☐ Stock Piles: ☐ Open ☐ Covered
- ☐ Unpaved Roads: *Watered?* ☐ Yes ☐ No
- ☐ Other *(specify)*:
- ☐ Other *(specify)*:
- ☐ Other *(specify)*:

PART D: Vehicular Traffic on Unpaved Roads *(if applicable)*

Part D gathers information on vehicular traffic patterns when the site contains unpaved roads. All data should be provided assuming peak hours of vehicular traffic. Two one-way trips equal one round trip. For external traffic (vehicles entering and leaving the property lines), the distance from the plant to the property line is the one-way trip distance.

16. Average Silt Content of Unpaved Roads:

17. Vehicle Description	18. Max. No. round trips at peak hours (trips/hr)	19. Distance of one-way trip (miles/trip)	20. Max. vehicle speed (mph)	21. Max. gross vehicle weight *(fully loaded)* (tons)	22. Tare weight (tons)	23. No. of wheels on vehicle (wheels)

OAQ GENERAL SOURCE DATA APPLICATION
GSD-07: Criteria Pollutant Emissions Summary

State Form 51602 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to provide the actual and potential emissions of each criteria pollutant emitted from the source. This form is required for all air permit applications.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Part A: Unit Emissions Summary

Part A provides the actual and potential emissions of each criteria pollutant emitted from each emissions unit. If you do not provide enough information to adequately describe the emissions from each emissions unit, the application process may be stopped.

1. Unit ID	2. Stack / Vent ID	3. Criteria Pollutant	4. Actual Emissions		5. Potential To Emit	
			Standard Units	Tons Per Year	Standard Units	Tons Per Year
KLN1	PC1	CO				84.06
		NOx				54.00
		Total PM, PM10, PM2.5				26.78
		SO2				9.45
		VOC				8.10
KLN2	PC2	CO				84.06
		NOx				54.00
		Total PM, PM10, PM2.5				26.78
		SO2				9.45
		VOC				8.10
DRY1	PBBH2	CO				6.13
		NOx				7.30
		Total PM, PM10, PM2.5				23.65
		SO2				0.04
		VOC				0.40

Continued on Next Page

Part B: Pollutant Emissions Summary

Part B provides the total actual and potential emissions of each criteria pollutant emitted from the source (including all emissions units and fugitive emissions at the source). If you do not provide enough information to adequately describe the total source emissions, the application process may be stopped.

6. Criteria Pollutant	7. Actual Emissions		8. Potential To Emit	
	Standard Units	Tons Per Year	Standard Units	Tons Per Year
Carbon Monoxide (CO)				181.43
Lead (Pb)	see GSD-08 for detailed info.	0.5		0.93
Nitrogen Oxides (NO_X)				140.02
Particulate Matter (PM)			(includes fugitives)	176.02
Particulate Matter less than 10μm (PM_{10})			(includes fugitives)	163.20
Particulate Matter less than 2.5μm ($PM_{2.5}$)			(includes fugitives)	160.78
Sulfur Dioxide (SO_2)				19.35
Volatile Organic Compounds (VOC)				17.35
Other *(specify)*:				

Part C: Fugitive VOC Emissions *(if applicable)*

Part C summarizes the sources of fugitive VOC emissions at the source and estimates VOC emissions from these emission points. Complete this table if you are required to provide fugitive emissions data pursuant to 326 IAC 2-2 or 326 IAC 2-3.

9. Fugitive Emissions Source	10. Emission Factor (lb/hr)	11. Number Leaking	12. Uncontrolled Potential To Emit	
			Pounds Per Hour	Tons Per Year
Compressor Seals				
Flanges				
Open-Ended Lines				
Pressure Relief Seals				
Pump Seals				
Sampling Connections				
Valves				
Other *(specify)*:				

OAQ GENERAL SOURCE DATA APPLICATION
GSD-07: Criteria Pollutant Emissions Summary

State Form 51602 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
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Facsimile Number: (317) 232-6749
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NOTES:

- The purpose of this form is to provide the actual and potential emissions of each criteria pollutant emitted from the source. This form is required for all air permit applications.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
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Part A: Unit Emissions Summary

Part A provides the actual and potential emissions of each criteria pollutant emitted from each emissions unit. If you do not provide enough information to adequately describe the emissions from each emissions unit, the application process may be stopped.

1. Unit ID	2. Stack / Vent ID	3. Criteria Pollutant	4. Actual Emissions		5. Potential To Emit	
			Standard Units	Tons Per Year	Standard Units	Tons Per Year
RB1	RBBH1	Total PM, PM10, PM2.5				15.77
PB1	PBBH1&2	Total PM, PM10, PM2.5				Included in DRY1&CP1
RM1	RMBV1	Total PM, PM10, PM2.5				0.35
RM2	RMBV2	Total PM, PM10, PM2.5				0.35
RM3	RMBV3	Total PM, PM10, PM2.5				0.35
RM4	RMBV4	Total PM, PM10, PM2.5				0.35
CP1	PBBH1	Total PM, PM10, PM2.5				15.77
CP2	PBBH1	Total PM, PM10, PM2.5				Included in CP1
TB1	TBBH1	Total PM, PM10, PM2.5				15.77
TB2	TBBH2	Total PM, PM10, PM2.5				15.77
FP1	FPBV1	Total PM, PM10, PM2.5				0.35
FP2	FPBV2	Total PM, PM10, PM2.5				0.35
FP3	FPBV3	Total PM, PM10, PM2.5				0.35
FP4	FPBV4	Total PM, PM10, PM2.5				0.35
FP5	FPBV5	Total PM, PM10, PM2.5				0.35

Continued on Next Page

Part B: Pollutant Emissions Summary

Part B provides the total actual and potential emissions of each criteria pollutant emitted from the source (including all emissions units and fugitive emissions at the source). If you do not provide enough information to adequately describe the total source emissions, the application process may be stopped.

6. Criteria Pollutant	7. Actual Emissions		8. Potential To Emit	
	Standard Units	Tons Per Year	Standard Units	Tons Per Year
Carbon Monoxide (CO)	PTE Included on first copy	of form GSD-07		
Lead (Pb)				
Nitrogen Oxides (NO_X)				
Particulate Matter (PM)				
Particulate Matter less than 10μm (PM_{10})				
Particulate Matter less than 2.5μm ($PM_{2.5}$)				
Sulfur Dioxide (SO_2)				
Volatile Organic Compounds (VOC)				
Other *(specify)*:				

Part C: Fugitive VOC Emissions *(if applicable)*

Part C summarizes the sources of fugitive VOC emissions at the source and estimates VOC emissions from these emission points. Complete this table if you are required to provide fugitive emissions data pursuant to 326 IAC 2-2 or 326 IAC 2-3.

9. Fugitive Emissions Source	10. Emission Factor (lb/hr)	11. Number Leaking	12. Uncontrolled Potential To Emit	
			Pounds Per Hour	Tons Per Year
Compressor Seals				
Flanges				
Open-Ended Lines				
Pressure Relief Seals				
Pump Seals				
Sampling Connections				
Valves				
Other *(specify)*:				

OAQ GENERAL SOURCE DATA APPLICATION
GSD-07: Criteria Pollutant Emissions Summary

State Form 51602 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
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NOTES:

- The purpose of this form is to provide the actual and potential emissions of each criteria pollutant emitted from the source. This form is required for all air permit applications.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Part A: Unit Emissions Summary

Part A provides the actual and potential emissions of each criteria pollutant emitted from each emissions unit. If you do not provide enough information to adequately describe the emissions from each emissions unit, the application process may be stopped.

1. Unit ID	2. Stack / Vent ID	3. Criteria Pollutant	4. Actual Emissions		5. Potential To Emit	
			Standard Units	Tons Per Year	Standard Units	Tons Per Year
EG1	EG1	CO				2.75
		NOx				12.00
		PM, PM10, PM2.5				0.35
		SO2				0.20
		VOC				0.35
EG2	EG2	CO				2.75
		NOx				12.00
		PM, PM10, PM2.5				0.35
		SO2				0.20
		VOC				0.35
Roadway	NA	PM				16.02
		PM10				3.20
		PM2.5				0.79

Continued on Next Page

Part B: Pollutant Emissions Summary

Part B provides the total actual and potential emissions of each criteria pollutant emitted from the source (including all emissions units and fugitive emissions at the source). If you do not provide enough information to adequately describe the total source emissions, the application process may be stopped.

6. Criteria Pollutant	7. Actual Emissions		8. Potential To Emit	
	Standard Units	Tons Per Year	Standard Units	Tons Per Year
Carbon Monoxide (CO)	PTE Included on first copy	of form GSD-07		
Lead (Pb)				
Nitrogen Oxides (NO_X)				
Particulate Matter (PM)				
Particulate Matter less than 10μm (PM_{10})				
Particulate Matter less than 2.5μm ($PM_{2.5}$)				
Sulfur Dioxide (SO_2)				
Volatile Organic Compounds (VOC)				
Other *(specify)*:				

Part C: Fugitive VOC Emissions *(if applicable)*

Part C summarizes the sources of fugitive VOC emissions at the source and estimates VOC emissions from these emission points. Complete this table if you are required to provide fugitive emissions data pursuant to 326 IAC 2-2 or 326 IAC 2-3.

9. Fugitive Emissions Source	10. Emission Factor (lb/hr)	11. Number Leaking	12. Uncontrolled Potential To Emit	
			Pounds Per Hour	Tons Per Year
Compressor Seals				
Flanges				
Open-Ended Lines				
Pressure Relief Seals				
Pump Seals				
Sampling Connections				
Valves				
Other *(specify)*:				

OAQ GENERAL SOURCE DATA APPLICATION
GSD-08: Hazardous Air Pollutant Emissions Summary

State Form 51604 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to provide the actual and potential emissions of each hazardous air pollutant emitted from the source This form is required for all air permit applications.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1 Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Part A: Unit Emissions Summary

Part A provides the actual and potential emissions of each hazardous air pollutant emitted from each emissions unit. If you do not provide enough information to adequately describe the emissions from each emissions unit, the application process may be stopped.

1. Unit ID	2. Stack / Vent ID	3. Hazardous Air Pollutant	4. CAS Number	5. Actual Emissions		6. Potential To Emit	
				Standard Units	Tons Per Year	Standard Units	Tons Per Year
KLN1	PC1	Lead Compound					0.31
KLN2	PC2	Lead Compound					0.31
RB1	RBBH1	Lead Compound					0.06
CB1	CBBH1	Lead Compound					0.06
PB1	PBBH1&2	Lead Compound					Part of RBBH1 &2
RM1	RMBV1	Lead Compound					0.0071
RM2	RMBV2	Lead Compound					0.0071
RM3	RMBV3	Lead Compound					0.0071
RM4	RMBV4	Lead Compound					0.0071
CP1	PBBH1	Lead Compound					Part of RBBH1
CP2	PBBH1	Lead Compound					Part of RBBH1
DRY1	PBBH2	Lead Compound					Part of RBBH2
TB1	TBBH1	Lead Compound					0.0003
TB2	TBBH2	Lead Compound					0.0003
continued...							

Continued on Next Page

Part B: Pollutant Emissions Summary

Part B provides the total actual and potential emissions of each hazardous air pollutant emitted from the source (including all emissions units and fugitive emissions at the source). If you do not provide enough information to adequately describe the total source emissions, the application process may be stopped.

7. Hazardous Air Pollutant	8. CAS Number	9. Actual Emissions		10. Potential To Emit	
		Standard Units	Tons Per Year	Standard Units	Tons Per Year
Lead Compund			0.5		0.93
See Emission Calculations for full list of HAP					

Part C: Fugitive HAP Emissions *(if applicable)*

Part C summarizes the sources of fugitive HAP emissions at the source and estimates HAP emissions from these emission points. Complete this table if you are required to provide fugitive emissions data pursuant to 326 IAC 2-2 or 326 IAC 2-3.

11. Fugitive Emissions Source	12. Hazardous Air Pollutant	13. Emission Factor (lb/hr)	14. Number Leaking	15. Uncontrolled Potential To Emit	
				Pounds Per Hour	Tons Per Year
Compressor Seals					
Flanges					
Open-Ended Lines					
Pressure Relief Seals					
Pump Seals					
Sampling Connections					
Valves					
Other *(specify)*:					

OAQ GENERAL SOURCE DATA APPLICATION
GSD-08: Hazardous Air Pollutant Emissions Summary

State Form 51604 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
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Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
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NOTES:

- The purpose of this form is to provide the actual and potential emissions of each hazardous air pollutant emitted from the source. This form is required for all air permit applications.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Part A: Unit Emissions Summary

Part A provides the actual and potential emissions of each hazardous air pollutant emitted from each emissions unit. If you do not provide enough information to adequately describe the emissions from each emissions unit, the application process may be stopped.

1. Unit ID	2. Stack / Vent ID	3. Hazardous Air Pollutant	4. CAS Number	5. Actual Emissions		6. Potential To Emit	
				Standard Units	Tons Per Year	Standard Units	Tons Per Year
WB1	TBBH1, TBBH2	Lead Compound					Part of TBBH1&2
FP1	FPBV1	Lead Compound					0.0071
FP2	FPBV2	Lead Compound					0.0071
FP3	FPBV3	Lead Compound					0.0071
FP4	FPBV4	Lead Compound					0.0071
FP5	FPBV5	Lead Compound					0.0071
EG1	EG1	Lead Compound					0.00003
EG2	EG2	Lead Compound					0.00003

Continued on Next Page

Part B: Pollutant Emissions Summary

Part B provides the total actual and potential emissions of each hazardous air pollutant emitted from the source (including all emissions units and fugitive emissions at the source). If you do not provide enough information to adequately describe the total source emissions, the application process may be stopped.

7. Hazardous Air Pollutant	8. CAS Number	9. Actual Emissions		10. Potential To Emit	
		Standard Units	Tons Per Year	Standard Units	Tons Per Year
PTE included on first copy of GSD-08 form					

Part C: Fugitive HAP Emissions *(if applicable)*

Part C summarizes the sources of fugitive HAP emissions at the source and estimates HAP emissions from these emission points. Complete this table if you are required to provide fugitive emissions data pursuant to 326 IAC 2-2 or 326 IAC 2-3.

11. Fugitive Emissions Source	12. Hazardous Air Pollutant	13. Emission Factor (lb/hr)	14. Number Leaking	15. Uncontrolled Potential To Emit	
				Pounds Per Hour	Tons Per Year
Compressor Seals					
Flanges					
Open-Ended Lines					
Pressure Relief Seals					
Pump Seals					
Sampling Connections					
Valves					
Other *(specify)*:					

OAQ GENERAL SOURCE DATA APPLICATION
GSD-09: Summary of Additional Information

State Form 51611 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to supply a format for providing additional information about a process or emissions unit. This form is optional.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Summary of Additional Information

This table is intended to summarize any additional information about a process or emissions unit that you are submitting with your air permit application.

1. Process: Emergency Generators Fuel Sulfur Content	**2. Unit ID:** EG1, EG2 (two identical units)

3. Application Form Reference: PI-02C, Item 10. Control Techniques, Low Sulfur Fuel Content

4. Explanation: Provide a brief explanation of why you are supplementing the application with additional information. This information will help us continue to improve our air permit application forms.

This form is required by form PI-02C for a further explanation of the control technique for the emergency generators (i.e., low sulfur content fuel).

5. Summary of Additional Information: Provide a brief summary of the additional information you are providing with your air permit application.

The potential emissions were based on the emergency generators firing low sulfur diesel fuel. The facility will limit sulfur content in the diesel fuel fired in the emergency generators to no more than 500 ppm (or 0.05%).

6. Additional Calculations / Diagrams: Use the space provided to include additional calculations and/or diagrams, if applicable.

OAQ GENERAL SOURCE DATA APPLICATION
GSD-10: Insignificant Activities

State Form 51596 (R4 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to identify all trivial and insignificant activities in operation at the source. This form is required for all air permit applications.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Part A: Trivial Activities (Optional)

Part A identifies all trivial activities in operation at the source as defined in 326 IAC 2-7-1(40). **Please use this table as a checklist.** Check each item and sub-item that applies. If applicable, provide the Emissions Unit Identification number that corresponds to the Plant Layout and Process Flow diagrams.

Unit ID	Description of Trivial Activity	Citation (326 IAC)
Diesel Storage Tank, Water Heaters, Space Heater	1. Any activity or emission unit:	2-7-1(40)(A)
	☒ not regulated by a NESHAP, with potential uncontrolled emissions are equal to or less than one (1) pound per day on an emission unit basis for any single HAP or combination of HAPs; and	
	☒ for which the potential uncontrolled emissions meet the exemption levels specified in the following:	
	☒ For lead and lead compounds measured as elemental lead (Pb), potential uncontrolled emissions that are equal to or less than one (1) pound per day	
	☒ For carbon monoxide (CO), potential uncontrolled emissions that are equal to or less than one (1) pound per day	
	☒ For sulfur dioxide (SO_2), potential uncontrolled emissions that are equal to or less than one (1) pound per day	
	☒ For volatile organic compounds (VOC), potential uncontrolled emissions that are equal to or less than one (1) pound per day	
	☒ For nitrogen oxides (NO_X), potential uncontrolled emissions that are equal to or less than one (1) pound per day	
	☒ For particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM_{10}), potential uncontrolled emissions that are equal to or less than one (1) pound per day	
	2. Water related activities including:	2-7-1(40)(B)
	☒ Production of hot water for on-site personal use not related to any industrial or production process	
	☐ Water treatment activities used to provide potable and process water for the plant, excluding any activities associated with wastewater treatment	
	☐ Steam traps, vents, leaks and safety relief valves	
	☐ Cooling ponds	
	☒ Laundry operations using only water solutions of bleach or detergents	
	☐ Demineralized water tanks and demineralizer vents	

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Part A: Trivial Activities (Optional)

Part A identifies all trivial activities in operation at the source as defined in 326 IAC 2-7-1(40). **Please use this table as a checklist.** Check each item and sub-item that applies. If applicable, provide the Emissions Unit Identification number that corresponds to the Plant Layout and Process Flow diagrams.

Unit ID	Description of Trivial Activity	Citation (326 IAC)
	☐ Boiler water treatment operations, not including cooling towers	
	☐ Oxygen scavenging (de-aeration) of water	
	☐ Steam cleaning operations and steam sterilizers	
	☒ Pressure washing of equipment	
	☐ Water jet cutting operations	

Continued on Next Page

Part A: Trivial Activities (continued)

Part A identifies all trivial activities in operation at the source as defined in 326 IAC 2-7-1(40). **Please use this table as a checklist.** Check each item and sub-item that applies. If applicable, provide the Emissions Unit Identification number that corresponds to the Plant Layout and Process Flow diagrams.

Unit ID	Description of Trivial Activity	Citation (326 IAC)
	3. Combustion activities including the following:	2-7-1(40)(C)
	☒ Portable electrical generators that can be moved by hand from one location to another. "Moved by hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device	
	☐ Combustion emissions from propulsion of mobile sources	
	☐ Fuel use related to food preparation for on-site consumption	
	☒ Tobacco smoking rooms and areas	
	☐ Blacksmith forges	
	☐ Indoor and outdoor kerosene heaters	
	4. Activities related to ventilation, venting equipment and refrigeration, including the following:	2-7-1(40)(D)
	☒ Ventilation exhaust, central chiller water systems, refrigeration and air conditioning equipment, not related to any industrial or production process, including natural draft hoods or ventilating systems that do not remove air pollutants	
	☒ Stack and vents from plumbing traps used to prevent the discharge of sewer gases, handling domestic sewage only, excluding those at wastewater treatment plants or those handling any industrial waste	
	☒ Vents from continuous emissions monitors and other analyzers	
	☐ Natural gas pressure regulator vents, excluding venting at oil and gas production facilities	
	☐ Air vents from air compressors	
	☐ Vents for air cooling of electric motors provided the air does not commingle with regulated air pollutants	
	☐ Vents from equipment used to air blow water from cooled plastics strands or sheets	
	5. Activities related to routine fabrication, maintenance and repair of buildings, structures, equipment or vehicles at the source where air emissions from those activities would not be associated with any commercial production process including the following:	2-7-1(40)(E)
	☒ Activities associated with the repair and maintenance of paved and unpaved roads, including paving or sealing, or both, of parking lots and roadways	
	☒ Painting, including interior and exterior painting of buildings, and solvent use, excluding degreasing operations utilizing halogenated organic solvents	
	☒ Brazing, soldering, or welding operations and associated equipment	
	☐ Portable blast-cleaning equipment with enclosures	
	☒ Blast-cleaning equipment using water as the suspension agent and associated equipment	
	☒ Batteries and battery charging stations, except at battery manufacturing plants	
	☒ Lubrication, including hand-held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations	
	☒ Non-asbestos insulation installation or removal	
	☒ Tarring, retarring and repair of building roofs	
	☐ Bead blasting of heater tubes	
	☐ Instrument air dryer and filter maintenance	
	☐ Manual tank gauging	
	☐ Open tumblers associated with deburring operations in maintenance shops	

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Part A: Trivial Activities (continued)

Part A is intended to identify all trivial activities in operation at the source as defined in 326 IAC 2-7-1(40). **Please use this table as a checklist.** Check each item and sub-item that applies. If applicable, provide the Emissions Unit Identification number that corresponds to the Plant Layout and Process Flow diagrams.

Unit ID	Description of Trivial Activity	Citation (326 IAC)
	6. Activities performed using hand-held equipment including the following:	2-7-1(40)(F)
	☐ Application of hot melt adhesives with no VOC in the adhesive formulation	
	☒ Cutting, excluding cutting torches ☐ Buffing ☒ Grinding ☐ Sanding	
	☐ Machining wood, metal, or plastic ☐ Carving ☐ Polishing ☒ Sawing	
	☐ Turning wood, metal, or plastic ☒ Drilling ☐ Routing ☒ Surface grinding	
	7. Housekeeping and janitorial activities and supplies including the following:	2-7-1(40)(G)
	☒ Vacuum cleaning systems used exclusively for housekeeping or custodial activities, or both	
	☒ Steam cleaning activities	
	☒ Rest rooms and associated cleanup operations and supplies	
	☐ Alkaline or phosphate cleaners and associated equipment	
	☒ Mobile floor sweepers and floor scrubbers	
	☒ Pest control fumigation	
	8. Office related activities including the following:	2-7-1(40)(H)
	☒ Office supplies and equipment	
	☒ Photocopying equipment and associated supplies	
	☒ Paper shredding	
	☒ Blueprint machines, photographic equipment, and associated supplies	
	9. Lawn care and landscape maintenance activities and equipment, including the storage, spraying or application of insecticides, pesticides and herbicides	2-7-1(40)(I)
	10. Storage equipment and activities including:	2-7-1(40)(J)
	☐ Pressurized storage tanks and associated piping for the following:	
	☐ Acetylene ☐ Inorganic compounds ☐ Natural gas	
	☐ Anhydrous ammonia ☐ Liquid petroleum gas (LPG) ☐ Nitrogen dioxide	
	☐ Carbon Monoxide ☐ Liquid natural gas (LNG) (propane) ☐ Sulfur dioxide	
	☐ Chlorine	
	☐ Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP	
	☐ Storage tanks, reservoirs, and pumping and handling equipment of any size containing soap, wax, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized	
	☒ Storage of drums containing maintenance raw materials	
	☐ Storage of the following:	
	☐ Castings	
	☐ Lance rods	
	☐ Any non-HAP containing material in solid form stored in a sealed or covered container	
	☒ Portable containers used for the collection, storage, or disposal of materials provided the container capacity is equal to or less than forty-six hundredths (0.46) cubic meters and the container is closed except when the material is added or removed	

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Part A: Trivial Activities (continued)

Part A identifies to identify all trivial activities in operation at the source as defined in 326 IAC 2-7-1(40). **Please use this ...le as a checklist.** Check each item and sub-item that applies. If applicable, provide the Emissions Unit Identification ...nber that corresponds to the Plant Layout and Process Flow diagrams.

Unit ID	Description of Trivial Activity	Citation (326 IAC)
	11. Emergency and standby equipment including:	2-7-1(40)(K)
	☐ Emergency (backup) electrical generators at residential locations, such as dormitories, prisons and hospitals.	
	☐ Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares.	
	☐ Process safety relief devices installed solely for the purpose of minimizing injury to persons or damage to equipment which could result from abnormal process operating conditions, including the following:	
	☐ Explosion relief vents, diaphragms or panels ☐ Rupture discs ☐ Safety relief valves	
	☐ Activities and equipment associated with on-site medical care not otherwise specifically regulated	
	☐ Vacuum producing devices for the purpose of removing potential accidental releases	
	12. Sampling and testing equipment and activities including the following:	2-7-1(40)(L)
	☐ Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis	
	☐ Hydraulic and hydrostatic testing equipment	
	☒ Ground water monitoring wells and associated sample collection equipment	
	☐ Environmental chambers not using hazardous air pollutant (HAP) gases	
	☐ Shock chambers	
	☐ Humidity chambers	
	☐ Solar simulators	
	☒ Sampling activities including	
	☒ Sampling of waste ☐ Glove box sampling, charging, and packaging	
	☐ Instrument air dryers and distribution	
	13. Use of consumer products and equipment where the product or equipment is used at a source in the same manner as normal consumer use and is not associated with any production process	2-7-1(40)(M)
	14. Equipment and activities related to the handling, treating, and processing of animals including:	2-7-1(40)(N)
	☐ Equipment used exclusively to slaughter animals, but not including the following: Rendering cookers, Boilers, Heating plants, Incinerators, and/or Electrical power generating equipment	
	☐ Veterinary operating rooms	
	15. Activities generating limited amounts of fugitive dust including:	2-7-1(40)(O)
	☒ Fugitive emissions related to movement of passenger vehicles, provided the emissions are not counted for applicability purposes under 326 IAC 2-7-1(22)(B), and any required fugitive dust control plan or its equivalent is submitted	
	☐ Soil boring	
	☒ Road salting and sanding	

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Part A: Trivial Activities (continued)

Part A identifies all trivial activities in operation at the source as defined in 326 IAC 2-7-1(40). **Please use this table as a checklist.** Check each item and sub-item that applies. If applicable, provide the Emissions Unit Identification number that corresponds to the Plant Layout and Process Flow diagrams.

Unit ID	Description of Trivial Activity	Citation (326 IAC)
	16. Activities associated with production including the following:	2-7-1(40)(P)
	☐ Closed, non-vented, tumblers used for cleaning or deburring metal products without abrasive blasting	
	☐ Electrical resistance welding	
	☐ CO_2 lasers, used only on metals and other materials which do not emit HAPs in the process	
	☐ Laser trimmers which do not produce fugitive emissions and are equipped with dust collection devices such as bag filter, cyclone, or equivalent device	
	☐ Application equipment for hot melt adhesives with no VOC in the adhesive formulation	
	☐ Drop hammers or hydraulic presses for forging or metalworking	
	☐ Air compressors and pneumatically operated equipment, including hand tools	
	☐ Compressor or pump lubrication and seal oil systems	
	☐ Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized	
	☐ Equipment for washing or drying fabricated glass or metal products, if no VOCs or HAPs are used in the process, and no gas, oil or solid fuel is burned	
	☐ Handling of solid steel, including coils and slabs, excluding scrap burning, scarfing, and charging into steel making furnaces and vessels	
	17. Miscellaneous equipment, but not emissions associated with the process for which the equipment is used, and activities including the following:	2-7-1(40)(Q)
	☐ Equipment used for surface coating, painting, dipping or spraying operation, except those that will emit VOCs or HAPs	
	☐ Condensate drains for natural gas and landfill gas	
	☐ Electric or steam heated drying ovens and autoclaves, including only the heating emissions and not any associated process emissions	
	☐ Salt baths using nonvolatile salts including caustic solutions that do not result in emissions of any regulated air pollutants	
	☐ Ozone generators	
	☐ Portable dust collectors	
	☐ Scrubber systems circulating water based solutions of inorganic salts or bases which are installed to be available for response to emergency situations	
	☐ Soil borrow pits	
	☒ Manual loading and unloading operations	
	☐ Purging of refrigeration devices using a combination of nitrogen and CFC-22 (R-22) as pressure test media	
	☒ Construction and demolition operations	
	☐ Mechanical equipment gear boxes and vents which are isolated from process materials	
	☐ Non-volatile mold release waxes and agents	

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Part B: Insignificant Activities

rt B identifies all insignificant activities in operation at the source as defined in 326 IAC 2-7-1(21)(G). **Please use this le as a checklist.** Indicate which activities are present by checking the appropriate box. If applicable, provide the Emissions Unit Identification number that corresponds to the Plant Layout and Process Flow diagrams.

Unit ID	Description of Insignificant Activity	Citation (326 IAC)
	18. Combustion related activities, including the following:	2-7-1(21)(G)(i)
	☒ Space heaters, process heaters, or boilers using the following fuels	
	☒ Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour	
	☐ Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour	
	☐ Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths percent (0.5%) sulfur by weight	
	☐ Wood-fired combustion sources with heat input equal to or less than one million (1,000,000) Btu per hour and not burning wood refuse, treated wood or chemically contaminated wood	
	☐ Equipment powered by diesel fuel fired or natural gas fired internal combustion engines of capacity equal to or less than five hundred thousand (500,000) Btu/hour, except where total capacity of equipment operated by one stationary source exceeds two million (2,000,000) Btu/hour	
	☐ Combustion source flame safety purging on startup	
	19. Fuel dispensing activities, including the following:	2-7-1(21)(G)(ii)
	☐ A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment	
	☒ A petroleum fuel, other than gasoline, dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less	
	20. The following VOC and HAP storage containers:	2-7-1(21)(G)(iii)
	☐ Storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs less than twelve thousand (12,000) gallons	
	☐ Vessels storing the following:	
	☐ Hydraulic oils ☐ Lubricating oils ☐ Machining oils ☐ Machining fluids	
	21. Refractory storage not requiring air pollution control equipment	2-7-1(21)(G)(iv)
	22. Equipment used exclusively for the following	2-7-1(21)(G)(v)
	☐ Packaging the following: ☐ Greases ☐ Lubricants	
	☐ Filling drums, pails or other packaging containers with the following:	
	☐ Greases ☐ Lubricating oils ☐ Waxes	

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Part B: Insignificant Activities (continued)

Part B identifies all insignificant activities in operation at the source as defined in 326 IAC 2-7-1(21)(G). **Please use this table as a checklist.** Indicate which activities are present by checking the appropriate box. If applicable, provide the Emissions Unit Identification number that corresponds to the Plant Layout and Process Flow diagrams.

Unit ID	Description of Insignificant Activity	Citation (326 IAC)
	23. Production related activities, including the following:	2-7-1(21)(G)(vi)
	☐ Application of the following as temporary protective coatings:	
	☐ Greases ☐ Lubricants ☐ Nonvolatile materials ☐ Oils	
	☐ Machining where an aqueous cutting coolant continuously floods the machining interface	
	☐ Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6	
	☒ Cleaners and solvents characterized as follows where the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months	
	☐ Having a vapor pressure equal to or less than two kilo Pascals (2.0 kPa) (fifteen millimeters of mercury (15 mm Hg) or three-tenths pound per square inch (0.3 psi)) measured at thirty-eight degrees Centigrade (38°C) (one hundred degrees Fahrenheit (100°F))	
	☐ Having a vapor pressure equal to or less than seven-tenths kilo Pascals (0.7 kPa) (five millimeters of mercury (5 mm Hg) or one-tenth pound per square inch (0.1 psi)) measured at twenty degrees Centigrade (20°C) (sixty-eight degrees Fahrenheit (68°F))	
	☒ The following equipment related to manufacturing activities not resulting in the emission of HAPs:	
	☒ Brazing equipment ☒ Cutting torches ☒ Soldering equipment ☒ Welding equipment	
	☐ Closed loop heating and cooling systems	
	☐ Infared cure equipment	
	☐ Exposure chambers (towers or columns) for curing of ultraviolet inks and ultra-violet coatings where heat is the intended discharge	
	☐ Any of the following structural steel and bridge fabrication activities:	
	☐ Cutting two hundred thousand (200,000) linear feet or less of one (1) inch plate or equivalent	
	☐ Using eighty (80) tons or less of welding consumables	
	24. Activities associated with the following recovery systems:	2-7-1(21)(G)(vii)
	☐ Rolling oil recovery systems	
	☐ Groundwater oil recovery wells	
	25. Solvent recycling systems with batch capacity less than or equal to one hundred (100) gallons	2-7-1(21)(G)(viii)

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Part B: Insignificant Activities (continued)

Part B is intended to identify all insignificant activities in operation at the source as defined in 326 IAC 2-7-1(21)(G). **Please use this table as a checklist.** Indicate which activities are present by checking the appropriate box. If applicable, provide the Emissions Unit Identification number that corresponds to the Plant Layout and Process Flow diagrams.

Unit ID	Description of Insignificant Activity	Citation (326 IAC)
	26. Water-based activities, including the following:	2-7-1(21)(G)(ix)
	☐ Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume	
	☐ Water runoff ponds for petroleum coke-cutting and coke storage piles	
	☐ Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the owner/operator, that is, an on-site sewage treatment facility	
	☒ Any operation using aqueous solutions containing less than one percent (1%) by weight of VOCs excluding HAPs	
	☐ Water based adhesives that are less than or equal to five percent (5%) by volume of VOCs excluding HAPs	
	☐ Noncontact cooling tower systems with either of the following:	
	☐ Natural draft cooling towers not regulated under a NESHAP	
	☐ Forced and induced draft cooling tower systems not regulated under a NESHAP	
	☐ Quenching operations used with heat treating processes	
	27. Repair activities, including the following:	2-7-1(21)(G)(x)
	☒ Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment	
	☐ Heat exchanger cleaning and repair	
	☒ Process vessel degassing and cleaning to prepare for internal repairs	
	28. Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device, such as a bag filter or cyclone	2-7-1(21)(G)(xi)
	29. Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal	2-7-1(21)(G)(xii)
	30. Paved and unpaved roads and parking lots with public access	2-7-1(21)(G)(xiii)
	31. Conveyors as follows:	2-7-1(21)(G)(xiv)
	☒ Covered conveyors for solid raw material, including the following:	
	☒ Coal or coke conveying of less than or equal to three hundred sixty (360) tons per day	
	☐ Limestone conveying of less than or equal to seven thousand two hundred (7,200) tons per day for sources other than mineral processing plants constructed after August 31, 1983	
	☐ Uncovered coal or coke conveying of less than or equal to one hundred twenty (120) tons per day	
	☐ Underground conveyors	
	☐ Enclosed systems for conveying plastic raw materials and plastic finished goods	
	32. Coal bunker and coal scale exhausts and associated dust collector vents	2-7-1(21)(G)(xv)
	33. Asbestos abatement projects regulated by 326 IAC 14-10	2-7-1(21)(G)(xvi)

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Part B: Insignificant Activities (continued)

Part B is intended to identify all insignificant activities in operation at the source as defined in 326 IAC 2-7-1(21)(G). **Please use this table as a checklist.** Indicate which activities are present by checking the appropriate box. If applicable, provid the Emissions Unit Identification number that corresponds to the Plant Layout and Process Flow diagrams.

Unit ID	Description of Insignificant Activity	Citation (326 IAC)
	34. Routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process, including the following:	2-7-1(21)(G)(xvii)
	☐ Purging of gas lines ☐ Purging of vessels	
	35. Flue gas conditioning systems and associated chemicals such as the following:	2-7-1(21)(G)(xviii)
	☐ Sodium sulfate ☐ Ammonia ☐ Sulfur trioxide.	
	36. Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including the following:	2-7-1(21)(G)(xix)
	☐ Catch tanks ☐ Temporary liquid separators ☐ Tanks ☐ Fluid handling equipment	
	37. Blowdown for the following:	2-7-1(21)(G)(xx)
	☐ Sight glass ☐ Boiler ☐ Compressors ☐ Pumps ☐ Cooling tower	
	38. Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to four hundred fifty (450) cubic inches by volume	2-7-1(21)(G)(xxi)
	39. Activities associated with emergencies, including the following:	2-7-1(21)(G)(xxii)
	☐ On-site fire training approved by the IDEM	
	☒ Emergency generators as follows:	
	☐ Gasoline generators not exceeding one hundred ten (110) horsepower	
	☒ Diesel generators not exceeding one thousand six hundred (1,600) horsepower	
	☐ Natural gas turbines or reciprocating engines not exceeding sixteen thousand (16,000) horsepower	
	☐ Stationary fire pump engines	
	40. Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to three one-hundredths grains per actual cubic foot (0.03 gr/acf) and a gas flow rate less than or equal to four thousand actual cubic feet per minute (4,000 acf/min), including the following:	2-7-1(21)(G)(xxiii)
	☐ Deburring ☐ Polishing ☐ Pneumatic conveying ☐ Buffing ☐ Abrasive blasting ☐ Woodworking operations	
	41. Purge double block and bleed valves	2-7-1(21)(G)(xxiv)
	42. Filter or coalescer media changeout	2-7-1(21)(G)(xxv)
	43. Vents from ash transport systems not operated at positive pressure	2-7-1(21)(G)(xxvi)
	44. Mold release agents using low volatile products (vapor pressure less than or equal to two kilo Pascals (2kPa) measured at thirty-eight degrees Centigrade (38°C)	2-7-1(21)(G)(xxvii)
	45. Farm operations	2-7-1(21)(G)(xviii)

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Part B: Insignificant Activities (continued)

Part B identifies all insignificant activities in operation at the source as defined in 326 IAC 2-7-1(21)(G). **Please use this ...le as a checklist.** Indicate which activities are present by checking the appropriate box. If applicable, provide the Emissions Unit Identification number that corresponds to the Plant Layout and Process Flow diagrams.

Unit ID	Description of Insignificant Activity	Citation (326 IAC)
	46. Woodworking equipment controlled by a baghouse provided that the following criteria are met:	2-7-1(21)(G)(xxix)
	☐ The baghouse does not exhaust to the atmosphere greater than one hundred twenty-five thousand (125,000) cubic feet per minute	
	☐ The baghouse does not emit particulate matter with a diameter less than ten (10) microns in excess of three-thousandths grains per dry standard cubic feet (0.003 gr/dscf) of outlet air	
	☐ Opacity from the baghouse does not exceed ten percent (10%)	
	☐ The baghouse is in operation at all times the woodworking equipment is in use	
	☐ Visible emissions from the baghouse are observed daily using procedures in accordance with 40 CFR 60, Appendix A, Method 22 and normal or abnormal emissions are recorded. In the event abnormal emissions are observed for greater than six (6) minutes in duration, the following shall occur:	
	☐ The baghouse shall be inspected	
	☐ Corrective actions, such as replacing or reseating bags, are initiated, when necessary	
	☐ The baghouse is inspected quarterly when vented to the atmosphere	
	☐ The owner or operator keeps the following records:	
	☐ Records documenting the date when the baghouse redirected indoors or to the atmosphere	
	☐ Quarterly inspection reports, when vented to the atmosphere	
	☐ Visible observation reports	
	☐ Records of corrective actions	
	47. Woodworking equipment controlled by a baghouse provided that the following criteria are met:	2-7-1(21)(G)(xxx)
	☐ The baghouse does not exhaust to the atmosphere greater than forty thousand (40,000) cubic feet per minute	
	☐ The baghouse does not emit particulate matter with a diameter less than ten (10) microns in excess of one-hundredth grains per dry standard cubic feet (0.01 gr/dscf) of outlet air	
	☐ Opacity from the baghouse does not exceed ten percent (10%)	
	☐ The baghouse is in operation at all times the woodworking equipment is in use	
	☐ Visible emissions from the baghouse are observed daily using procedures in accordance with 40 CFR 60, Appendix A, Method 22 and normal or abnormal emissions are recorded. In the event abnormal emissions are observed for greater than six (6) minutes in duration, the following shall occur:	
	☐ The baghouse shall be inspected	
	☐ Corrective actions, such as replacing or reseating bags, are initiated, when necessary	
	☐ The baghouse is inspected quarterly when vented to the atmosphere	
	☐ The owner or operator keeps the following records:	
	☐ Records documenting the date when the baghouse redirected indoors or to the atmosphere	
	☐ Quarterly inspection reports, when vented to the atmosphere	
	☐ Visible observation reports	
	☐ Records of corrective actions	

Continued on Next Page

Part C: Insignificant Laboratory, Research, and Educational Activities

Part C identifies insignificant activities in operation at the source as defined in 326 IAC 2-7-1(21), paragraph (D), (E), or (F) **Please use this table as a checklist.** Indicate which activities are present by checking the appropriate box. If applicable provide the Emissions Unit Identification number that corresponds to the Plant Layout and Process Flow diagrams.

Unit ID	Description of Insignificant Activity
	48. ☐ Emissions from a laboratory as defined in 2-7-1(21)(D).
	49. ☐ Emissions from research and development activities as defined in 2-7-1(21)(E).
	50. ☐ Emissions from educational and teaching activities as defined in 2-7-1(21)(F).

Part D: Other Insignificant Activities

Part D identifies all other insignificant activities in operation at the source (as defined in 326 IAC 2-7-1(21), paragraphs (A) and (B) as those activities with potential uncontrolled emissions equal to or less than the thresholds listed below) that are not identified above in Parts A, B, or C. If applicable, provide the Emissions Unit Identification number that corresponds to the Plant Layout and Process Flow diagrams.

Carbon Monoxide (CO) ≤ 25 lb/day	Particulate Matter with aerodynamic diameter ≤ 10μm (PM_{10}) ≤ 5 lbs/hr or 25 lb/day
Lead (Pb) ≤ 0.6 ton/yr or 3.29 lb/day	Sulfur Dioxide (SO_2) ≤ 5 lbs/hr or 25 lb/day
Nitrogen Oxides (NO_x) ≤ 5 lbs/hr or 25 lb/day	Volatile Organic Compounds (VOC) ≤ 3 lbs/hr or 15 lb/day

51. **Other Insignificant Activities**: Identify any "other activities", and provide a brief description.

Unit ID	Description of Other Activity

Continued on Next Page

Part E: Insignificant Activities with HAP Emissions

t D identifies all insignificant activities in operation at the source (as defined in 326 IAC 2-7-1(21)(C)) that have the .ential to emit hazardous air pollutants (HAP). These activities may or may not be identified above in Parts A, B, or D. **Activities listed in Part C above, need not be listed in this section.** Indicate which type of "Insignificant HAP Activities" are present by checking the appropriate box, and provide a brief description.

52. **Individual HAP Emissions**:
Identify any emissions unit, not regulated by a NESHAP, emitting greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP.

Emissions Unit	HAP	Brief Description	Applicable Requirements

53. **Combination HAP Emissions**:
Identify any emissions unit, not regulated by a NESHAP, emitting greater than 1 pound per day but less than 12.5 pounds per day or 2.5 ton per year of a combination of HAPs.

Emissions Unit	HAPs	Brief Description	Applicable Requirements

Continued on Next Page

Part E: Specifically Regulated Insignificant Activities

Part E identifies all specifically regulated insignificant activities. Examples of specifically regulated activities that may have insignificant emissions include boilers, process heaters, any activity regulated under a federal rule such as MACT or BACT, etc. If you are not sure if an emissions unit would be considered a specifically regulated insignificant activity, contact the Air Permit Reviewer of the Day for additional guidance.

54. Unit ID	55. Stack / Vent ID	56. Pollutant	57. Actual Emissions		58. Potential to Emit		59. Citation
			Standard Units	Tons Per Year	Standard Units	Tons Per Year	

OAQ GENERAL SOURCE DATA APPLICATION
GSD-13: Affidavit of Applicability

State Form 51603 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of GSD-13 is to certify that the requirement to notify adjacent landowners and occupants is applicable to the source of air pollutant emissions.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

PART A: Affidavit Of Applicability

Complete this form to certify that the requirement to notify adjacent landowners and occupants pursuant to Indiana Code (IC) 13-15-8 is applicable to the source of air pollutant emissions. This form must be notarized by a public notary.

Nigel Morrison , being first duly sworn upon oath, deposes and says:

1. I live in Marion County, State of Indiana, and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of President for Waelz Sustainable Products, LLC (permit applicant's or facility's name).
3. By virtue of my position with Waelz Sustaianble Products, LLC (permit applicant's name), I am authorized to make the representation contained in this affidavit on behalf of the facility.
4. I understand that the notice requirements of Ind. Code §13-15-8 applies to Waelz Sustainable Prouducts, LLC permit applicant's or facility's name) for purposes of the accompanying permit application.
5. As required by Indiana Code § 13-15-8, the permit applicant will send written notice to adjacent landowners not more than ten (10) days after submission of the accompanying application for construction of the WSP facility (briefly describe type of permit application) filed on behalf of Waelz Sustainable Product, LLC (permit applicant's or facility's name).
6. **Further Affiant Saith Not.**

☑ I affirm under the penalty for perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Nigel Morrison Name *(typed)*	President Title
N Morrison Signature	4/8/2019 Date
STATE OF Indiana	COUNTY OF Marion

ORIGINAL

PART B: Notarization

This section must be completed by a Public Notary.

Before me a notary Public in and for said County and State, personally appeared Nigel Morrison, and being first duly sworn by me upon oath, says that the fact stated in the foregoing instrument are true. Signed and sealed this 8th of April, 2019

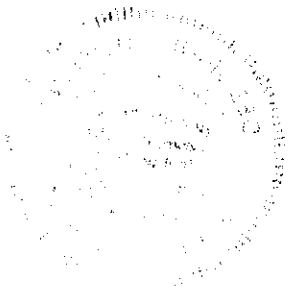
Printed: Deborah C Dobbins My Commission Expires: 09-06-2023

Residence of Hendricks County Indiana

Deborah C Dobbins

DEBORAH C DOBBINS
Hendricks County
NOTARY PUBLIC
Comm. # 671570
NOTARY SEAL
My Commission Expires 09-06-2023
STATE OF INDIANA

ORIGINAL



OAQ GENERAL SOURCE DATA APPLICATION
GSD-14: Owners and Occupants Notified

State Form 51609 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of GSD-14 is to identify adjacent landowners and occupants that are to be notified that an air permit application has been submitted.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Owners And Occupants Notified

Use this table to identify adjacent landowners and occupants that you have notified of your intent to construct pursuant to Indiana Code (IC) 13-15-8. If you need additional space, you may make copies of this form.

1. Owner / Occupant Name: Red Tail Land Conservancy, Inc.		**2. Date Notified**: 4/20/2019
3. Address: 125 E Charles Street, Suite 200		
City: Muncie	**State**: IN	**ZIP Code**: 47305 –
4. Electronic Mail:	**5. Telephone Number**: ( ) -	
6. Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: Elm Ridge Funeral Home & Cemetery, LLC		**Date Notified**: 4/20/2019
Address: 10291 N Meridian Street, Suite 200		
City: Indianapolis	**State**: IN	**ZIP Code**: 46290 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: Elm Ridge Funeral Home & Cemetery, LLC		**Date Notified**: 4/20/2019
Address: 4500 W Kilgore Ave		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: Muncie Sanitary District		**Date Notified**: 4/20/2019
Address: 5050 W Kilgore Ave		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: Muncie Sanitary District		**Date Notified**: 4/20/2019
Address: 300 N Hight Street		
City: Muncie	**State**: IN	**ZIP Code**: 47305 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		

OAQ GENERAL SOURCE DATA APPLICATION
GSD-14: Owners and Occupants Notified

State Form 51609 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of GSD-14 is to identify adjacent landowners and occupants that are to be notified that an air permit application has been submitted.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Owners And Occupants Notified

Use this table to identify adjacent landowners and occupants that you have notified of your intent to construct pursuant to Indiana Code (IC) 13-15-8. If you need additional space, you may make copies of this form.

1. Owner / Occupant Name: Indiana Michigan Power Company		**2. Date Notified**: 4/20/2019
3. Address: PX Box 16428		
City: Columbus	**State**: OH	**ZIP Code**: 16428 –
4. Electronic Mail:	**5. Telephone Number**: ( ) -	
6. Method of Notification: ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other *(specify)*:		
Owner / Occupant Name:		**Date Notified**: 4/20/2019
Address: 5200 W Kilgore Ave		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other *(specify)*:		
Owner / Occupant Name: Womack Edward J and Rhonda G		**Date Notified**: 4/20/2019
Address: 12120 W Woodcreek Dr.		
City: Yorktown	**State**: IN	**ZIP Code**: 47396 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other *(specify)*:		
Owner / Occupant Name: Ed's Carpet & Flooring		**Date Notified**: 4/20/2019
Address: 5214 W Kilgore Ave		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other *(specify)*:		
Owner / Occupant Name: SLAVEN RICK D		**Date Notified**: 4/20/2019
Address: 5300 W KILGORE AV		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other *(specify)*:		

OAQ GENERAL SOURCE DATA APPLICATION
GSD-14: Owners and Occupants Notified

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Owners And Occupants Notified

Use this table to identify adjacent landowners and occupants that you have notified of your intent to construct pursuant to Indiana Code (IC) 13-15-8. If you need additional space, you may make copies of this form.

1. Owner / Occupant Name: MIDDLEFIELD INDUSTRIAL		**2. Date Notified**: 4/20/2019
3. Address: 1052 Mahoning Ave NW		
City: Warren	**State**: OH	**ZIP Code**: 44483 –
4. Electronic Mail:	**5. Telephone Number**: ( ) -	
6. Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: COOK & SONS LLC		**Date Notified**: 4/20/2019
Address: 1826 S Main St		
City: Akron	**State**: OH	**ZIP Code**: 44301 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: Hickory Haven Mobile Home Park		**Date Notified**: 4/20/2019
Address: 5600 W KILGORE AVE		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: SPEARS TONY R AND ANITA L		**Date Notified**: 4/20/2019
Address: 1419 S GLENDALE DR		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: JONES JOSHUA		**Date Notified**: 4/20/2019
Address: 1307 CAMPANIA		
City: New Braunfels	**State**: TX	**ZIP Code**: 78132 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		

OAQ GENERAL SOURCE DATA APPLICATION
GSD-14: Owners and Occupants Notified

State Form 51609 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Facsimile Number: (317) 232-6749
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NOTES:

- The purpose of GSD-14 is to identify adjacent landowners and occupants that are to be notified that an air permit application has been submitted.
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Owners And Occupants Notified

Use this table to identify adjacent landowners and occupants that you have notified of your intent to construct pursuant to Indiana Code (IC) 13-15-8. If you need additional space, you may make copies of this form.

1. Owner / Occupant Name: Current Owner/Occupants		**2. Date Notified**: 4/20/2019
3. Address: 1509 S GLENDALE DR		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
4. Electronic Mail:	**5. Telephone Number**: ( ) -	
6. Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: KING BOB REVOCABLE LIVING TRUST		**Date Notified**: 4/20/2019
Address: 2910 S SCOTT DR		
City: Yorktown	**State**: IN	**ZIP Code**: 47396 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: Northgate Motors		**Date Notified**: 4/20/2019
Address: 5701 W 11TH ST		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: BOBCAT PROPERTIES LLC		**Date Notified**: 4/20/2019
Address: 520 S NICHOLS SUITE G		
City: Muncie	**State**: IN	**ZIP Code**: 47303 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: Current Owner/Occupants		**Date Notified**: 4/20/2019
Address: 1615 S GLENDALE DR		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		

OAQ GENERAL SOURCE DATA APPLICATION
GSD-14: Owners and Occupants Notified

State Form 51609 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
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NOTES:

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Owners And Occupants Notified

Use this table to identify adjacent landowners and occupants that you have notified of your intent to construct pursuant to Indiana Code (IC) 13-15-8. If you need additional space, you may make copies of this form.

1. Owner / Occupant Name: BURTON DANIELLE		**2. Date Notified**: 4/20/2019
3. Address: 1619 S GLENDALE DR		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
4. Electronic Mail:	**5. Telephone Number**: ( ) -	
6. Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: STINSON GARRY D		**Date Notified**: 4/20/2019
Address: 3700 W BETHEL AVE		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: Current Owner/Occupant		**Date Notified**: 4/20/2019
Address: 5700 W 12TH ST		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: JIM WALLACE COMPANY LLC		**Date Notified**: 4/20/2019
Address: 7760 CARTER RD		
City: Northfield	**State**: OH	**ZIP Code**: 44067 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: IPPEL FAMILY TRUST		**Date Notified**: 4/20/2019
Address: 5680 W Cornbread Rd		
City: Yorktown	**State**: IN	**ZIP Code**: 47396 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		

OAQ GENERAL SOURCE DATA APPLICATION
GSD-14: Owners and Occupants Notified

State Form 51609 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
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Owners And Occupants Notified

Use this table to identify adjacent landowners and occupants that you have notified of your intent to construct pursuant to Indiana Code (IC) 13-15-8. If you need additional space, you may make copies of this form.

1. Owner / Occupant Name: SIMLEY CORP.		**2. Date Notified**: 4/20/2019
3. Address: PO BOX 1135		
City: FULSHEAR	**State**: TX	**ZIP Code**: 77441 –
4. Electronic Mail:	**5. Telephone Number**: ( ) -	
6. Method of Notification: ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other *(specify)*:		
Owner / Occupant Name: TCLJ WILLIAMS PROPERTIES I LLC		**Date Notified**: 4/20/2019
Address: 36 VIA SANTA MARIA		
City: SAN CLEMENTE	**State**: CA	**ZIP Code**: 92672 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other *(specify)*:		
Owner / Occupant Name: Current Owner/Occupant		**Date Notified**: 4/20/2019
Address: 2380 S PROCTOR RD		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other *(specify)*:		
Owner / Occupant Name: HOLLAND RICHARD E		**Date Notified**: 4/20/2019
Address: 1700 S PERDIEU RD		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other *(specify)*:		
Owner / Occupant Name: HUFF LAURA B & MARY D		**Date Notified**: 4/20/2019
Address: 504 N MEADOW WOOD DR		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ Telephone ☐ Electronic Mail ☒ Standard Mail ☐ Other *(specify)*:		

OAQ GENERAL SOURCE DATA APPLICATION
GSD-14: Owners and Occupants Notified

State Form 51609 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of GSD-14 is to identify adjacent landowners and occupants that are to be notified that an air permit application has been submitted.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Owners And Occupants Notified

Use this table to identify adjacent landowners and occupants that you have notified of your intent to construct pursuant to Indiana Code (IC) 13-15-8. If you need additional space, you may make copies of this form.

1. Owner / Occupant Name: BURRESS ROGER L AND HELEN G		**2. Date Notified**: 4/20/2019
3. Address: 1500 S WOODRUFF DR		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
4. Electronic Mail:	**5. Telephone Number**: ( ) -	
6. Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: HOOD JACKIE		**Date Notified**: 4/20/2019
Address: 1600 S WOODRUFF DR		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: LANGE STEVEN D		**Date Notified**: 4/20/2019
Address: 3801 S COUNTY ROAD 575 E		
City: SELMA	**State**: IN	**ZIP Code**: 47383 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: Current Owner/Occupant		**Date Notified**: 4/20/2019
Address: 1604 S WOODRUFF DR		
City: Muncie	**State**: IN	**ZIP Code**: 67304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: MUSICK JANICE E AND MATTHEW L HOLDING		**Date Notified**: 4/20/2019
Address: 1627 S Woodruff Dr		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		

OAQ GENERAL SOURCE DATA APPLICATION
GSD-14: Owners and Occupants Notified

State Form 51609 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of GSD-14 is to identify adjacent landowners and occupants that are to be notified that an air permit application has been submitted.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Owners And Occupants Notified

Use this table to identify adjacent landowners and occupants that you have notified of your intent to construct pursuant to Indiana Code (IC) 13-15-8. If you need additional space, you may make copies of this form.

1. Owner / Occupant Name: Current Owner/Occupant		**2. Date Notified**: 4/20/2019
3. Address: 1608 S WOODRUFF DR		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
4. Electronic Mail:	**5. Telephone Number**: ( ) -	
6. Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: STOCKRAHM TIM & SHARON STOCKRAHM		**Date Notified**: 4/20/2019
Address: 1620 S WOODRUFF DR		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: HOLDING MATTHEW L		**Date Notified**: 4/20/2019
Address: 6161 W KILGORE AVE		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name: Current Owner/Occupant		**Date Notified**: 4/20/2019
Address: 1628 S WOODRUFF DR		
City: Muncie	**State**: IN	**ZIP Code**: 47304 –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☒ **Standard Mail** ☐ **Other** *(specify)*:		
Owner / Occupant Name:		**Date Notified**:
Address:		
City:	**State**:	**ZIP Code**: –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☐ **Standard Mail** ☐ **Other** *(specify)*:		

OAQ GENERAL SOURCE DATA APPLICATION
GSD-15: Government Officials Notified

State Form 51608 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of GSD-15 is to identify local government officials that are to be notified that an air permit application has been submitted.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for public inspection.

Government Officials Notified

Use this table to identify local government officials that should be notified pursuant to Indiana Code (IC) 13-15-3-1 that an air permit application has been submitted. If you need additional space, you may make copies of this form.

1. Name: Marta Moody		**2. Date Notified**:
3. Title: Executive Director		
4. Address: 100 W Main Street		
City: Muncie	**State**: IN	**ZIP Code**: 47305 –
5. Electronic Mail:	**6. Telephone Number**: (765) 747 - 7740	
7. Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☐ **Standard Mail** ☐ **Other** *(specify)*:		

Name: Dennis Tyler		**Date Notified**:
Title: Mayor		
Address: 300 North High Street		
City: Muncie	**State**: IN	**ZIP Code**: 47305 –
Electronic Mail: mayor@cityofmuncie.com	**Telephone Number**: (765) 747 - 4845	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☐ **Standard Mail** ☐ **Other** *(specify)*:		

Name:		**Date Notified**:
Title:		
Address:		
City:	**State**:	**ZIP Code**: –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☐ **Standard Mail** ☐ **Other** *(specify)*:		

Name:		**Date Notified**:
Title:		
Address:		
City:	**State**:	**ZIP Code**: –
Electronic Mail:	**Telephone Number**: ( ) -	
Method of Notification: ☐ **Telephone** ☐ **Electronic Mail** ☐ **Standard Mail** ☐ **Other** *(specify)*:		

OAQ PROCESS INFORMATION APPLICATION
PI-01: Miscellaneous Process

State Form 52534 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to obtain detailed information about the process. Complete one form for each process unit (or group of identical process units). This is a required form.
- Detailed instructions for this form are available online on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

PART A: Process Information

Part A identifies the process. If there are multiple process units that are identical in nature, capacity, and use, you may use one form to summarize the data for the identical process units.

1. **Unit ID**: Not Applicable

2. **Installation Date**: *(actual or anticipated)*

3. **How many *(identical)* process units are identified in this form?** ☐ One ☐ More than one *(specify number)*: _____

4. **Process Description**:

5. **Maximum Production Rate** *(specify units)*:

6. **Fuel Used**: ☐ Not Applicable ☐ Natural Gas Only ☐ Other – *Attach completed PI-02F form.*

7. **Add-On Control Technology**: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- ☐ None
- ☐ Baghouse / Fabric Filter – *Attach CE-02.*
- ☐ Cyclone – *Attach CE-03.*
- ☐ Electrostatic Precipitator – *Attach CE-04.*
- ☐ Absorption / Wet Collector / Scrubber – *Attach CE-05.*
- ☐ Oxidizer / Incinerator – *Attach CE-06.*
- ☐ Adsorber – *Attach CE-07.*
- ☐ Condenser – *Attach CE-08.*
- ☐ Reduction – *Attach CE-09.*
- ☐ Other *(specify)*: – *Attach CE-10.*

8. **Control Techniques**: *Identify all control techniques used for this process.*

9. **Process Limitations / Additional Information**: *Identify any acceptable process limitations. Attach additional information if necessary.*

Continued on next page

PART B: Emission Factors

Part B identifies all emission factors used to calculate air emissions from this process.

10. Process Unit *(& ID, if applicable)*	11. Air Pollutant	12. Emission Factor		13. Source of Emission Factor *(if not using AP-42, include calculations)*
		value	*units*	
				☐ AP-42 ☐ Other
				☐ AP-42 ☐ Other
				☐ AP-42 ☐ Other
				☐ AP-42 ☐ Other
				☐ AP-42 ☐ Other
				☐ AP-42 ☐ Other

PART C: Processed Materials

Part C identifies the materials processed and the raw material usage.

14. Materials Processed	15. Raw Materials Usage Rate *(lb/hr)*

PART D: Federal Rule Applicability

Part D identifies any federal rules that apply to the process.

16. Is a **New Source Performance Standard (NSPS)** applicable to this source? *Attach a completed FED-01 for each rule that applies.* ☐ Yes ☐ No

40 CFR Part 60, Subpart _____

17. Is a **National Emission Standard for Hazardous Air Pollutants (NESHAP)** applicable to this source? *Attach a completed FED-01 for each rule that applies.* ☐ Yes ☐ No

40 CFR Part 61, Subpart _____

40 CFR Part 63, Subpart _____

18. Non-Applicability Determination: *Provide an explanation if the process unit appears subject to a rule (based on the rule title or the source category), but the rule will not apply.*

OAQ PROCESS INFORMATION APPLICATION
PI-02A: Combustion Unit Summary

State Form 52535 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to summarize all of the combustion process units.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

Form ID	Form Title	Guidance on when to submit the form
PI-02A	Combustion Unit Summary	Complete once for each application.
PI-02B	Boilers & Process Heaters	Complete once for each boiler or process heater.
PI-02C	Turbines & Internal Combustion Engines	Complete once for each turbine or internal combustion engine.
PI-02D	Incinerators & Combustors	Complete once for each incinerator or combustor.
PI-02E	Kilns	Complete once for each kiln.
PI-02F	Fuel Use	Complete once for each emissions unit that burns fuel **other than natural gas**.
PI-02G	Emission Factors	Complete once for each emissions unit.
PI-02H	Federal Rule Applicability	Complete once for each emissions unit.

Summary of Combustion Units

This table summarizes all the combustion units at the source. If there are multiple combustion units that are identical in nature, capacity, and use, you may use one row to summarize the identical units.

1. Combustion Unit Type	2. Number of Identical Units	3. Unit ID(s)	4. Date of Installation or Modification *(actual or anticipated)*	5. Heat Input Rate of each unit *(MMBtu/hr)*	6. Emergency / Back-Up Unit?
Kiln	2	PC1 & PC2	8/1/2019	50.00	☐ Yes ☒ No
Dryer	1	DRY1	8/1/2019	17.00	☐ Yes ☒ No
Emergency Generator	2	EG1 & EG2	8/1/2019	14.00	☒ Yes ☐ No
					☐ Yes ☐ No
					☐ Yes ☐ No
					☐ Yes ☐ No
					☐ Yes ☐ No
					☐ Yes ☐ No
					☐ Yes ☐ No
					☐ Yes ☐ No
					☐ Yes ☐ No
					☐ Yes ☐ No

OAQ PROCESS INFORMATION APPLICATION
PI-02B: Combustion – Boilers, Process Heaters & Furnaces

State Form 52536 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to specify details that pertain only to boilers, process heaters and furnaces.
- For the purposes of this form, a process heater is any combustion unit that provides heat directly or indirectly to the process.
- Complete one PI-02B form for each emissions unit. If there are multiple emission units that are identical in nature, capacity, and use, you may use one PI-02B form to summarize the units.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

PART A: Process Unit Details

Part A specifies operating information that is unique to boilers, process heaters and furnaces. Definitions and additional explanation of terminology are included in the instructions for this form.

1. Unit ID: DRYER (DRY1)

2. Type of Combustion Unit

☐ Boiler:	☐ Industrial Boiler	☐ Commercial Boiler
	☐ Institutional Boiler	☐ Horseshoe Boiler
☒ Process Heater:	☐ Dutch Oven	☒ Drying Oven
	☐ Fuel Cell	☐ Space Heater
☐ Furnace:	☐ Crucible	☐ Crucible Pot
	☐ Cupola	☐ Electric Arc
	☐ Electric Induction	☐ Open Hearth
	☐ Open Hearth, Oxygen Lanced	☐ Pot
	☐ Reverberatory	☐ Sweat

3. Combustion Process

☐ Cyclone Burner	☐ Fluidized Bed – *Circulating*	☐ Fluidized Bed – *Bubbling*
☐ Overfeed Stoker / Traveling Grate	☐ Pulverized – *Dry Bottom*	☐ Pulverized – *Wet Bottom*
☐ Spreader Stoker	☐ Underfeed Stoker	☒ Other *(specify)*: TBD

4. Heat Transfer Method: ☐ Watertube ☐ Firetube ☐ Cast Iron

5. Transfer Surface Arrangement *(check all that apply)*:

☐ Horizontal	☐ Straight
☐ Vertical	☐ Bent Tube

6. Firing Configuration:

☐ Cyclone	☐ Fluidized Bed Combustor	☐ Front Wall
☐ Horizontally Opposed	☐ Normal	☐ Stoker
☐ Suspension	☐ Tangential	

7. Heat Transfer Method *(process heaters only)*: ☒ Direct ☐ Indirect

8. Fuel Used: ☒ Natural Gas Only ☐ Other – *Attach completed PI-02F.*

Continued on Next Page

PART B: Emission Controls and Limitations

Part B identifies control technology, control techniques or other process limitations that impact air emissions.

9. Add-On Control Technology: *Identify all control technologies used for this process. Attach completed CE-01 (unless "none").*

- ☐ None
- ☒ Baghouse / Fabric Filter – *Attach CE-02.*
- ☐ Cyclone – *Attach CE-03.*
- ☐ Electrostatic Precipitator – *Attach CE-04.*
- ☐ Absorption / Wet Collector / Scrubber – *Attach CE-05.*
- ☐ NO_x Reduction – *Attach CE-09.*
- ☐ Other *(specify)*: – *Attach CE-10.*

10. Control Techniques: *Identify all control techniques used for this process.*

- ☒ None *(explain)*: Burner capacity is low. Only control on the Dryer is the baghouse.
- ☐ Ammonia Injection
- ☐ Biased Burner Firing
- ☐ Burning Oil / Water Emulsions
- ☐ Burners Out Of Service
- ☐ Duct Injection
- ☐ Flue Gas Recirculation
- ☐ Flyash Reinjection
- ☐ Furnace Injection
- ☐ Load Reduction
- ☐ Low Excess Air
- ☐ Low NO_x Burners
- ☐ Overfire Air
- ☐ Reburn
- ☐ Reduced Air Preheat
- ☐ Spray Drying
- ☐ Staged Combustion
- ☐ Other *(specify)*: – *Attach completed GSD-09.*

11. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

PART C: Previously Installed Boilers

Part C identifies all boilers that were installed prior to submitting this application.

12. Are there any **Previously Installed Boilers** present at this source?

- ☒ No – Proceed to Part D.
- ☐ Yes → ☐ Information attached. ☐ Information is contained in operating permit:

PART D: Furnace Details

Part D identifies details that pertain only to furnaces. If there are no furnaces identified with this application, completion of this table is not required.

13. Material Melted:

14. Maximum Melt Rate *(specify units)*:

15. Flux Type: ☐ MSDS attached.

16. Flux Amount *(specify units)*:

17. Oven Throughput Material:

OAQ PROCESS INFORMATION APPLICATION
PI-02C: Combustion – Turbines & Reciprocating Internal Combustion Engines

State Form 52537 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to specify details that pertain only to turbines and internal combustion engines.
- Complete one PI-02C form for each emissions unit. If there are multiple emission units that are identical in nature, capacity, and use, you may use one PI-02C form to summarize the units.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

PART A: Process Unit Details

Part A specifies operating information that is unique to turbines and reciprocating internal combustion engines. Definitions and additional explanation of terminology are included in the instructions for this form.

1. Unit ID: Emergency Generator 1 (EG1) & Emergency Generator 2 (EG2) (two identical units)

2. Type of Combustion Unit

☐ Turbine:	☐ Simple Cycle ☐ Regenerative Cycle ☐ Cogeneration ☐ Combined Cycle
☒ Reciprocating Internal Combustion Engine:	☐ 2-stroke lean-burn ☐ 4-stroke lean-burn ☒ 4-stroke rich-burn

3. Combustion Process: ☐ Diffusion Flame Combustion ☐ Lean-Premix Staged Combustion

4. Ignition Type: ☐ Spark ☒ Compression

5. Power Output: 2000.00 horsepower (hp)
megawatts (MW)

6. Duty Cycle: 500 hours per year (hr/yr)

7. Fuel Used: ☐ Natural Gas Only
☒ Other – *Attach completed PI-02F.*

8. Does this combustion unit supply power to an emergency generator? ☒ Yes ☐ No

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Continued on Next Page

PART B: Emission Controls and Limitations

Part B identifies control technology, control techniques or other process limitations that impact air emissions.

9. Add-On Control Technology: *Identify all control technologies used for this process. Attach completed CE-01 (unless "none").*

- ☒ None
- ☐ Catalytic Oxidation – *Attach CE-06*
- ☐ NO_x Reduction – *Attach CE-09*
- ☐ Other *(specify)*: – *Attach CE-10.*

10. Control Techniques: *Identify all control techniques used for this process.*

- ☐ None *(explain)*:
- ☐ Air-To-Fuel Ratio Adjustments
- ☐ Boiling Point adjusted to 10% and 90%
- ☐ Charge Cooling
- ☐ Derating
- ☐ Exhaust Gas Recirculation
- ☐ Fuel Injection Pressure
- ☐ Injection Timing Retard
- ☐ Lean Combustion
- ☐ Oil Consumption Control
- ☐ Rapid Spill Nozzles
- ☐ Two Stage Lean / Lean Combustion
- ☐ Water/Fuel Emulsions
- ☐ Other *(specify)*:
- ☐ Aromatic Content Increase
- ☐ Cetane Number
- ☐ Combustion Chamber Modifications
- ☐ Electronic Timing & Metering
- ☐ Fuel Additives
- ☐ Injection Rate Control
- ☐ Injector Nozzle Geometry
- ☒ Low Sulfur Content Fuel
- ☐ Pre-ignition Chamber Combustion
- ☐ Turbocharging
- ☐ Two Stage Rich / Lean Combustion
- ☐ Water / Steam Injection

– *Attach completed GSD-09.*

11. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

OAQ PROCESS INFORMATION APPLICATION
PI-02E: Combustion – Kilns

State Form 52539 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to specify details that pertain only to kilns.
- Complete one PI-02E form for each emissions unit. If there are multiple emission units that are identical in nature, capacity, and use, you may use one PI-02E form to summarize the units.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

PART A: Process Unit Details

Part A specifies operating information that is unique to kilns. Definitions and additional explanation of terminology are included in the instructions for this form.

1. Unit ID:	Kiln 1 (KLN1) & Kiln 2 (KLN2) (two identical units)
2. Processed Material:	☐ Portland Cement *Attach this PI-02E to the completed PI-15.* ☐ Lime *Attach this PI-02E to the completed PI-13.* ☐ Brick or Clay Products *Attach this PI-02E to the completed PI-05.* ☒ Other *(specify)*: EAF dust and a carbon source (e.g., metallurgical coke breeze, anthracite, petroleum coke, etc.)
3. Configuration:	☒ Rotary ☐ Vertical
4. Type of Kiln:	☐ Calcimatic ☐ Dry Process ☐ Fluidized Bed ☐ Preheater ☐ Preheater / Precalciner Process ☐ Regenerative ☐ Wet Process
5. Material Throughput *(specify units)*:	30.50 ton/hr of EAF & carbonaceous material (each)
6. Fuel Used:	☒ Natural Gas Only ☐ Other – *Attach completed PI-02F.*
7. Heating Method:	☒ Periodic ☐ Tunnel
8. Length of Burn Time *(specify units)*:	TBD
9. Does this source have a pre-dryer / pre-heater? *If yes, attach completed PI-02B.*	☒ Yes ☐ No

This space was intentionally left blank.

Continued on Next Page

PART B: Emission Controls and Limitations

Part B identifies control technology, control techniques or other process limitations that impact air emissions.

10. Add-On Control Technology: *Identify all control technologies used for this process. Attach completed CE-01 (unless "none").*

- ☐ None
- ☒ Baghouse / Fabric Filter – *Attach CE-02.*
- ☐ Cyclone – *Attach CE-03.*
- ☐ Electrostatic Precipitator – *Attach CE-04.*
- ☐ Absorption / Wet Collector / Scrubber – *Attach CE-05.*
- ☐ Oxidizer / Incinerator – *Attach CE-06.*
- ☐ Adsorber – *Attach CE-07.*
- ☐ Condenser – *Attach CE-08.*
- ☐ NO_X Reduction – *Attach CE-09.*
- ☐ Other *(specify)*: – *Attach CE-10.*

11. Control Techniques: *Identify all control techniques used for this process.*

12. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

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OAQ PROCESS INFORMATION APPLICATION
PI-02F: Combustion – Fuel Use

State Form 52540 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to identify each fuel that will be used in the combustion unit. Definitions and additional explanation of terminology are included in the instructions for this form.
- Complete one form PI-02F for each combustion unit. If the unit has any capability of using a fuel, even if on a backup or intermittent basis, complete the applicable section. Using a fuel that is not specified in the permit is a violation of the permit.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

PART A: Process Unit Identification

1. Unit ID: KLN1

PART B: Gaseous Fuels

Part B identifies the gaseous fuels that will be used in the combustion unit.

2. Fuel Type:	3. Percent of Fuel Use *(by volume)*	4. Primary or Secondary Fuel?	5. Component Percentages:	6. Heating Value:
☒ Natural Gas	100.00%	☒ Primary ☐ Secondary	Sulfur: 0.00%	1020.00 *(Btu/ft³)*
☐ Liquefied Petroleum Gas ☐ *Commercial- Propane* ☐ *Engine Fuel Propane (HD-5)* ☐ *Commercial- Butane*		☐ Primary ☐ Secondary	Sulfur: Butane: Propane:	*(Btu/ft³)*
☐ Process Gas *		☐ Primary ☐ Secondary	Sulfur:	*(Btu/ft³)*
☐ Landfill Gas *		☐ Primary ☐ Secondary	Sulfur:	*(Btu/ft³)*
☐ Other *(specify)*:		☐ Primary ☐ Secondary		*(Btu/ft³)*

* Indicate the source of the process or landfill gas:

Continue Next Page

PART C: Liquid Fuels

Part C identifies the liquid fuels that will be used in the combustion unit.

7. Fuel Type:	8. Percent of Fuel Use *(by volume)*	9. Primary or Secondary Fuel?	10. Component Percentages:	11. Heating Value:	12. Percent Heat:
☐ Residual Fuel Oil ☐ *No. 5 – Heavy* ☐ *No. 5 – Light* ☐ *No. 6 (Bunker C)*		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☐ Distillate Fuel Oil ☐ *No. 1* ☐ *No. 2 (Diesel)* ☐ *No. 4*		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☐ Gasoline		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☐ Waste Oil		☐ Primary ☐ Secondary	Sulfur: Ash: Lead Chlorine:	*(Btu/gal)*	
☐ Liquid Waste *		☐ Primary ☐ Secondary	Sulfur: Fluorine: Chlorine:	*(Btu/gal)*	
☐ Other *(specify)*:		☐ Primary ☐ Secondary	: :	*(Btu/gal)*	

* RCRA alpha-numeric codes for Special or Hazardous Waste to be Burned:

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PART D1: Solid Fuels – Coal

Part D1 identifies all variations of coal that will be used in the combustion unit.

13. Fuel Type:	14. Percent of Fuel Use *(by volume)*	15. Primary or Secondary Fuel?	16. Component Percentages:	17. Heating Value:	18. Basis:
☐ Anthracite Coal ☐ *Anthracite* ☐ *Culm*		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Bituminous Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Sub-bituminous Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Lignite Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Coke		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Other Coal *(specify)*:		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/gal)*	☐ Dry ☐ Moist

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Continue Next Page

PART D2: Other Solid Fuels

Part D2 identifies the solid fuels, other than coal, that will be used in the combustion unit.

19. Fuel Type:	20. Percent of Fuel Use *(by volume)*	21. Primary or Secondary Fuel?	22. Component Percentages:	23. Heating Value:	24. Percent Heat:
☐ Wood or Wood Waste ☐ *Wood Only* ☐ *Wood Residue Only* ☐ *Wood and Wood Residue*		☐ Primary ☐ Secondary	Moisture:	*(Btu/ton)*	
☐ Tires or Tire Derived Fuel ☐ *Whole Tires* ☐ *Tire Derived Fuel*		☐ Primary ☐ Secondary	Sulfur: Chromium: Chlorine:	*(Btu/lb)*	
☐ Bagasse		☐ Primary ☐ Secondary	Ash: Moisture:	*(Btu/lb)*	
☐ Solid Waste *		☐ Primary ☐ Secondary	: :	*(Btu/lb)*	
☐ Other *(specify)*:		☐ Primary ☐ Secondary	: :	*(Btu/lb)*	

*RCRA alpha-numeric codes for Special or Hazardous Waste to be Burned:

PART E: Fuel Consumption Limitations

Use the space provided to specify any fuel consumption limitations that are acceptable for the combustion unit.

Kiln burner will have a capacity of 50 MMBtu/hr (natural gas).

OAQ PROCESS INFORMATION APPLICATION
PI-02F: Combustion – Fuel Use

State Form 52540 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
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Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to identify each fuel that will be used in the combustion unit. Definitions and additional explanation of terminology are included in the instructions for this form.
- Complete one form PI-02F for each combustion unit. If the unit has any capability of using a fuel, even if on a backup or intermittent basis, complete the applicable section. Using a fuel that is not specified in the permit is a violation of the permit.
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PART A: Process Unit Identification

1. Unit ID: KLN2

PART B: Gaseous Fuels

Part B identifies the gaseous fuels that will be used in the combustion unit.

2. Fuel Type:	3. Percent of Fuel Use *(by volume)*	4. Primary or Secondary Fuel?	5. Component Percentages:	6. Heating Value:
☒ Natural Gas	100.00%	☒ Primary ☐ Secondary	Sulfur: 0.00%	1020.00 *(Btu/ft³)*
☐ Liquefied Petroleum Gas ☐ *Commercial- Propane* ☐ *Engine Fuel Propane (HD-5)* ☐ *Commercial- Butane*		☐ Primary ☐ Secondary	Sulfur: Butane: Propane:	*(Btu/ft³)*
☐ Process Gas *		☐ Primary ☐ Secondary	Sulfur:	*(Btu/ft³)*
☐ Landfill Gas *		☐ Primary ☐ Secondary	Sulfur:	*(Btu/ft³)*
☐ Other *(specify)*:		☐ Primary ☐ Secondary	:	*(Btu/ft³)*

* Indicate the source of the process or landfill gas:

Continue Next Page

PART C: Liquid Fuels

Part C identifies the liquid fuels that will be used in the combustion unit.

7. Fuel Type:	8. Percent of Fuel Use *(by volume)*	9. Primary or Secondary Fuel?	10. Component Percentages:	11. Heating Value:	12. Percent Heat:
☐ Residual Fuel Oil ☐ *No. 5 – Heavy* ☐ *No. 5 – Light* ☐ *No. 6 (Bunker C)*		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☐ Distillate Fuel Oil ☐ *No. 1* ☐ *No. 2 (Diesel)* ☐ *No. 4*		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☐ Gasoline		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☐ Waste Oil		☐ Primary ☐ Secondary	Sulfur: Ash: Lead Chlorine:	*(Btu/gal)*	
☐ Liquid Waste *		☐ Primary ☐ Secondary	Sulfur: Fluorine: Chlorine:	*(Btu/gal)*	
☐ Other *(specify)*:		☐ Primary ☐ Secondary	: :	*(Btu/gal)*	

* RCRA alpha-numeric codes for Special or Hazardous Waste to be Burned:

This space was intentionally left blank.

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PART D1: Solid Fuels – Coal

Part D1 identifies all variations of coal that will be used in the combustion unit.

13. Fuel Type:	14. Percent of Fuel Use *(by volume)*	15. Primary or Secondary Fuel?	16. Component Percentages:	17. Heating Value:	18. Basis:
☐ Anthracite Coal ☐ *Anthracite* ☐ *Culm*		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Bituminous Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Sub-bituminous Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Lignite Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Coke		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Other Coal *(specify)*:		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/gal)*	☐ Dry ☐ Moist

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Continue Next Page

PART D2: Other Solid Fuels

Part D2 identifies the solid fuels, other than coal, that will be used in the combustion unit.

19. Fuel Type:	20. Percent of Fuel Use *(by volume)*	21. Primary or Secondary Fuel?	22. Component Percentages:	23. Heating Value:	24. Percent Heat:
☐ Wood or Wood Waste ☐ *Wood Only* ☐ *Wood Residue Only* ☐ *Wood and Wood Residue*		☐ Primary ☐ Secondary	Moisture:	*(Btu/ton)*	
☐ Tires or Tire Derived Fuel ☐ *Whole Tires* ☐ *Tire Derived Fuel*		☐ Primary ☐ Secondary	Sulfur: Chromium: Chlorine:	*(Btu/lb)*	
☐ Bagasse		☐ Primary ☐ Secondary	Ash: Moisture:	*(Btu/lb)*	
☐ Solid Waste *		☐ Primary ☐ Secondary	: :	*(Btu/lb)*	
☐ Other *(specify)*:		☐ Primary ☐ Secondary	: :	*(Btu/lb)*	

*RCRA alpha-numeric codes for Special or Hazardous Waste to be Burned:

PART E: Fuel Consumption Limitations

Use the space provided to specify any fuel consumption limitations that are acceptable for the combustion unit.

Kiln burner will have a capacity of 50 MMBtu/hr (natural gas).

OAQ PROCESS INFORMATION APPLICATION
PI-02F: Combustion – Fuel Use

State Form 52540 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to identify each fuel that will be used in the combustion unit. Definitions and additional explanation of terminology are included in the instructions for this form.
- Complete one form PI-02F for each combustion unit. If the unit has any capability of using a fuel, even if on a backup or intermittent basis, complete the applicable section. Using a fuel that is not specified in the permit is a violation of the permit.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

PART A: Process Unit Identification

1. Unit ID: DRY1

PART B: Gaseous Fuels

Part B identifies the gaseous fuels that will be used in the combustion unit.

2. Fuel Type:	3. Percent of Fuel Use *(by volume)*	4. Primary or Secondary Fuel?	5. Component Percentages:	6. Heating Value:
☒ Natural Gas	100.00%	☒ Primary ☐ Secondary	Sulfur: 0.00%	1020.00 *(Btu/ft³)*
☐ Liquefied Petroleum Gas ☐ *Commercial- Propane* ☐ *Engine Fuel Propane (HD-5)* ☐ *Commercial- Butane*		☐ Primary ☐ Secondary	Sulfur: Butane: Propane:	*(Btu/ft³)*
☐ Process Gas *		☐ Primary ☐ Secondary	Sulfur:	*(Btu/ft³)*
☐ Landfill Gas *		☐ Primary ☐ Secondary	Sulfur:	*(Btu/ft³)*
☐ Other *(specify)*:		☐ Primary ☐ Secondary	:	*(Btu/ft³)*

* Indicate the source of the process or landfill gas:

Continue Next Page

PART C: Liquid Fuels

Part C identifies the liquid fuels that will be used in the combustion unit.

7. Fuel Type:	8. Percent of Fuel Use *(by volume)*	9. Primary or Secondary Fuel?	10. Component Percentages:	11. Heating Value:	12. Percent Heat:
☐ Residual Fuel Oil ☐ *No. 5 – Heavy* ☐ *No. 5 – Light* ☐ *No. 6 (Bunker C)*		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☐ Distillate Fuel Oil ☐ *No. 1* ☐ *No. 2 (Diesel)* ☐ *No. 4*		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☐ Gasoline		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☐ Waste Oil		☐ Primary ☐ Secondary	Sulfur: Ash: Lead Chlorine:	*(Btu/gal)*	
☐ Liquid Waste *		☐ Primary ☐ Secondary	Sulfur: Fluorine: Chlorine:	*(Btu/gal)*	
☐ Other *(specify)*:		☐ Primary ☐ Secondary	: :	*(Btu/gal)*	

* RCRA alpha-numeric codes for Special or Hazardous Waste to be Burned:

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PART D1: Solid Fuels – Coal

Part D1 identifies all variations of coal that will be used in the combustion unit.

13. Fuel Type:	14. Percent of Fuel Use *(by volume)*	15. Primary or Secondary Fuel?	16. Component Percentages:	17. Heating Value:	18. Basis:
☐ Anthracite Coal ☐ *Anthracite* ☐ *Culm*		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Bituminous Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Sub-bituminous Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Lignite Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Coke		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Other Coal *(specify)*:		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/gal)*	☐ Dry ☐ Moist

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Continue Next Page

PART D2: Other Solid Fuels

Part D2 identifies the solid fuels, other than coal, that will be used in the combustion unit.

19. Fuel Type:	20. Percent of Fuel Use *(by volume)*	21. Primary or Secondary Fuel?	22. Component Percentages:	23. Heating Value:	24. Percent Heat:
☐ Wood or Wood Waste ☐ *Wood Only* ☐ *Wood Residue Only* ☐ *Wood and Wood Residue*		☐ Primary ☐ Secondary	Moisture:	*(Btu/ton)*	
☐ Tires or Tire Derived Fuel ☐ *Whole Tires* ☐ *Tire Derived Fuel*		☐ Primary ☐ Secondary	Sulfur: Chromium: Chlorine:	*(Btu/lb)*	
☐ Bagasse		☐ Primary ☐ Secondary	Ash: Moisture:	*(Btu/lb)*	
☐ Solid Waste *		☐ Primary ☐ Secondary	: :	*(Btu/lb)*	
☐ Other *(specify)*:		☐ Primary ☐ Secondary	: :	*(Btu/lb)*	

*RCRA alpha-numeric codes for Special or Hazardous Waste to be Burned:

PART E: Fuel Consumption Limitations

Use the space provided to specify any fuel consumption limitations that are acceptable for the combustion unit.

Dryer will have a capacity of 17 MMBtu/hr (natural gas).

OAQ PROCESS INFORMATION APPLICATION
PI-02F: Combustion – Fuel Use

State Form 52540 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to identify each fuel that will be used in the combustion unit. Definitions and additional explanation of terminology are included in the instructions for this form.
- Complete one form PI-02F for each combustion unit. If the unit has any capability of using a fuel, even if on a backup or intermittent basis, complete the applicable section. Using a fuel that is not specified in the permit is a violation of the permit.
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PART A: Process Unit Identification

1. Unit ID: EG1

PART B: Gaseous Fuels

Part B identifies the gaseous fuels that will be used in the combustion unit.

2. Fuel Type:	3. Percent of Fuel Use *(by volume)*	4. Primary or Secondary Fuel?	5. Component Percentages:	6. Heating Value:
☐ Natural Gas		☐ Primary ☐ Secondary	Sulfur:	*(Btu/ft³)*
☐ Liquefied Petroleum Gas ☐ *Commercial- Propane* ☐ *Engine Fuel Propane (HD-5)* ☐ *Commercial- Butane*		☐ Primary ☐ Secondary	Sulfur: Butane: Propane:	*(Btu/ft³)*
☐ Process Gas *		☐ Primary ☐ Secondary	Sulfur:	*(Btu/ft³)*
☐ Landfill Gas *		☐ Primary ☐ Secondary	Sulfur:	*(Btu/ft³)*
☐ Other *(specify)*:		☐ Primary ☐ Secondary	:	*(Btu/ft³)*

* Indicate the source of the process or landfill gas:

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PART C: Liquid Fuels

Part C identifies the liquid fuels that will be used in the combustion unit.

7. Fuel Type:	8. Percent of Fuel Use *(by volume)*	9. Primary or Secondary Fuel?	10. Component Percentages:	11. Heating Value:	12. Percent Heat:
☐ Residual Fuel Oil ☐ *No. 5 – Heavy* ☐ *No. 5 – Light* ☐ *No. 6 (Bunker C)*		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☒ Distillate Fuel Oil ☐ *No. 1* ☒ *No. 2 (Diesel)* ☐ *No. 4*	100.00%	☒ Primary ☐ Secondary	Sulfur: 500 ppm	139,000 *(Btu/gal)*	100.00%
☐ Gasoline		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☐ Waste Oil		☐ Primary ☐ Secondary	Sulfur: Ash: Lead Chlorine:	*(Btu/gal)*	
☐ Liquid Waste *		☐ Primary ☐ Secondary	Sulfur: Fluorine: Chlorine:	*(Btu/gal)*	
☐ Other *(specify)*:		☐ Primary ☐ Secondary	: :	*(Btu/gal)*	

* RCRA alpha-numeric codes for Special or Hazardous Waste to be Burned:

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Continued on Next Page

PART D1: Solid Fuels – Coal

Part D1 identifies all variations of coal that will be used in the combustion unit.

13. Fuel Type:	14. Percent of Fuel Use *(by volume)*	15. Primary or Secondary Fuel?	16. Component Percentages:	17. Heating Value:	18. Basis:
☐ Anthracite Coal ☐ *Anthracite* ☐ *Culm*		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Bituminous Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Sub-bituminous Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Lignite Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Coke		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Other Coal *(specify)*:		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/gal)*	☐ Dry ☐ Moist

This space was intentionally left blank.

Continue Next Page

PART D2: Other Solid Fuels

Part D2 identifies the solid fuels, other than coal, that will be used in the combustion unit.

19. Fuel Type:	20. Percent of Fuel Use *(by volume)*	21. Primary or Secondary Fuel?	22. Component Percentages:	23. Heating Value:	24. Percent Heat:
☐ Wood or Wood Waste ☐ *Wood Only* ☐ *Wood Residue Only* ☐ *Wood and Wood Residue*		☐ Primary ☐ Secondary	Moisture:	*(Btu/ton)*	
☐ Tires or Tire Derived Fuel ☐ *Whole Tires* ☐ *Tire Derived Fuel*		☐ Primary ☐ Secondary	Sulfur: Chromium: Chlorine:	*(Btu/lb)*	
☐ Bagasse		☐ Primary ☐ Secondary	Ash: Moisture:	*(Btu/lb)*	
☐ Solid Waste *		☐ Primary ☐ Secondary	: :	*(Btu/lb)*	
☐ Other *(specify)*:		☐ Primary ☐ Secondary	: :	*(Btu/lb)*	

*RCRA alpha-numeric codes for Special or Hazardous Waste to be Burned:

PART E: Fuel Consumption Limitations

Use the space provided to specify any fuel consumption limitations that are acceptable for the combustion unit.

OAQ PROCESS INFORMATION APPLICATION
PI-02F: Combustion – Fuel Use

State Form 52540 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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NOTES:

- The purpose of this form is to identify each fuel that will be used in the combustion unit. Definitions and additional explanation of terminology are included in the instructions for this form.
- Complete one form PI-02F for each combustion unit. If the unit has any capability of using a fuel, even if on a backup or intermittent basis, complete the applicable section. Using a fuel that is not specified in the permit is a violation of the permit.
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- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

PART A: Process Unit Identification

1. Unit ID: EG2

PART B: Gaseous Fuels

Part B identifies the gaseous fuels that will be used in the combustion unit.

2. Fuel Type:	3. Percent of Fuel Use *(by volume)*	4. Primary or Secondary Fuel?	5. Component Percentages:	6. Heating Value:
☐ Natural Gas		☐ Primary ☐ Secondary	Sulfur:	*(Btu/ft³)*
☐ Liquefied Petroleum Gas ☐ *Commercial- Propane* ☐ *Engine Fuel Propane (HD-5)* ☐ *Commercial- Butane*		☐ Primary ☐ Secondary	Sulfur: Butane: Propane:	*(Btu/ft³)*
☐ Process Gas *		☐ Primary ☐ Secondary	Sulfur:	*(Btu/ft³)*
☐ Landfill Gas *		☐ Primary ☐ Secondary	Sulfur:	*(Btu/ft³)*
☐ Other *(specify)*:		☐ Primary ☐ Secondary	:	*(Btu/ft³)*

* Indicate the source of the process or landfill gas:

Continue Next Page

PART C: Liquid Fuels

Part C identifies the liquid fuels that will be used in the combustion unit.

7. Fuel Type:	8. Percent of Fuel Use *(by volume)*	9. Primary or Secondary Fuel?	10. Component Percentages:	11. Heating Value:	12. Percent Heat:
☐ Residual Fuel Oil ☐ *No. 5 – Heavy* ☐ *No. 5 – Light* ☐ *No. 6 (Bunker C)*		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☒ Distillate Fuel Oil ☐ *No. 1* ☒ *No. 2 (Diesel)* ☐ *No. 4*	100.00%	☒ Primary ☐ Secondary	Sulfur: 500 ppm	139,000 *(Btu/gal)*	100.00%
☐ Gasoline		☐ Primary ☐ Secondary	Sulfur:	*(Btu/gal)*	
☐ Waste Oil		☐ Primary ☐ Secondary	Sulfur: Ash: Lead Chlorine:	*(Btu/gal)*	
☐ Liquid Waste *		☐ Primary ☐ Secondary	Sulfur: Fluorine: Chlorine:	*(Btu/gal)*	
☐ Other *(specify)*:		☐ Primary ☐ Secondary	: :	*(Btu/gal)*	

* RCRA alpha-numeric codes for Special or Hazardous Waste to be Burned:

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PART D1: Solid Fuels – Coal

Part D1 identifies all variations of coal that will be used in the combustion unit.

13. Fuel Type:	14. Percent of Fuel Use *(by volume)*	15. Primary or Secondary Fuel?	16. Component Percentages:	17. Heating Value:	18. Basis:
☐ Anthracite Coal ☐ *Anthracite* ☐ *Culm*		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Bituminous Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Sub-bituminous Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Lignite Coal		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Coke		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/lb)*	☐ Dry ☐ Moist
☐ Other Coal *(specify)*:		☐ Primary ☐ Secondary	Sulfur: Ash: Moisture:	*(Btu/gal)*	☐ Dry ☐ Moist

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Continue Next Page

PART D2: Other Solid Fuels

Part D2 identifies the solid fuels, other than coal, that will be used in the combustion unit.

19. Fuel Type:	20. Percent of Fuel Use *(by volume)*	21. Primary or Secondary Fuel?	22. Component Percentages:	23. Heating Value:	24. Percent Heat:
☐ Wood or Wood Waste ☐ *Wood Only* ☐ *Wood Residue Only* ☐ *Wood and Wood Residue*		☐ Primary ☐ Secondary	Moisture:	*(Btu/ton)*	
☐ Tires or Tire Derived Fuel ☐ *Whole Tires* ☐ *Tire Derived Fuel*		☐ Primary ☐ Secondary	Sulfur: Chromium: Chlorine:	*(Btu/lb)*	
☐ Bagasse		☐ Primary ☐ Secondary	Ash: Moisture:	*(Btu/lb)*	
☐ Solid Waste *		☐ Primary ☐ Secondary	: :	*(Btu/lb)*	
☐ Other *(specify)*:		☐ Primary ☐ Secondary	: :	*(Btu/lb)*	

*RCRA alpha-numeric codes for Special or Hazardous Waste to be Burned:

PART E: Fuel Consumption Limitations

Use the space provided to specify any fuel consumption limitations that are acceptable for the combustion unit.

OAQ PROCESS INFORMATION APPLICATION
PI-02G: Combustion – Emission Factors

State Form 52541 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to specify the emission factors used to calculate potential to emit from the combustion unit.
- Complete one PI-02G form for each emissions unit. If there are multiple emission units that are identical in nature, capacity, and use, you may use one PI-02G form to summarize the units.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

Emission Factors

This table identifies all emission factors used to calculate air emissions from the combustion unit.

1. Unit ID: KLN1 & KLN2 (two identical units). Emission factors based on stack test data from similar facility and include a 50% contingency.

2. Air Pollutant:	3. Emission Factor		4. Source of Emission Factor *(if not using AP-42, include calculations)*		
	value	*units*			
Carbon Monoxide (CO)	0.94	lb/ton	☐ AP-42	☒ Other	☐ N/A
Lead (Pb)	0.09	lb/hr	☐ AP-42	☒ Other	☐ N/A
Hazardous Air Pollutant (HAP) *(specify)*: Total	0.39	lb/hr	☒ AP-42	☒ Other	☐ N/A
Nitrogen Oxides (NO_x)	54.00	lb/ton	☐ AP-42	☒ Other	☐ N/A
Mercury (Hg)	0.09	lb/hr	☐ AP-42	☒ Other	☐ N/A
Particulate Matter (PM)	0.30	lb/ton	☐ AP-42	☒ Other	☐ N/A
Particulate Matter less than 10μm (PM_{10})	0.20	lb/ton	☐ AP-42	☒ Other	☐ N/A
Particulate Matter less than 2.5μm ($PM_{2.5}$)	0.20	lb/ton	☐ AP-42	☒ Other	☐ N/A
Sulfur Dioxide (SO_2)	0.11	lb/ton	☐ AP-42	☒ Other	☐ N/A
Volatile Organic Compounds (VOC)	0.09	lb/ton	☐ AP-42	☒ Other	☐ N/A
Other *(specify)*:			☐ AP-42	☐ Other	☐ N/A
Other *(specify)*:			☐ AP-42	☐ Other	☐ N/A
Other *(specify)*:			☐ AP-42	☐ Other	☐ N/A

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OAQ PROCESS INFORMATION APPLICATION
PI-02G: Combustion – Emission Factors

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NOTES:

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- Complete one PI-02G form for each emissions unit. If there are multiple emission units that are identical in nature, capacity, and use, you may use one PI-02G form to summarize the units.
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Emission Factors

This table identifies all emission factors used to calculate air emissions from the combustion unit.

1. Unit ID: DRY1

2. Air Pollutant:	**3. Emission Factor**		**4. Source of Emission Factor** *(if not using AP-42, include calculations)*		
	value	*units*			
Carbon Monoxide (CO)	84.00	lb/MMscf	☒ AP-42	☐ Other	☐ N/A
Lead (Pb)	0.00	lb/MMscf	☒ AP-42	☐ Other	☐ N/A
Hazardous Air Pollutant (HAP) *(specify)*: Total, Natural Gas Combustion	5.10	lb/MMscf	☒ AP-42	☒ Other	☐ N/A
Nitrogen Oxides (NO_x)	100.00	lb/MMscf	☒ AP-42	☐ Other	☐ N/A
Mercury (Hg)			☐ AP-42	☐ Other	☐ N/A
Particulate Matter (PM)	7.60	lb/MMscf	☒ AP-42	☐ Other	☐ N/A
Particulate Matter less than 10μm (PM_{10})	7.60	lb/MMscf	☒ AP-42	☐ Other	☐ N/A
Particulate Matter less than 2.5μm ($PM_{2.5}$)	7.60	lb/MMscf	☒ AP-42	☐ Other	☐ N/A
Sulfur Dioxide (SO_2)	0.60	lb/MMscf	☒ AP-42	☐ Other	☐ N/A
Volatile Organic Compounds (VOC)	5.5	lb/MMscf	☒ AP-42	☐ Other	☐ N/A
Other *(specify)*:			☐ AP-42	☐ Other	☐ N/A
Other *(specify)*:			☐ AP-42	☐ Other	☐ N/A
Other *(specify)*:			☐ AP-42	☐ Other	☐ N/A

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OAQ PROCESS INFORMATION APPLICATION
PI-02G: Combustion – Emission Factors

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NOTES:

- The purpose of this form is to specify the emission factors used to calculate potential to emit from the combustion unit.
- Complete one PI-02G form for each emissions unit. If there are multiple emission units that are identical in nature, capacity, and use, you may use one PI-02G form to summarize the units.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
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Emission Factors

This table identifies all emission factors used to calculate air emissions from the combustion unit.

1. Unit ID: EG1 & EG 2 (two identical units)

2. Air Pollutant:	**3. Emission Factor**		**4. Source of Emission Factor** *(if not using AP-42, include calculations)*		
	value	*units*			
Carbon Monoxide (CO)	5.5E-03	lb/hp-hr	☑ AP-42	☐ Other	☐ N/A
Lead (Pb)	6.30E-08	lb/hp-hr	☑ AP-42	☐ Other	☐ N/A
Hazardous Air Pollutant (HAP) *(specify)*: Total	1.70E-03	lb/MMBtu	☑ AP-42	☐ Other	☐ N/A
Nitrogen Oxides (NO_X)	0.024	lb/hp-hr	☑ AP-42	☐ Other	☐ N/A
Mercury (Hg)			☐ AP-42	☐ Other	☐ N/A
Particulate Matter (PM)	7.00E-04	lb/hp-hr	☑ AP-42	☐ Other	☐ N/A
Particulate Matter less than 10μm (PM_{10})	7.00E-04	lb/hp-hr	☑ AP-42	☐ Other	☐ N/A
Particulate Matter less than 2.5μm ($PM_{2.5}$)	7.00E-04	lb/hp-hr	☑ AP-42	☐ Other	☐ N/A
Sulfur Dioxide (SO_2)	4.05E-04	lb/hp-hr	☑ AP-42	☐ Other	☐ N/A
Volatile Organic Compounds (VOC)	7.05E-04	lb/hp-hr	☑ AP-42	☐ Other	☐ N/A
Other *(specify)*:			☐ AP-42	☐ Other	☐ N/A
Other *(specify)*:			☐ AP-42	☐ Other	☐ N/A
Other *(specify)*:			☐ AP-42	☐ Other	☐ N/A

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OAQ PROCESS INFORMATION APPLICATION
PI-02H: Combustion – Federal Rule Applicability

State Form 52542 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to identify any federal rules that apply to the emission unit.
- Complete one PI-02H form for each emissions unit. If there are multiple emission units that are identical in nature, capacity, and use, you may use one PI-02H form to summarize the units.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

Federal Rule Applicability

This table identifies any federal rules that apply to the process.

1. Is a **New Source Performance Standard (NSPS)** applicable to this source? ☒ Yes ☐ No *If yes, attach a completed FED-01 for each rule that applies.*		2. **Unit IDs**
☐ 40 CFR Part 60, Subpart Cb	Large Municipal Waste Combustors *(constructed before 9/20/1994)*	
☐ 40 CFR Part 60, Subpart Ce	Hospital/Medical/Infectious Waste Incinerators	
☐ 40 CFR Part 60, Subpart D	Fossil-Fuel-Fired Steam Generators *(constructed after 8/17/1971)*	
☐ 40 CFR Part 60, Subpart Da	Electric Utility Steam Generating Units *(constructed after 9/18/1978)*	
☐ 40 CFR Part 60, Subpart Db	Industrial-Commercial-Institutional Generating Units	
☐ 40 CFR Part 60, Subpart Dc	Small Industrial-Commercial-Institutional Generating Units	
☐ 40 CFR Part 60, Subpart E	Incinerators	
☐ 40 CFR Part 60, Subpart Ea	Municipal Waste Combustors *(constructed after 12/20/1989 and before 9/20/1994)*	
☐ 40 CFR Part 60, Subpart Eb	Large Municipal Waste Combustors *(constructed after 9/20/1994 or modified / reconstructed after 6/19/1996)*	
☐ 40 CFR Part 60, Subpart Ec	Hospital/Medical/Infectious Waste Incinerators *(constructed after 6/20/1996)*	
☐ 40 CFR Part 60, Subpart O	Sewage Treatment Plants *(sludge burners)*	
☐ 40 CFR Part 60, Subpart Y	Coal Preparation Plants	
☐ 40 CFR Part 60, Subpart GG	Stationary Gas Turbines	
☐ 40 CFR Part 60, Subpart AAA	New Residential Wood Heaters	
☐ 40 CFR Part 60, Subpart AAAA	Small Municipal Waste Combustion Units *(constructed after 8/30/1999 or modified / reconstructed after 6/6/2001)*	
☐ 40 CFR Part 60, Subpart BBBB	Small Municipal Waste Combustion Units *(constructed on or before 8/30/1999)*	
☐ 40 CFR Part 60, Subpart CCCC	Commercial and Industrial Solid Waste Incineration Units *(constructed after 11/30/1999 or modified / reconstructed after 6/1/2001)*	
☐ 40 CFR Part 60, Subpart DDDD	Commercial and Industrial Solid Waste Incineration Units *(constructed on or before 11/30/1999)*	
☐ 40 CFR Part 60, Subpart KKKK	Stationary Combustion Turbines	

Continued on Next Page

Federal Rule Applicability *(continued)*

This table identifies any federal rules that apply to the process.

3. Is a **National Emission Standard for Hazardous Air Pollutants (NESHAP)** applicable to this source? ☒ Yes ☐ No *If yes, attach a completed FED-01 for each rule that applies.*		4. **Unit IDs**
☐ 40 CFR Part 63, Subpart MM	Combustion Sources at Kraft, Soda, and Sulfite Pulp & Paper Mills	
☐ 40 CFR Part 63, Subpart EEE	Hazardous Waste Combustion	
☐ 40 CFR Part 63, Subpart YYYY	Stationary Combustion Turbines	
☒ 40 CFR Part 63, Subpart ZZZZ	Reciprocating Internal Combustion Engines (RICE)	EG1 & EG2
☐ 40 CFR Part 63, Subpart DDDDD	Industrial, Commercial, and Institutional Boilers and Process Heaters	

5. **Non-Applicability Determination**: *Provide an explanation if the process unit appears subject to a rule (based on the rule title or the source category), but the rule will not apply.*

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OAQ PROCESS INFORMATION APPLICATION
PI-03: Storage & Handling of Bulk Material

State Form 52543 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to obtain detailed information about the storage and handling of bulk materials. Complete one form for each process (or group of identical processes). Use additional forms if necessary. This is a required form.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

PART A: Storage & Handling Information

Part A identifies all process units associated with storage and handling process for bulk materials. If there are multiple process units that are identical in nature, capacity, and use, you may use one form to summarize the data.

1. Equipment / Component Type	2. Unit ID	3. Number of Identical Units	4. Installation Date *(see instructions)*	5. Material Handled/ Stored	6. Maximum Materials Throughput Rate *(tons/year)*
Indoor Storage	RB1	1	TBD	EAF Dust	360,000

7. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- ☐ None
- ☑ Baghouse / Fabric Filter – *Attach CE-02.*
- ☐ Cyclone – *Attach CE-03*
- ☐ Electrostatic Precipitator – *Attach CE-04*
- ☐ Absorption / Wet Collector / Scrubber – *Attach CE-05*
- ☐ Adsorber – *Attach CE-07.*
- ☐ Other *(specify)*: – *Attach CE-10*

8. Control Techniques: *Identify any other air emission control options used for the process.*

9. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

Continued on next page

PART B: Process Material Information

Part B summarizes the process material information. Provide the information in the items below for each material stored and/or handled in this process.

10. Material Handled/Stored *(from table above)*	11. Method of Handling	12. Type of Storage	13. Storage Capacity *(tons)*	14. Pile Acreage	15. Silt Content *(% by weight)*	16. Moisture Content *(% by weight)*
EAF Dust	TBD	TBD	TBD	TBD	TBD	TBD

PART C: Emission Factors

Part C identifies all emission factors used to calculate air emissions from the process units listed on this form.

17. Process Equipment & ID *(complete for all units listed in Part A of this form)*	18. Air Pollutant	19. Emission Factor		20. Source of Emission Factor *(if not using AP-42, include calculations)*	
		value	*units*		
RB1	PM	0.003	gr/dscf	☐ AP-42	☑ Other
RB1	PM-10	0.003	gr/dscf	☐ AP-42	☑ Other
				☐ AP-42	☐ Other
				☐ AP-42	☐ Other

PART D: Federal Rule Applicability

Part D identifies any federal rules that apply to the process.

21. Is a **New Source Performance Standard (NSPS)** applicable to this source? ☐ Yes ☑ No
If yes, attach a completed FED-01 for each rule that applies.

- ☐ 40 CFR Part 60, Subpart CC — Glass Manufacturing Plants
- ☐ 40 CFR Part 60, Subpart DD — Grain Elevators
- ☐ 40 CFR Part 60, Subpart HH — Lime Manufacturing Plants
- ☐ 40 CFR Part 60, Subpart LL — Metallic Mineral Processing Plants
- ☐ 40 CFR Part 60, Subpart UU — Asphalt Processing and Asphalt Roofing Manufacture
- ☐ 40 CFR Part 60, Subpart OOO — Non-Metallic Mineral Processing Plants
- ☐ 40 CFR Part 60, Subpart UUU — Calciners and Dryers in Mineral Industries

22. Is a **National Emission Standard for Hazardous Air Pollutants (NESHAP)** applicable to this source? ☐ Yes ☑ No
If yes, attach a completed FED-01 for each rule that applies.

- ☐ 40 CFR Part 61, Subpart _____ *(Specify)*:
- ☐ 40 CFR Part 63, Subpart _____ *(Specify)*:

23. Non-Applicability Determination: Provide an explanation if the process unit appears subject to a rule (based on the rule title or the source category), but the rule will not apply.

Refer to application narrative for detailed regulatory applicability review.

OAQ PROCESS INFORMATION APPLICATION
PI-03: Storage & Handling of Bulk Material

State Form 52543 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
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NOTES:

- The purpose of this form is to obtain detailed information about the storage and handling of bulk materials. Complete one form for each process (or group of identical processes). Use additional forms if necessary. This is a required form.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy.

PART A: Storage & Handing Information

Part A identifies all process units associated with storage and handling process for bulk materials. If there are multiple process units that are identical in nature, capacity, and use, you may use one form to summarize the data.

1. Equipment / Component Type	2. Unit ID	3. Number of Identical Units	4. Installation Date *(see instructions)*	5. Material Handled/ Stored	6. Maximum Materials Throughput Rate *(tons/year)*
Indoor Storage	PB1	1	TBD	EAF dust blend	~442,000
					(EAF Dust, Carbon Material)

7. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- ☐ None
- ☑ Baghouse / Fabric Filter – *Attach CE-02*
- ☐ Cyclone – *Attach CE-03*
- ☐ Electrostatic Precipitator – *Attach CE-04*
- ☐ Absorption / Wet Collector / Scrubber – *Attach CE-05*
- ☐ Adsorber – *Attach CE-07*
- ☐ Other *(specify)*: – *Attach CE-10*

8. Control Techniques: *Identify any other air emission control options used for the process.*

9. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

Continued on next page

PART B: Process Material Information

Part B summarizes the process material information. Provide the information in the items below for each material stored and/or handled in this process.

10. Material Handled/Stored *(from table above)*	11. Method of Handling	12. Type of Storage	13. Storage Capacity *(tons)*	14. Pile Acreage	15. Silt Content *(% by weight)*	16. Moisture Content *(% by weight)*
EAF dust blend	TBD	TBD	TBD	TBD	TBD	TBD

PART C: Emission Factors

Part C identifies all emission factors used to calculate air emissions from the process units listed on this form.

17. Process Equipment & ID *(complete for all units listed in Part A of this form)*	18. Air Pollutant	19. Emission Factor		20. Source of Emission Factor *(if not using AP-42, include calculations)*	
		value	*units*		
PB1	PM	0.003	gr/dscf	☐ AP-42	☑ Other
PB1	PM-10	0.003	gr/dscf	☐ AP-42	☑ Other
				☐ AP-42	☐ Other
				☐ AP-42	☐ Other

PART D: Federal Rule Applicability

Part D identifies any federal rules that apply to the process.

21. Is a **New Source Performance Standard (NSPS)** applicable to this source? *If yes, attach a completed FED-01 for each rule that applies.* ☐ Yes ☑ No

- ☐ 40 CFR Part 60, Subpart CC — Glass Manufacturing Plants
- ☐ 40 CFR Part 60, Subpart DD — Grain Elevators
- ☐ 40 CFR Part 60, Subpart HH — Lime Manufacturing Plants
- ☐ 40 CFR Part 60, Subpart LL — Metallic Mineral Processing Plants
- ☐ 40 CFR Part 60, Subpart UU — Asphalt Processing and Asphalt Roofing Manufacture
- ☐ 40 CFR Part 60, Subpart OOO — Non-Metallic Mineral Processing Plants
- ☐ 40 CFR Part 60, Subpart UUU — Calciners and Dryers in Mineral Industries

22. Is a **National Emission Standard for Hazardous Air Pollutants (NESHAP)** applicable to this source? *If yes, attach a completed FED-01 for each rule that applies.* ☐ Yes ☑ No

- ☐ 40 CFR Part 61, Subpart _____ *(Specify)*:
- ☐ 40 CFR Part 63, Subpart _____ *(Specify)*:

23. Non-Applicability Determination: Provide an explanation if the process unit appears subject to a rule (based on the rule title or the source category), but the rule will not apply.

Refer to application narrative for detailed regulatory applicability review.

OAQ PROCESS INFORMATION APPLICATION
PI-03: Storage & Handling of Bulk Material

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NOTES:

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PART A: Storage & Handing Information

Part A identifies all process units associated with storage and handling process for bulk materials. If there are multiple process units that are identical in nature, capacity, and use, you may use one form to summarize the data.

1. Equipment / Component Type	2. Unit ID	3. Number of Identical Units	4. Installation Date *(see instructions)*	5. Material Handled/ Stored	6. Maximum Materials Throughput Rate *(tons/year)*
Surge Hopper	RM1-4	4	TBD	EAF Dust Blend	~442,000
					(EAF Dust, Carbon Material)

7. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- ☐ None
- ☑ Baghouse / Fabric Filter – *Attach CE-02.*
- ☐ Electrostatic Precipitator – *Attach CE-04*
- ☐ Adsorber – *Attach CE-07*
- ☐ Cyclone – *Attach CE-03*
- ☐ Absorption / Wet Collector / Scrubber – *Attach CE-05*
- ☐ Other *(specify)*: – *Attach CE-10*

8. Control Techniques: *Identify any other air emission control options used for the process.*

9. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

Continued on next page

PART B: Process Material Information

Part B summarizes the process material information. Provide the information in the items below for each material stored and/or handled in this process.

10. Material Handled/Stored *(from table above)*	11. Method of Handling	12. Type of Storage	13. Storage Capacity *(tons)*	14. Pile Acreage	15. Silt Content *(% by weight)*	16. Moisture Content *(% by weight)*
EAF Dust Blend	TBD	TBD	TBD	TBD	TBD	TBD

PART C: Emission Factors

Part C identifies all emission factors used to calculate air emissions from the process units listed on this form.

17. Process Equipment & ID *(complete for all units listed in Part A of this form)*	18. Air Pollutant	19. Emission Factor		20. Source of Emission Factor *(if not using AP-42, include calculations)*	
		value	*units*		
RM1-4	PM	0.003	gr/dscf	☐ AP-42	☑ Other
RM1-4	PM-10	0.003	gr/dscf	☐ AP-42	☑ Other
				☐ AP-42	☐ Other
				☐ AP-42	☐ Other

PART D: Federal Rule Applicability

Part D identifies any federal rules that apply to the process.

21. Is a **New Source Performance Standard (NSPS)** applicable to this source? *If yes, attach a completed FED-01 for each rule that applies.* ☐ Yes ☑ No

- ☐ 40 CFR Part 60, Subpart CC — Glass Manufacturing Plants
- ☐ 40 CFR Part 60, Subpart DD — Grain Elevators
- ☐ 40 CFR Part 60, Subpart HH — Lime Manufacturing Plants
- ☐ 40 CFR Part 60, Subpart LL — Metallic Mineral Processing Plants
- ☐ 40 CFR Part 60, Subpart UU — Asphalt Processing and Asphalt Roofing Manufacture
- ☐ 40 CFR Part 60, Subpart OOO — Non-Metallic Mineral Processing Plants
- ☐ 40 CFR Part 60, Subpart UUU — Calciners and Dryers in Mineral Industries

22. Is a **National Emission Standard for Hazardous Air Pollutants (NESHAP)** applicable to this source? *If yes, attach a completed FED-01 for each rule that applies.* ☐ Yes ☑ No

- ☐ 40 CFR Part 61, Subpart _____ *(Specify)*:
- ☐ 40 CFR Part 63, Subpart _____ *(Specify)*:

23. Non-Applicability Determination: Provide an explanation if the process unit appears subject to a rule (based on the rule title or the source category), but the rule will not apply.

Refer to application narrative for detailed regulatory applicability review.

OAQ PROCESS INFORMATION APPLICATION
PI-03: Storage & Handling of Bulk Material

State Form 52543 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of this form is to obtain detailed information about the storage and handling of bulk materials. Complete one form for each process (or group of identical processes). Use additional forms if necessary. This is a required form.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for anyone to inspect and photocopy

PART A: Storage & Handing Information

Part A identifies all process units associated with storage and handling process for bulk materials. If there are multiple process units that are identical in nature, capacity, and use, you may use one form to summarize the data.

1. Equipment / Component Type	2. Unit ID	3. Number of Identical Units	4. Installation Date *(see instructions)*	5. Material Handled/ Stored	6. Maximum Materials Throughput Rate *(tons/year)*
Silo	FP1-5	5	TBD	Final Product	~442,000
					(EAF Dust, Carbon Material)

7. Add-On Control Technology: *Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").*

- ☐ None
- ☑ Baghouse / Fabric Filter – *Attach CE-02*
- ☐ Electrostatic Precipitator – *Attach CE-04.*
- ☐ Adsorber – *Attach CE-07*
- ☐ Cyclone – *Attach CE-03*
- ☐ Absorption / Wet Collector / Scrubber – *Attach CE-05*
- ☐ Other *(specify)*: – *Attach CE-10*

8. Control Techniques: *Identify any other air emission control options used for the process.*

9. Process Limitations / Additional Information: *Identify any acceptable process limitations. Attach additional information if necessary.*

Continued on next page

PART B: Process Material Information

Part B summarizes the process material information. Provide the information in the items below for each material stored and/or handled in this process.

10. Material Handled/Stored *(from table above)*	11. Method of Handling	12. Type of Storage	13. Storage Capacity *(tons)*	14. Pile Acreage	15. Silt Content *(% by weight)*	16. Moisture Content *(% by weight)*
Final Product	TBD	TBD	TBD	TBD	TBD	TBD

PART C: Emission Factors

Part C identifies all emission factors used to calculate air emissions from the process units listed on this form.

17. Process Equipment & ID *(complete for all units listed in Part A of this form)*	18. Air Pollutant	19. Emission Factor		20. Source of Emission Factor *(if not using AP-42, include calculations)*	
		value	*units*		
FP1-5	PM	0.003	gr/dscf	☐ AP-42	☑ Other
FP1-5	PM-10	0.003	gr/dscf	☐ AP-42	☑ Other
				☐ AP-42	☐ Other
				☐ AP-42	☐ Other

PART D: Federal Rule Applicability

Part D identifies any federal rules that apply to the process.

21. Is a **New Source Performance Standard (NSPS)** applicable to this source? *If yes, attach a completed FED-01 for each rule that applies.* ☐ Yes ☑ No

- ☐ 40 CFR Part 60, Subpart CC — Glass Manufacturing Plants
- ☐ 40 CFR Part 60, Subpart DD — Grain Elevators
- ☐ 40 CFR Part 60, Subpart HH — Lime Manufacturing Plants
- ☐ 40 CFR Part 60, Subpart LL — Metallic Mineral Processing Plants
- ☐ 40 CFR Part 60, Subpart UU — Asphalt Processing and Asphalt Roofing Manufacture
- ☐ 40 CFR Part 60, Subpart OOO — Non-Metallic Mineral Processing Plants
- ☐ 40 CFR Part 60, Subpart UUU — Calciners and Dryers in Mineral Industries

22. Is a **National Emission Standard for Hazardous Air Pollutants (NESHAP)** applicable to this source? *If yes, attach a completed FED-01 for each rule that applies.* ☐ Yes ☑ No

- ☐ 40 CFR Part 61, Subpart _____ *(Specify)*:
- ☐ 40 CFR Part 63, Subpart _____ *(Specify)*:

23. Non-Applicability Determination: Provide an explanation if the process unit appears subject to a rule (based on the rule title or the source category), but the rule will not apply.

Refer to application narrative for detailed regulatory applicability review.

OAQ CONTROL EQUIPMENT APPLICATION
CE-01: Control Equipment Summary

State Form 51904 (R3 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-01 is to summarize all of the equipment used to control emissions. This is a required form.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

Summary of Control Equipment

This table summarizes all of the equipment used to control air pollutant emissions. The identification numbers listed on this form should correspond to the emissions unit identified on the Plant Layout diagram and Process Flow diagram.

1. Control Equipment ID	2. Control Equipment Description	3. Pollutant Controlled	4. Emission Unit ID	5. Stack / Vent ID	6. Applicable Rule
PC1	Kiln 1 Product Collection Baghouse	PM	KLN1	PC1	NA
PC2	Kiln 2 Product Collection Baghouse	PM	KLN2	PC2	NA
RBBH1	EAF Receiving Building Baghouse	PM	RB1	RBBH1	NA
CBBH1	Carbon/Limestone Receiving Building Baghouse	PM	CB1	CBBH1	NA
PBBH1	Pelletizing Building / Cone Pelletizers Baghouse	PM	PB1, CP1, CP2	PBBH1	NA
PBBH2	Pelletizing Building / Rotary Dryer Baghouse	PM	PB1, DRY1	PHHB2	NA
TBBH1	Kiln 1 Transition Building / WIP Building Baghouse	PM	TB1, WB1	TBBH1	NA
TBBH2	Kiln 2 Transition Building / WIP Building Baghouse	PM	TB2, WB1	TBBH2	NA
FPBV1	Finished Product Silo No. 1 (Railway) Bin Vent Filter	PM	FP1	FPBV1	NA
FPBV2	Finished Product Silo No. 2 (Railway) Bin Vent Filter	PM	FP2	FPBV2	NA
FPBV3	Finished Product Silo No. 3 (Load Supersack) Bin Vent Filter	PM	FP3	FPBV3	NA
FPBV4	Finished Product Silo No. 4 (Load Supersack) Bin Vent Filter	PM	FP4	FPBV4	NA
FPBV5	Finished Product Silo No. 5 (Load Supersack) Bin Vent Filter	PM	FP5	FPBV5	NA
RMBV1	EAF Hopper No. 1 (Feed to Cone Pelletizer) Bin Vent Filter	PM	RM1	RMBV1	NA
RMBV2	EAF Hopper No. 2 (Feed to Cone Pelletizer) Bin Vent Filter	PM	RM2	RMBV2	NA
RMBV3	EAF Hopper No. 3 (Feed to Cone Pelletizer) Bin Vent Filter	PM	RM3	RMBV3	NA
RMBV4	EAF Hopper No. 4 (Feed to Cone Pelletizer) Bin Vent Filter	PM	RM4	RMBV4	NA

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. **Control Equipment ID:** PC1
2. **Installation Date:** 2019
3. **Bags or Cartridges?** ☒ Bags ☐ Cartridges
4. **Filter Material:** Nomex
5. **Number of Bags/Cartridges per Compartment:** 228
6. **Number of Compartments:** 20
7. **Mode of Operation:** ☐ Intermittent ☐ Periodic ☒ Continuous
8. **Cleaning Method:** ☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. **Cleaning Cycle / Frequency** *(specify units)*: TBD
10. **Is a bag leak detector installed on this device?** ☐ Yes ☒ No
11. **Type / Description of Bag Leak Detector:** ☐ Positive Pressure ☐ Negative Pressure
12. **Air to Cloth Ratio** *(Ex: 1.3 : 1.0)*: 4 : 1
13. Is **Lime Injection** used on this device? ☐ Yes ☒ No
14. Is **Carbon Injection** used on this device? ☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	200000.00	200000.00	
16. Gas Stream Temperature	°F	320.00	320.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	38.00	38.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10μm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral	☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

This device will be used for material recovery, and therefore it will be integral to the process.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. **Control Equipment ID:** PC2
2. **Installation Date:** 2019
3. **Bags or Cartridges?** ☒ Bags ☐ Cartridges
4. **Filter Material:** Nomex
5. **Number of Bags/Cartridges per Compartment:** 228
6. **Number of Compartments:** 20
7. **Mode of Operation:** ☐ Intermittent ☐ Periodic ☒ Continuous
8. **Cleaning Method:** ☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. **Cleaning Cycle / Frequency** *(specify units)*: TBD
10. **Is a bag leak detector installed on this device?** ☐ Yes ☒ No
11. **Type / Description of Bag Leak Detector:** ☐ Positive Pressure ☐ Negative Pressure
12. **Air to Cloth Ratio** *(Ex: 1.3 : 1.0)*: 4.0 : 1
13. Is **Lime Injection** used on this device? ☐ Yes ☒ No
14. Is **Carbon Injection** used on this device? ☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	200000.00	200000.00	
16. Gas Stream Temperature	°F	320.00	320.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	38.00	38	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10μm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

This device will be used for material recovery, and therefore it will be integral to the process.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. **Control Equipment ID:** RBBH1
2. **Installation Date:** 2019
3. **Bags or Cartridges?** ☒ Bags ☐ Cartridges
4. **Filter Material:** POLYESTER
5. **Number of Bags/Cartridges per Compartment:** 228
6. **Number of Compartments:** 5
7. **Mode of Operation:** ☐ Intermittent ☐ Periodic ☒ Continuous
8. **Cleaning Method:** ☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. **Cleaning Cycle / Frequency** *(specify units)*: TBD
10. **Is a bag leak detector installed on this device?** ☐ Yes ☒ No
11. **Type / Description of Bag Leak Detector:** ☐ Positive Pressure ☐ Negative Pressure
12. **Air to Cloth Ratio** *(Ex: 1.3 : 1.0)*: 4 : 1
13. Is **Lime Injection** used on this device? ☐ Yes ☒ No
14. Is **Carbon Injection** used on this device? ☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	140000.00	140000.00	
16. Gas Stream Temperature	°F	77.00	77.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	45.00	45.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10μm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☒ No ☐ Yes
If "Yes", provide the reason(s) why the device is integral.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	CBBH1
2. Installation Date:	2019
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	POLYESTER
5. Number of Bags/Cartridges per Compartment:	228
6. Number of Compartments:	5
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	4.0 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	140000.00	140000.00	
16. Gas Stream Temperature	°F	77.00	77.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	300.00	300.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10μm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☒ No ☐ Yes
If "Yes", provide the reason(s) why the device is integral.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	PBBH1
2. Installation Date:	2019
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	POLYESTER
5. Number of Bags/Cartridges per Compartment:	288
6. Number of Compartments:	5
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	4.0 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	140000.00	140000.00	
16. Gas Stream Temperature	°F	77.00	77.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	45.00	45.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10µm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5µm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral	☐ Not Integral

36. Is this device integral to the process? ☒ No ☐ Yes
If "Yes", provide the reason(s) why the device is integral.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	PBBH2
2. Installation Date:	2019
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	POLYESTER
5. Number of Bags/Cartridges per Compartment:	288
6. Number of Compartments:	5
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	4.0 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	140000.00	140000.00	
16. Gas Stream Temperature	°F	77.00	77.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	45.00	45.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10µm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5µm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☒ No ☐ Yes
If "Yes", provide the reason(s) why the device is integral.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	TBBH1
2. Installation Date:	2019
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	NOMEX
5. Number of Bags/Cartridges per Compartment:	288
6. Number of Compartments:	5
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	4.0 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	140000.00	140000.00	
16. Gas Stream Temperature	°F	140.00	140.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	45.00	45.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10µm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5µm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☒ No ☐ Yes
If "Yes", provide the reason(s) why the device is integral.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. **Control Equipment ID:** TBBH2
2. **Installation Date:** 2019
3. **Bags or Cartridges?** ☒ Bags ☐ Cartridges
4. **Filter Material:** NOMEX
5. **Number of Bags/Cartridges per Compartment:** 288
6. **Number of Compartments:** 5
7. **Mode of Operation:** ☐ Intermittent ☐ Periodic ☒ Continuous
8. **Cleaning Method:** ☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. **Cleaning Cycle / Frequency** *(specify units)*: TBD
10. **Is a bag leak detector installed on this device?** ☐ Yes ☒ No
11. **Type / Description of Bag Leak Detector:** ☐ Positive Pressure ☐ Negative Pressure
12. **Air to Cloth Ratio** *(Ex: 1.3 : 1.0)*: 4.0 : 1
13. Is **Lime Injection** used on this device? ☐ Yes ☒ No
14. Is **Carbon Injection** used on this device? ☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	140000.00	140000.00	
16. Gas Stream Temperature	°F	140.00	140.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	45.00	45.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10µm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5µm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☒ No ☐ Yes
If "Yes", provide the reason(s) why the device is integral.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
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NOTES:

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PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. **Control Equipment ID:** FPBV1
2. **Installation Date:** 2019
3. **Bags or Cartridges?** ☒ Bags ☐ Cartridges
4. **Filter Material:** POLYESTER
5. **Number of Bags/Cartridges per Compartment:** 24
6. **Number of Compartments:** 1
7. **Mode of Operation:** ☐ Intermittent ☐ Periodic ☒ Continuous
8. **Cleaning Method:** ☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. **Cleaning Cycle / Frequency** *(specify units)*: TBD
10. **Is a bag leak detector installed on this device?** ☐ Yes ☒ No
11. **Type / Description of Bag Leak Detector:** ☐ Positive Pressure ☐ Negative Pressure
12. **Air to Cloth Ratio** *(Ex: 1.3 : 1.0)*: 4.0 : 1.0
13. Is **Lime Injection** used on this device? ☐ Yes ☒ No
14. Is **Carbon Injection** used on this device? ☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	3145.00	3145.00	
16. Gas Stream Temperature	°F	212.00	212.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	38.00	38.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10μm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral	☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

This device will be used for material recovery, and therefore it will be integral to the process.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. **Control Equipment ID:** FPBV2
2. **Installation Date:** 2019
3. **Bags or Cartridges?** ☒ Bags ☐ Cartridges
4. **Filter Material:** POLYESTER
5. **Number of Bags/Cartridges per Compartment:** 24
6. **Number of Compartments:** 1
7. **Mode of Operation:** ☐ Intermittent ☐ Periodic ☒ Continuous
8. **Cleaning Method:** ☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. **Cleaning Cycle / Frequency** *(specify units)*: TBD
10. **Is a bag leak detector installed on this device?** ☐ Yes ☒ No
11. **Type / Description of Bag Leak Detector:** ☐ Positive Pressure ☐ Negative Pressure
12. **Air to Cloth Ratio** *(Ex: 1.3 : 1.0)*: 4 : 1
13. Is **Lime Injection** used on this device? ☐ Yes ☒ No
14. Is **Carbon Injection** used on this device? ☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	3145.00	3145.00	
16. Gas Stream Temperature	°F	212.00	212.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	38.00	38.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10µm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5µm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral	☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

This device will be used for material recovery, and therefore it will be integral to the process.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. **Control Equipment ID:** FPBV3
2. **Installation Date:** 2019
3. **Bags or Cartridges?** ☒ Bags ☐ Cartridges
4. **Filter Material:** POLYESTER
5. **Number of Bags/Cartridges per Compartment:** 24
6. **Number of Compartments:** 1
7. **Mode of Operation:** ☐ Intermittent ☐ Periodic ☒ Continuous
8. **Cleaning Method:** ☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. **Cleaning Cycle / Frequency** *(specify units)*: TBD
10. **Is a bag leak detector installed on this device?** ☐ Yes ☒ No
11. **Type / Description of Bag Leak Detector:** ☐ Positive Pressure ☐ Negative Pressure
12. **Air to Cloth Ratio** *(Ex: 1.3 : 1.0)*: 4.0 : 1.0
13. Is **Lime Injection** used on this device? ☐ Yes ☒ No
14. Is **Carbon Injection** used on this device? ☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	3145.00	3145.00	
16. Gas Stream Temperature	°F	212.00	212.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	38.00	38.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10μm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

This device will be used for material recovery, and therefore it will be integral to the process.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. **Control Equipment ID:** FPBV4
2. **Installation Date:** 2019
3. **Bags or Cartridges?** ☒ Bags ☐ Cartridges
4. **Filter Material:** POLYESTER
5. **Number of Bags/Cartridges per Compartment:** 24
6. **Number of Compartments:** 1
7. **Mode of Operation:** ☐ Intermittent ☐ Periodic ☒ Continuous
8. **Cleaning Method:** ☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. **Cleaning Cycle / Frequency** *(specify units)*: TBD
10. **Is a bag leak detector installed on this device?** ☐ Yes ☒ No
11. **Type / Description of Bag Leak Detector:** ☐ Positive Pressure ☐ Negative Pressure
12. **Air to Cloth Ratio** *(Ex: 1.3 : 1.0)*: 4.0 : 1.0
13. Is **Lime Injection** used on this device? ☐ Yes ☒ No
14. Is **Carbon Injection** used on this device? ☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	3145.00	3145.00	
16. Gas Stream Temperature	°F	212.00	212.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	38.00	38.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10μm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

This device will be used for material recovery, and therefore it will be integral to the process.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	FPBV5
2. Installation Date:	2019
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	POLYESTER
5. Number of Bags/Cartridges per Compartment:	24
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	4.0 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	3145.00	3145.00	
16. Gas Stream Temperature	°F	212.00	212.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	38.00	38.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10μm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral	☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

This device will be used for material recovery, and therefore it will be integral to the process.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	RMBV1
2. Installation Date:	2019
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	POLYESTER
5. Number of Bags/Cartridges per Compartment:	24
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	4.0 : 1
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	3145.00	3145	
16. Gas Stream Temperature	°F	77.00	77.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	45.00	45.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10µm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5µm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral	☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

This device will be used for material recovery, and therefore it will be integral to the process.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
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Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
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NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	RMBV2
2. Installation Date:	2019
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	POLYESTER
5. Number of Bags/Cartridges per Compartment:	24
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	4.0 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	3145.00	3145.00	
16. Gas Stream Temperature	°F	77.00	77.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	45.00	45.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10μm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

This device will be used for material recovery, and therefore it will be integral to the process.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. **Control Equipment ID:** RMBV3
2. **Installation Date:** 2019
3. **Bags or Cartridges?** ☒ Bags ☐ Cartridges
4. **Filter Material:** POLYESTER
5. **Number of Bags/Cartridges per Compartment:** 24
6. **Number of Compartments:** 1
7. **Mode of Operation:** ☐ Intermittent ☐ Periodic ☒ Continuous
8. **Cleaning Method:** ☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. **Cleaning Cycle / Frequency** *(specify units)*: TBD
10. **Is a bag leak detector installed on this device?** ☐ Yes ☒ No
11. **Type / Description of Bag Leak Detector:** ☐ Positive Pressure ☐ Negative Pressure
12. **Air to Cloth Ratio** *(Ex: 1.3 : 1.0)*: 4.0 : 1
13. Is **Lime Injection** used on this device? ☐ Yes ☒ No
14. Is **Carbon Injection** used on this device? ☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	3145.00	3145.00	
16. Gas Stream Temperature	°F	77.00	77.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	45.00	45.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10µm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5µm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number: | **Issuance Date:** | **Determination:** ☐ Integral ☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

This device will be used for material recovery, and therefore it will be integral to the process.

OAQ CONTROL EQUIPMENT APPLICATION
CE-02: Particulate Control – Baghouse / Fabric Filter

State Form 51953 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CE-02 is to identify all the parameters that describe the baghouse or fabric filter. This is a required form.
- Complete this form once for each baghouse or fabric filter (or once for each set of identical baghouses or fabric filters).
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification and Description of Control Equipment

Part A identifies the particulate control device and describes its physical properties.

1. Control Equipment ID:	RMVB4
2. Installation Date:	2019
3. Bags or Cartridges?	☒ Bags ☐ Cartridges
4. Filter Material:	POLYESTER
5. Number of Bags/Cartridges per Compartment:	24
6. Number of Compartments:	1
7. Mode of Operation:	☐ Intermittent ☐ Periodic ☒ Continuous
8. Cleaning Method:	☐ Shaking ☐ Reverse Pulse ☐ Reverse Air ☒ Jet Pulse
9. Cleaning Cycle / Frequency *(specify units)*:	TBD
10. Is a bag leak detector installed on this device?	☐ Yes ☒ No
11. Type / Description of Bag Leak Detector:	☐ Positive Pressure ☐ Negative Pressure
12. Air to Cloth Ratio *(Ex: 1.3 : 1.0)*:	4.0 : 1.0
13. Is Lime Injection used on this device?	☐ Yes ☒ No
14. Is Carbon Injection used on this device?	☐ Yes ☒ No

PART B: Operational Parameters

Part B provides the operational parameters of the control device and the pollutant laden gas stream. Appropriate units must be included if the standard units are not used. For each applicable parameter, provide the inlet and outlet values or provide the differential value.

	A. Units	B. Inlet	C. Outlet	D. Differential
15. Gas Stream Flow Rate	ACFM	3145.00	3145.00	
16. Gas Stream Temperature	°F	77.00	77.00	
17. Gas Stream Pressure	inches of water			to
18. Moisture Content	%	0.00%	0.00%	
19. Particle Size Range	micrometers	45.00	45.00	to
20. Lime Injection Rate *(if applicable)*	lb/hr			
21. Carbon Injection Rate *(if applicable)*	lb/hr			
22. Other *(specify)*:				

Continued on Next Page

PART C: Pollutant Concentrations

Part C provides the pollutant concentrations of the pollutant laden gas stream.

	23. Units	24. Inlet	25. Outlet	26. Efficiency (%): Capture	26. Efficiency (%): Control
☒ a. Lead (Pb)					
☒ b. Hazardous Air Pollutant (HAP) *(specify)*:					
☒ c. Particulate Matter (PM)				100.00%	99.90%
☒ d. Particulate Matter less than 10μm (PM_{10})				100.00%	99.90%
☒ e. Particulate Matter less than 2.5μm ($PM_{2.5}$)				100.00%	99.90%
☐ f. Other Pollutant *(specify)*:					

PART D: Monitoring, Record Keeping, & Testing Procedures

Part D identifies any existing or proposed monitoring, record keeping, & testing procedures that may need to be included in the permit.

27. Item(s) Monitored:				
28. Monitoring Frequency:				
29. Item(s) Recorded:				
30. Record Keeping Frequency:				
31. Pollutant(s) Tested:				
32. Test Method(s):				
33. Testing Frequency:				

PART E: Preventive Maintenance Plan

Part E verifies that a complete Preventive Maintenance Plan (PMP) has been prepared for the control device, if applicable. Use this table as a checklist to ensure that the PMP is complete.

34. Do you have a Preventive Maintenance Plan (PMP)?

☒ No PMP is needed. ☐ Yes – the following items are identified on the PMP:

- ☐ **A.** Identification of the individual(s) responsible for inspecting, maintaining and repairing emission control devices.
- ☐ **B.** Description of the items or conditions that will be inspected.
- ☐ **C.** Schedule for inspection of items or conditions described above.
- ☐ **D.** Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

PART F: Determination of Integral Control

Part F provides explanation to determine whether the control device should be considered integral to the process.

35. Has IDEM already made an integral control determination for this device? ☒ No ☐ Yes
If "Yes", provide the following:

Permit Number:	**Issuance Date:**	**Determination:** ☐ Integral	☐ Not Integral

36. Is this device integral to the process? ☐ No ☒ Yes
If "Yes", provide the reason(s) why the device is integral.

This device will be used for material recovery, and therefore it will be integral to the process.

OAQ COMPLIANCE DETERMINATION APPLICATION
CD-01: Emissions Unit Compliance Status
State Form 51861 (R / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CD-01 is to identify the requirements that apply to each emissions unit at the permitted source and to determine the compliance status of these emissions units.
- This is required form for each initial Title V permit application as well as each modification and every renewal.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification of Source and Emissions Unit

Part A identifies the source and the emissions unit. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

1. Source Name: Kiln 1 and Kiln 2	**2. Source ID:** – TBD
3. Emissions Unit Description: Two Waelz Kilns (identical)	**4. Unit ID:** KLN1 and KLN2

PART B: Regulatory Compliance Status

Part B identifies the regulatory requirements that apply to the emissions unit and to determine the compliance status of the emissions unit. These "regulatory requirements" are those required by federal, state, or local law.

5. Rule Cite	6. Description	7. State / Local Only	8. Limitation	9. Test Method	10. In Compliance (y/n)
326 IAC Article 5	Opacity Regulations	State	40% (any 6-minute period); 60% (cumulative total of 15 minutes in a 6-hour period)	TBD	TBD
326 IAC Article 6	Particulate Rules	State	Process Weight Rule	TBD	TBD

PART C: Compliance Status – Other Requirements

Part C identifies any other requirements that apply to the emissions unit and to determine the compliance status of the emissions unit. These "other requirements" would not be required by federal, state, or local law.

11. Other Requirements	12. State / Local Only	13. In Compliance (y/n)
Throughput Limit - 360,000 ton per year (combined Kiln throughput)	N/A	TBD

OAQ COMPLIANCE DETERMINATION APPLICATION
CD-01: Emissions Unit Compliance Status

State Form 51861 (R / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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NOTES:

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- This is required form for each initial Title V permit application as well as each modification and every renewal.
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PART A: Identification of Source and Emissions Unit

Part A identifies the source and the emissions unit. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

1. Source Name: Feed Dryer	**2. Source ID:** – TBD
3. Emissions Unit Description: Natural Gas Fired Feed Dryer	**4. Unit ID:** DRY1

PART B: Regulatory Compliance Status

Part B identifies the regulatory requirements that apply to the emissions unit and to determine the compliance status of the emissions unit. These "regulatory requirements" are those required by federal, state, or local law.

5. Rule Cite	6. Description	7. State / Local Only	8. Limitation	9. Test Method	10. In Compliance (y/n)
326 IAC Article 5	Opacity Regulations	State	40% (any 6-minute period); 60% (cumulative total of 15 minutes in a 6-hour period)	TBD	TBD
326 IAC Article 6	Particulate Rules	State	Process Weight Rule	TBD	TBD

PART C: Compliance Status – Other Requirements

Part C identifies any other requirements that apply to the emissions unit and to determine the compliance status of the emissions unit. These "other requirements" would not be required by federal, state, or local law.

11. Other Requirements	12. State / Local Only	13. In Compliance (y/n)

OAQ COMPLIANCE DETERMINATION APPLICATION
CD-01: Emissions Unit Compliance Status

State Form 51861 (R / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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100 N. Senate Avenue, MC 61-53 Room 1003
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NOTES:

- The purpose of CD-01 is to identify the requirements that apply to each emissions unit at the permitted source and to determine the compliance status of these emissions units.
- This is required form for each initial Title V permit application as well as each modification and every renewal.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification of Source and Emissions Unit

Part A identifies the source and the emissions unit. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

1. Source Name:	EAF Receiving Building, Carbon/Limestone Receiving Building, Pelletizing Building, EAF Hopper 1 through EAF Hopper 4, Cone Pelletizer 1 through Cone Pelletizer 2, Kiln 1 Transition Building through Kiln 2 Transition Building, WIP Building, Finished Product Silos Nos. 1 through 5	**2. Source ID:**	– TBD
3. Emissions Unit Description:	Process/process building baghouses and bin vents; included altogether here because regulatory applicability is the same for all sources.	**4. Unit ID:**	RB1 CB1 PB1 RM1 - RM4 CP1 - CP2 TB1 - TB2 WB1 FP1 - FP5

PART B: Regulatory Compliance Status

Part B identifies the regulatory requirements that apply to the emissions unit and to determine the compliance status of the emissions unit. These "regulatory requirements" are those required by federal, state, or local law.

5. Rule Cite	6. Description	7. State / Local Only	8. Limitation	9. Test Method	10. In Compliance (y/n)
326 IAC Article 5	Opacity Regulations	State	40% (any 6-minute period); 60% (cumulative total of 15 minutes in a 6-hour period)	TBD	TBD
326 IAC Article 6	Particulate Rules	State	Process Weight Rule	TBD	TBD

PART C: Compliance Status – Other Requirements

Part C identifies any other requirements that apply to the emissions unit and to determine the compliance status of the emissions unit. These "other requirements" would not be required by federal, state, or local law.

11. Other Requirements	**12. State / Local Only**	**13. In Compliance** (y/n)

OAQ COMPLIANCE DETERMINATION APPLICATION
CD-01: Emissions Unit Compliance Status

State Form 51861 (R / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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NOTES:

- The purpose of CD-01 is to identify the requirements that apply to each emissions unit at the permitted source and to determine the compliance status of these emissions units.
- This is required form for each initial Title V permit application as well as each modification and every renewal.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification of Source and Emissions Unit

Part A identifies the source and the emissions unit. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

1. Source Name: Emergency Generator 1 and Emergency Generator 2	**2. Source ID:** – TBD
3. Emissions Unit Description: Two diesel-fired emergency generators	**4. Unit ID:** EG1, EG2

PART B: Regulatory Compliance Status

Part B identifies the regulatory requirements that apply to the emissions unit and to determine the compliance status of the emissions unit. These "regulatory requirements" are those required by federal, state, or local law.

5. Rule Cite	6. Description	7. State / Local Only	8. Limitation	9. Test Method	10. In Compliance (y/n)
326 IAC Article 5	Opacity Regulations	State	40% (any 6-minute period); 60% (cumulative total of 15 minutes in a 6-hour period)	TBD	TBD
40 CFR 63, Subpart ZZZZ	Stationary Reciprocating Internal Combustion Engines	Federal	Initial notification requirements of §63.6645(f)	N/A	TBD
40 CFR 60, Subpart IIII	Stationary Compression Ignition Internal Combustion Engines	Federal	Emission standards for new nonroad CI engines in Table 1 to §89.112(a) and the opacity standards in §89.113 as required by §60.4205(b) and §60.4202(a)(2)	N/A	TBD

PART C: Compliance Status – Other Requirements

Part C identifies any other requirements that apply to the emissions unit and to determine the compliance status of the emissions unit. These "other requirements" would not be required by federal, state, or local law.

11. Other Requirements	12. State / Local Only	13. In Compliance (y/n)

OAQ COMPLIANCE DETERMINATION APPLICATION
CD-02: Compliance Plan Requirements Per Applicable Requirement

State Form 51862 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
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Facsimile Number: (317) 232-6749
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NOTES:

- The purpose of CD-02 is to identify existing compliance monitoring activities (monitoring, testing, record keeping and/or reporting) required in an applicable requirement or to provide compliance monitoring activities for applicable requirements where there is no or inadequate compliance monitoring requirements.
- CD-02 focuses on generally applicable requirements that apply to many or all emission units at the source.
- This is required form for each initial Title V permit application as well as each modification and every renewal.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification of Source and Applicable Requirement

Part A identifies the source and the applicable requirement. Use one form for each applicable requirement. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

1. **Source Name:** Kiln 1 and Kiln 2
2. **Source ID:** – TBD
3. **Applicable Requirement:** Throughput Limit - 360,000 ton per year (combined Kiln throughput)
4. **Rule Cite:** N/A
5. **Limitations:** List each operational and/or emission limit specified in the applicable requirement.

Throughput Limit - 360,000 ton per year (combined Kiln throughput)

6. **Reporting Schedule:** Provide a description of the reporting schedule to be used. The schedule should include what will be reported and how often the reports will be submitted.

Semiannual Title V Reports will indicate combined kiln throughput totals for the current 12-month rolling period.

Continued on Next Page

PART B: Compliance Plan Components

Part B identifies the main components of each required compliance plan.

7. Unit ID	8. Stack / Vent ID	9. Control Equipment	10. Parameters Monitored	11. Monitoring Frequency	12. Item Recorded	13. Record Keeping Frequency	14. Pollutants tested	15. Test Method	16. Testing Frequency
KLN1, KLN2	PC1, PC2	PC1, PC2	Throughput	Daily	Combined kiln throughput (tons)	Daily	N/A	N/A	N/A

OAQ COMPLIANCE DETERMINATION APPLICATION
CD-02: Compliance Plan Requirements Per Applicable Requirement

State Form 51862 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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NOTES:

- The purpose of CD-02 is to identify existing compliance monitoring activities (monitoring, testing, record keeping and/or reporting) required in an applicable requirement or to provide compliance monitoring activities for applicable requirements where there is no or inadequate compliance monitoring requirements.
- CD-02 focuses on generally applicable requirements that apply to many or all emission units at the source.
- This is required form for each initial Title V permit application as well as each modification and every renewal.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification of Source and Applicable Requirement

Part A identifies the source and the applicable requirement. Use one form for each applicable requirement. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

1. **Source Name:** All Sources/Facility-Wide
2. **Source ID:** – TBD
3. **Applicable Requirement:** Opacity Regulations
4. **Rule Cite:** 326 IAC Article 5
5. **Limitations:** List each operational and/or emission limit specified in the applicable requirement.

40% (any 6-minute period)

60% (cumulative total of 15 minutes in a 6-hour period)

6. **Reporting Schedule:** Provide a description of the reporting schedule to be used. The schedule should include what will be reported and how often the reports will be submitted.

Semiannual Title V Reports will indicate any exceedances of the opacity limit, as well as corrective actions taken to reconcile any exceedance events.

Continued on Next Page

PART B: Compliance Plan Components

Part B identifies the main components of each required compliance plan.

7. Unit ID	8. Stack / Vent ID	9. Control Equipment	10. Parameters Monitored	11. Monitoring Frequency	12. Item Recorded	13. Record Keeping Frequency	14. Pollutants tested	15. Test Method	16. Testing Frequency
KLN1	PC1	PC2	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
KLN2	PC2	PC2	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
RB1	RBBH1	RBBH1	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
CB1	CBBH1	CBBH1	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
PB1	PBBH1, PBBH2	PBBH1, PBBH2	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
RM1	RMBV1	RMBV1	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
RM2	RMBV2	RMBV2	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
RM3	RMBV3	RMBV3	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
RM4	RMBV4	RMBV4	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
CP1	PBBH1	PBBH1	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
CP2	PBBH2	PBBH2	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
DRY1	PBBH2	PBBH2	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
TB1	TBBH1	TBBH1	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
TB2	TBBH2	TBBH2	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
WB1	TBBH1, TBBH2	TBBH1, TBBH2	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
FP1	FPBV1	FPBV1	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
FP2	FPBV2	FPBV2	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
FP3	FPBV3	FPBV3	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
FP4	FPBV4	FPBV4	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD

FP5	FPBV5	FPBV5	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
EG1	N/A	N/A	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD
EG2	N/A	N/A	Opacity	TBD	Opacity Reading	TBD	N/A	Method 9	TBD

OAQ COMPLIANCE DETERMINATION APPLICATION
CD-02: Compliance Plan Requirements Per Applicable Requirement

State Form 51862 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CD-02 is to identify existing compliance monitoring activities (monitoring, testing, record keeping and/or reporting) required in an applicable requirement or to provide compliance monitoring activities for applicable requirements where there is no or inadequate compliance monitoring requirements.
- CD-02 focuses on generally applicable requirements that apply to many or all emission units at the source.
- This is required form for each initial Title V permit application as well as each modification and every renewal.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification of Source and Applicable Requirement

Part A identifies the source and the applicable requirement. Use one form for each applicable requirement. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

1. **Source Name:** All Sources/Facility-Wide
2. **Source ID:** – TBD

3. **Applicable Requirement:** Particulate Rules

4. **Rule Cite:** 326 IAC Article 6

5. **Limitations:** List each operational and/or emission limit specified in the applicable requirement.

Process Weight Rule; The following equations are used to determine the PM emission limits for WSP's manufacturing processes:

E=4.10×P^0.67;for P<30

E=55.0×P^0.11-40; for 30≤P

where:

E = Pounds of PM emitted per hour (lb/hr)

P = Process weight rate (tons/hr)

The WSP facility will comply with this rule through the use of baghouses and bin vent filters.

6. **Reporting Schedule:** Provide a description of the reporting schedule to be used. The schedule should include what will be reported and how often the reports will be submitted.

Semiannual Title V Reports will indicate any exceedances of the PM limit, as well as corrective actions taken to reconcile any exceedance events.

Continued on Next Page

PART B: Compliance Plan Components

Part B identifies the main components of each required compliance plan.

7. Unit ID	8. Stack / Vent ID	9. Control Equipment	10. Parameters Monitored	11. Monitoring Frequency	12. Item Recorded	13. Record Keeping Frequency	14. Pollutants tested	15. Test Method	16. Testing Frequency
KLN1	PC1	PC2	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
KLN2	PC2	PC2	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
RB1	RBBH1	RBBH1	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
CB1	CBBH1	CBBH1	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
PB1	PBBH1, PBBH2	PBBH1, PBBH2	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A

RM1	RMBV1	RMBV1	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
RM2	RMBV2	RMBV2	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
RM3	RMBV3	RMBV3	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
RM4	RMBV4	RMBV4	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
CP1	PBBH1	PBBH1	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
CP2	PBBH2	PBBH2	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A

DRY1	PBBH2	PBBH2	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
TB1	TBBH1	TBBH1	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
TB2	TBBH2	TBBH2	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
WB1	TBBH1, TBBH2	TBBH1, TBBH2	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
FP1	FPBV1	FPBV1	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
FP2	FPBV2	FPBV2	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A

FP3	FPBV3	FPBV3	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
FP4	FPBV4	FPBV4	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A
FP5	FPBV5	FPBV5	PM	N/A	Will comply with this rule through the use of baghouses and bin vent filters.	N/A	N/A	N/A	N/A

OAQ COMPLIANCE DETERMINATION APPLICATION
CD-02: Compliance Plan Requirements Per Applicable Requirement

State Form 51862 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CD-02 is to identify existing compliance monitoring activities (monitoring, testing, record keeping and/or reporting) required in an applicable requirement or to provide compliance monitoring activities for applicable requirements where there is no or inadequate compliance monitoring requirements.
- CD-02 focuses on generally applicable requirements that apply to many or all emission units at the source.
- This is required form for each initial Title V permit application as well as each modification and every renewal.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Identification of Source and Applicable Requirement

Part A identifies the source and the applicable requirement. Use one form for each applicable requirement. For the purposes of this form, the term "source" refers to the plant site as a whole and NOT to individual emissions units.

1. Source Name: Emergency Generator 1 and Emergency Generator 2	**2. Source ID:** – TBD
3. Applicable Requirement: Emission standards for new nonroad CI engines in Table 1 to §89.112(a) and the opacity standards in §89.113 as required by §60.4205(b) and §60.4202(a)(2)	
4. Rule Cite: 40 CFR 60, Subpart IIII	

5. Limitations: List each operational and/or emission limit specified in the applicable requirement.

Emission standards for new nonroad CI engines in Table 1 to §89.112(a) and the opacity standards in §89.113 as required by §60.4205(b) and §60.4202(a)(2). The emergency generators will be operated for no more than 100 hours per year for the purposes of maintenance and readiness checks [§60.4211(f)(2)]. Both engines will combust ultra-low sulfur diesel (15 parts per million [ppm]) as required by §60.4207(b) and specified in §80.510(b)(1)(i). WSP will operate and maintain the engines in accordance with the manufacturer's emission-related written instructions and will not change any emissions-related settings other than those that are permitted by the manufacturer [§60.4211(a)(1) and (2)]. WSP will purchase certified engines as required by §60.4211(c).

6. Reporting Schedule: Provide a description of the reporting schedule to be used. The schedule should include what will be reported and how often the reports will be submitted.

N/A

Continued on Next Page

PART B: Compliance Plan Components

Part B identifies the main components of each required compliance plan.

7. Unit ID	8. Stack / Vent ID	9. Control Equipment	10. Parameters Monitored	11. Monitoring Frequency	12. Item Recorded	13. Record Keeping Frequency	14. Pollutants tested	15. Test Method	16. Testing Frequency
EG1	N/A	N/A	Emissions	N/A - engines will be certified					
EG1	N/A	N/A	Hours of operation	Per event	Hours of operation, Type of operation (emergency, non-emergency)	Per event	N/A	N/A	N/A
EG2	N/A	N/A	Emissions	N/A - engines will be certified					
EG2	N/A	N/A	Hours of operation	Per event	Hours of operation, Type of operation (emergency, non-emergency)	Per event	N/A	N/A	N/A

OAQ COMPLIANCE DETERMINATION APPLICATION
CD-04: Compliance Schedule and Certification

State Form 51864 (R2 / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53 Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.IN.gov/idem

NOTES:

- The purpose of CD-04 is to provide a schedule of for compliance certification submittals, a certification of the source's compliance status with all applicable requirements, and a compliance schedule that details the measures a source will use to address non-compliance.
- Complete this form once per application (not once for each emissions unit) with respect to all applicable requirements at the source.
- This is required form for each initial Title V permit application as well as each modification and every renewal.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

PART A: Source Identification and Compliance Schedule

Part A identifies the permitted source and the permit term compliance certification schedule.

1. Source Name: Waelz Sustainable Products, LLC	**2. Source ID:** – TBD
3. Permit Term Compliance Certification Schedule	
Date of first certification submittal:	**Frequency of future submittals:** Semiannually

PART B: Risk Management Plan

Part B indicates whether sources subject to section 112(r), Accidental Release Prevention, are complying with the requirement to submit a Risk Management Plan (RMP).

4. Statement of Applicability / Non-Applicability: Indicate whether the source is subject to Section 112(r) and the requirement to submit and RMP.

☐ Source is subject to Section 112(r) and a Risk Management Plan (RMP) is required.

☒ Source is not subject to Section 112(r) and a Risk Management Plan (RMP) is not required.

RMP Submittal Information: Indicate when the RMP was submitted to each of the following agencies. If the RMP has not yet been submitted to any of the listed agencies, indicate the date when the RMP will be mailed to that agency. If the RMP for IDEM is attached to this application, please write "attached" in the Date Submitted column.

5. Agency Name	6. Date Submitted	7. Expected Submittal Date
Chemical Safety and Hazard Investigation Board (CSHIB)		
United States Environmental Protection Agency (U.S. EPA)		
Indiana Department of Environmental Management (IDEM)		
Local Agency responsible for permitting:		

8. EPA Facility Identifier: — —

Continued on Next Page

ORIGINAL

PART C: Certification of Source Compliance Status

Part C states whether the source is or is not in full compliance with all applicable requirements and to identify corrective actions to be taken in cases of noncompliance.

9. Check the Most Accurate Statement.

- ☒ The source described in this air pollution control permit application is fully in compliance with all applicable requirements and will continue to comply with those requirements.
- ☐ FORM CD-01 includes new requirements that apply or will apply to the emissions unit during the term of the permit. The source will meet such requirements on a timely basis.
- ☐ The source described in this air pollution control permit application is fully in compliance with all applicable requirements, except for the emissions unit(s) listed below. Compliance will be achieved according to the schedule identified below.

10. Unit ID	11. Applicable Requirement	12. Corrective Action	13. Deadline	14. Progress Reports	
				Start Date	Frequency

15. Signature of Responsible Official

☒ I certify that, based on information and belief formed after reasonable inquiry, the statements and information presented are true, accurate and complete.

Nigel Morrison
Name *(typed)*

President
Title

Signature

4/8/2019
Date

JAVIER

OAQ FEDERAL RULE INCORPORATION APPLICATION
FED-01: Summary of Federal Requirements – NSPS & NESHAP

State Form 53512 (R / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53, Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.in.gov/idem

NOTES:

- The purpose of this form is to provide a standardized way for sources to identify the NSPS or NESHAP requirements that are applicable to the regulated source. Complete one (1) form for each federal rule that applies to the source. This is a required form.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record.

Part A: Identification of Applicable Standard

Part A identifies the applicable standard and affected source.

1. Type of Standard:	☒ Part 60 NSPS ☐ Part 61 NESHAP ☐ Part 63 NESHAP (MACT)	
2. Subpart Letter:	IIII	
3. Source Category Name:	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	
4. Affected Source *(Include all applicable emission unit IDs)*:	EG1 & EG2	

Part B: Applicable Requirements

Part B specifies the specific requirements of the federal rule that are applicable to the process or emission unit.

5. Applicable Requirements: *Identify the section of the federal standard that is applicable at the lowest subsection level. For example, if all of 40 CFR 63.342(c) is applicable, "40 CFR 63.342(c)" is the appropriate citation. If only paragraph 2 of 40 CFR 63.342(c) is applicable, then the appropriate citation is 40 CFR 63.342(c)(2).*

- 40 CFR 60.4202(a)(2)
- 40 CFR 60.4205(b)
- 40 CFR 60 4207(b)
- 40 CFR 60.4211(f)(2)
- 40 CFR 60.4211(a)(1) and (2)

Continued on Next Page

Part C: Performance Testing Requirements

Part C identifies the performance testing requirements that are applicable to the process or emission unit.

6. Performance Testing:	NA	
7. Date of Initial Performance Test:		
8. Test Methods:		
9. Was the initial performance test approved by IDEM?	☐ Yes: *Date approved:* _____	☐ No
10. Did the initial performance test show compliance with the rule?	☐ Yes	☐ No: *Date of next performance test:* _____

Part D: Important Dates

Part D identifies specific dates associated with the federal standard that are applicable to the process or emission unit.

11. Date Initial Notification was Submitted:	NA	
12. Initial Compliance Date:	☐ Startup: _____	☐ Other: _____
13. Other Dates	Description: _____	Date: _____
	Description: _____	Date: _____
	Description: _____	Date: _____

Part E: Other Information

Part E identifies any additional information pertaining to the applicable federal rule. Attach additional information using form GSD-09 as necessary.

OAQ FEDERAL RULE INCORPORATION APPLICATION
FED-01: Summary of Federal Requirements – NSPS & NESHAP

State Form 53512 (R / 1-10)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM – Office of Air Quality – Permits Branch
100 N. Senate Avenue, MC 61-53, Room 1003
Indianapolis, IN 46204-2251
Telephone: (317) 233-0178 or
Toll Free: 1-800-451-6027 x30178 (within Indiana)
Facsimile Number: (317) 232-6749
www.in.gov/idem

NOTES:

- The purpose of this form is to provide a standardized way for sources to identify the NSPS or NESHAP requirements that are applicable to the regulated source. Complete one (1) form for each federal rule that applies to the source. This is a required form.
- Detailed instructions for this form are available on the Air Permit Application Forms website.
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record.

Part A: Identification of Applicable Standard

Part A identifies the applicable standard and affected source.

1. Type of Standard:	☐ Part 60 NSPS ☐ Part 61 NESHAP	☒ Part 63 NESHAP (MACT)
2. Subpart Letter:	ZZZZ	
3. Source Category Name:	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
4. Affected Source *(Include all applicable emission unit IDs)*:	EG1 & EG2	

Part B: Applicable Requirements

Part B specifies the specific requirements of the federal rule that are applicable to the process or emission unit.

5. Applicable Requirements: *Identify the section of the federal standard that is applicable at the lowest subsection level. For example, if all of 40 CFR 63.342(c) is applicable, "40 CFR 63.342(c)" is the appropriate citation. If only paragraph 2 of 40 CFR 63.342(c) is applicable, then the appropriate citation is 40 CFR 63.342(c)(2).*

Continued on Next Page

Part C: Performance Testing Requirements

Part C identifies the performance testing requirements that are applicable to the process or emission unit.

6. Performance Testing:	NA	
7. Date of Initial Performance Test:		
8. Test Methods:		
9. Was the initial performance test approved by IDEM?	☐ Yes: *Date approved:* _____	☐ No
10. Did the initial performance test show compliance with the rule?	☐ Yes	☐ No: *Date of next performance test:* _____

Part D: Important Dates

Part D identifies specific dates associated with the federal standard that are applicable to the process or emission unit.

11. Date Initial Notification was Submitted:	NA	
12. Initial Compliance Date:	☐ Startup: _____	☐ Other: _____
13. Other Dates	Description: _____	Date: _____
	Description: _____	Date: _____
	Description: _____	Date: _____

Part E: Other Information

Part E identifies any additional information pertaining to the applicable federal rule. Attach additional information using form GSD-09 as necessary.

APPENDIX B
SITE LOCATION MAP, LAYOUT DIAGRAM, AND PROCESS FLOW DIAGRAM

RAMBOLL

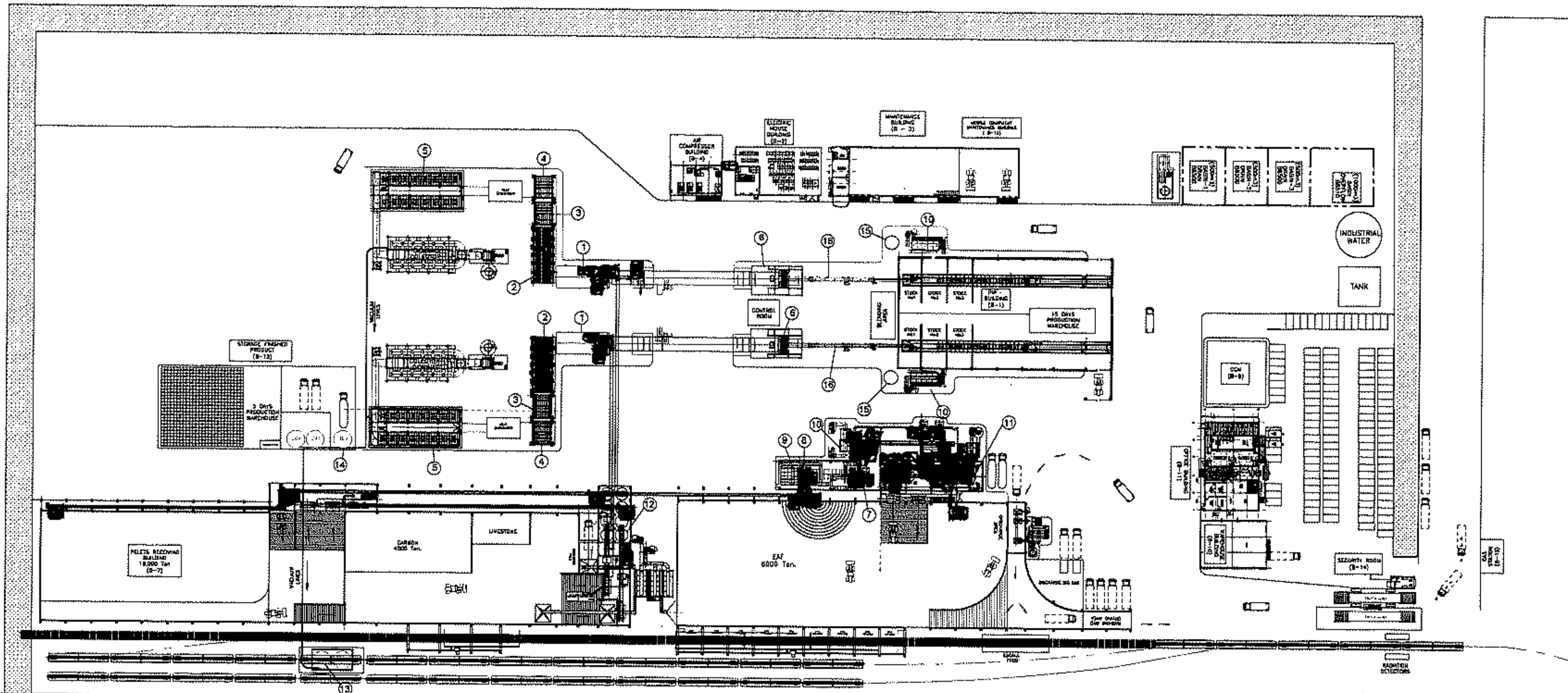
DRAFTED BY: EST | DATE: 3/4/2019

SITE LOCATION MAP

WAELZ SUSTAINABLE PRODUCTS, LLC
5401 WEST KILGORE AVENUE
MUNCIE, INDIANA

APPENDIX B
Figure 1

PROJECT: 11690010187



MAIN EQUIPMENT			
No	Description	Thickness	Material
1	Dust Chamber No.1	1/4"	A-36
2	Dust Chamber No.2	1/4"	A-36
3	Cooling Chamber No.1	1/4"	ss-316
4	Cooling Chamber No.2	1/4"	ss-316
5	Main Dust Collector	1/4"	A-36
6	Green Kiln	3/16"	A-36
7	Feed Chamber Pelletizing System	1/4"	A-36
8	Discharge Chamber Pelletizing System	1/4"	A-36
9	Combustion Chamber Pelletizing System	3/8"	A-36
10	General Collection	1/4"	A-36
11	Pelletizing Silos	5/16"	A-36
12	Feeding Silos	5/16"	A-36
13	Silos Finished Product (FTOC)	5/16"	A-36
14	Silos Finished Product (Big Bag)	3/16"	A-36

MAIN EQUIPMENT			
No	Description	Thickness	Material
15	Scrubber	?	?
16	Feeding Silos	3/16"	A-36
17	Cooling Chain	?	?
18			

MAIN BUILDINGS				
No	Description	Approximate Dimension (Mts.)		Area
B-1	Wip Building	67 Mts.	35 Mts.	2345 Mts²
B-2	Electric House Building	27.1 Mts.	15.2 Mts.	411.9 Mts²
B-3	Maintenance Building	41.6 Mts.	15.4 Mts.	634 Mts²
B-4	Air Compressor Building	19.2 Mts.	16.4 Mts.	316 Mts²
B-5	Pelletizing Building	63 Mts.	18 Mts.	1134 Mts²
B-6	Carbon Receiving Building	34.8 Mts.	75 Mts.	2610 Mts²
B-7	Pelets Receiving Building	38 Mts.	88 Mts.	3444 Mts²
B-8	EAF Dust Receiving & Conditioning Building	34 Mts.	118 Mts.	4016 Mts²
B-9	DCM	18.7 Mts.	20 Mts.	374 Mts²
B-10	Warehouse Building	20.8 Mts.	15.5 Mts.	322 Mts²
B-11	Office Building	25 Mts.	31 Mts.	775 Mts²
B-12	Storage Finished Product	42.4 Mts.	38 Mts.	1627 Mts²
B-13	Mobile Equipment Maintenance Building	19 Mts.	16 Mts.	304 Mts²
B-14	Security Room	9 Mts.	4 Mts.	36 Mts²
B-15	Gas Station	?	?	?

REVISIONES

PLANOS DE REFERENCIA

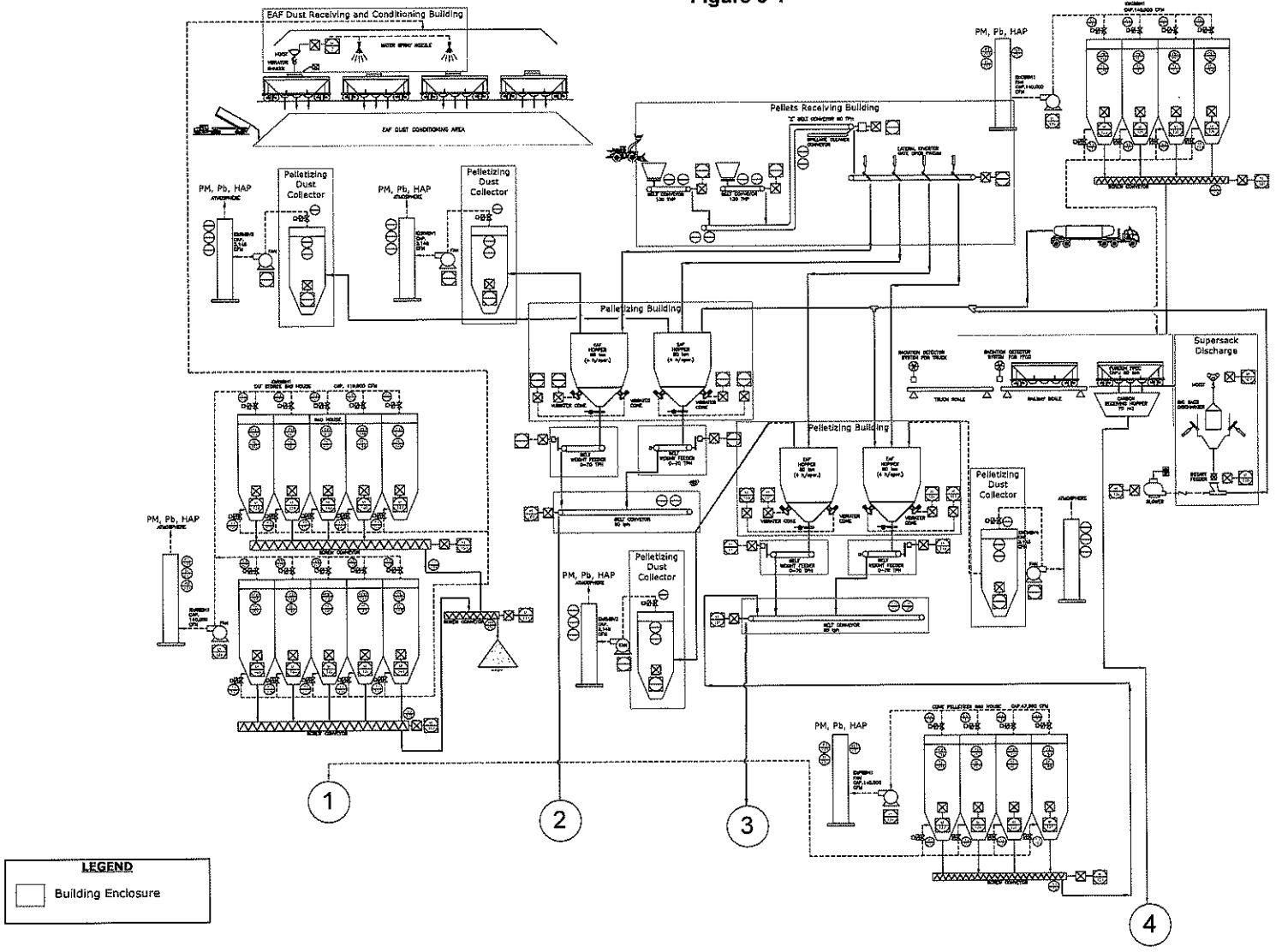
WSP

EMPRESA: xxxxx
PLANTA: INDIANA, U.S.A.
PROYECTO No.: SCORPION PROJECT
NOMBRE:
TITULO: LAY OUT KILN No. 1

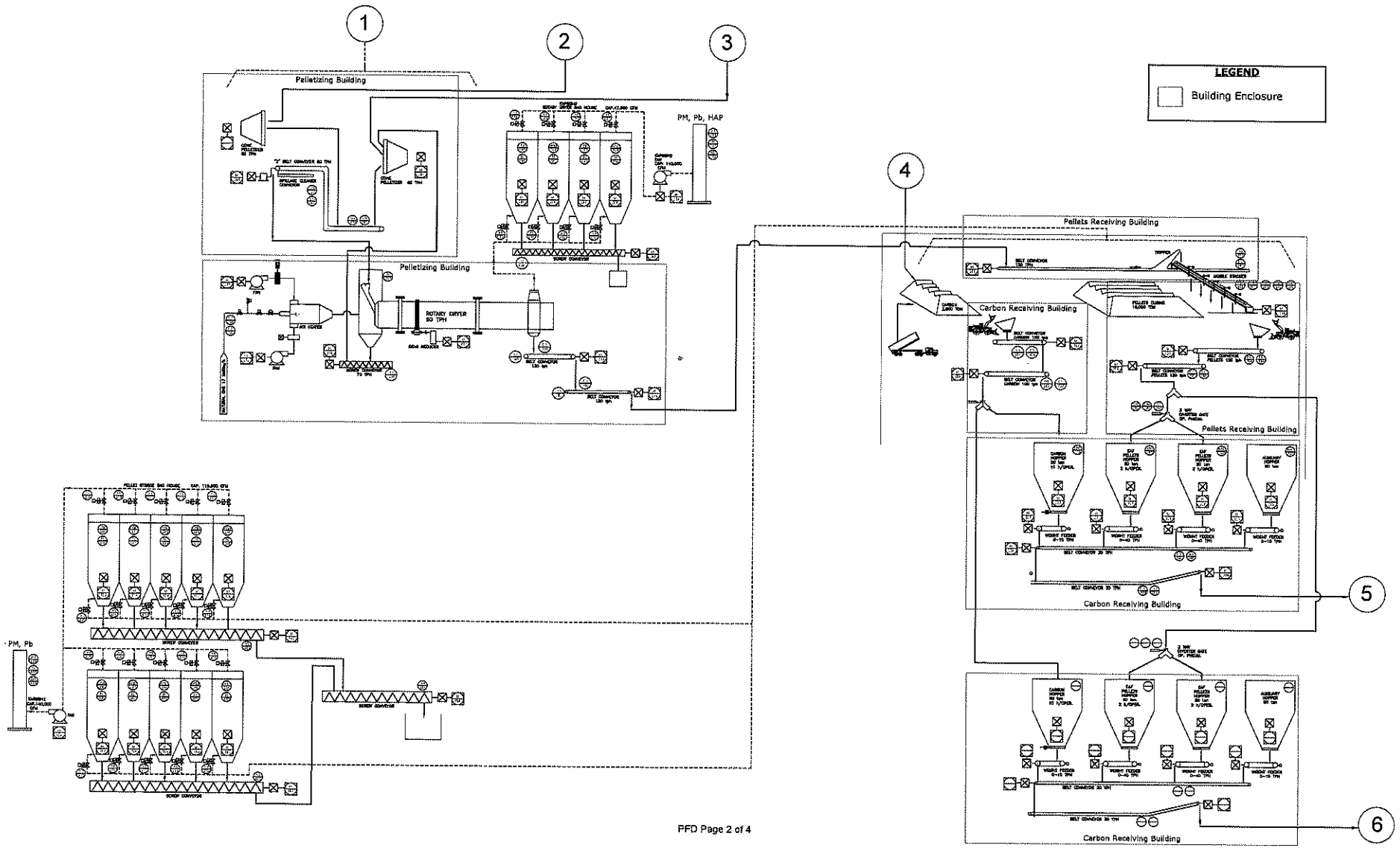
DIBUJO	CAGM	FECHA	30/01/2015
REVISO	MVA	FECHA	30/01/2019
APROBO	RAFT	FECHA	30/01/2019
UNIDAD	mm	ESCALA	1:

PLANO No.: 100-10-01-001 REV. No. E

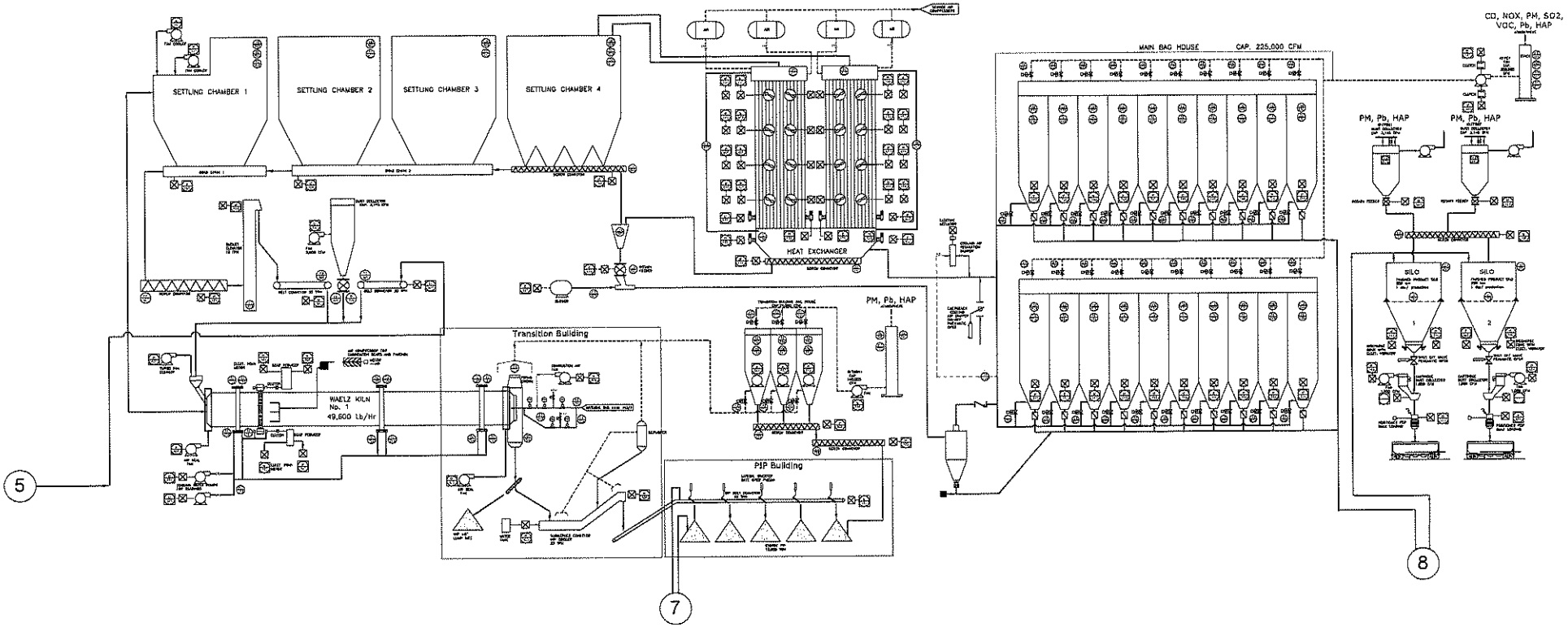
Waelz Sustainable Products, LLC
Site Process Flow Diagram
Figure 3-1



Waelz Sustainable Products, LLC
Site Process Flow Diagram
Figure 3-2



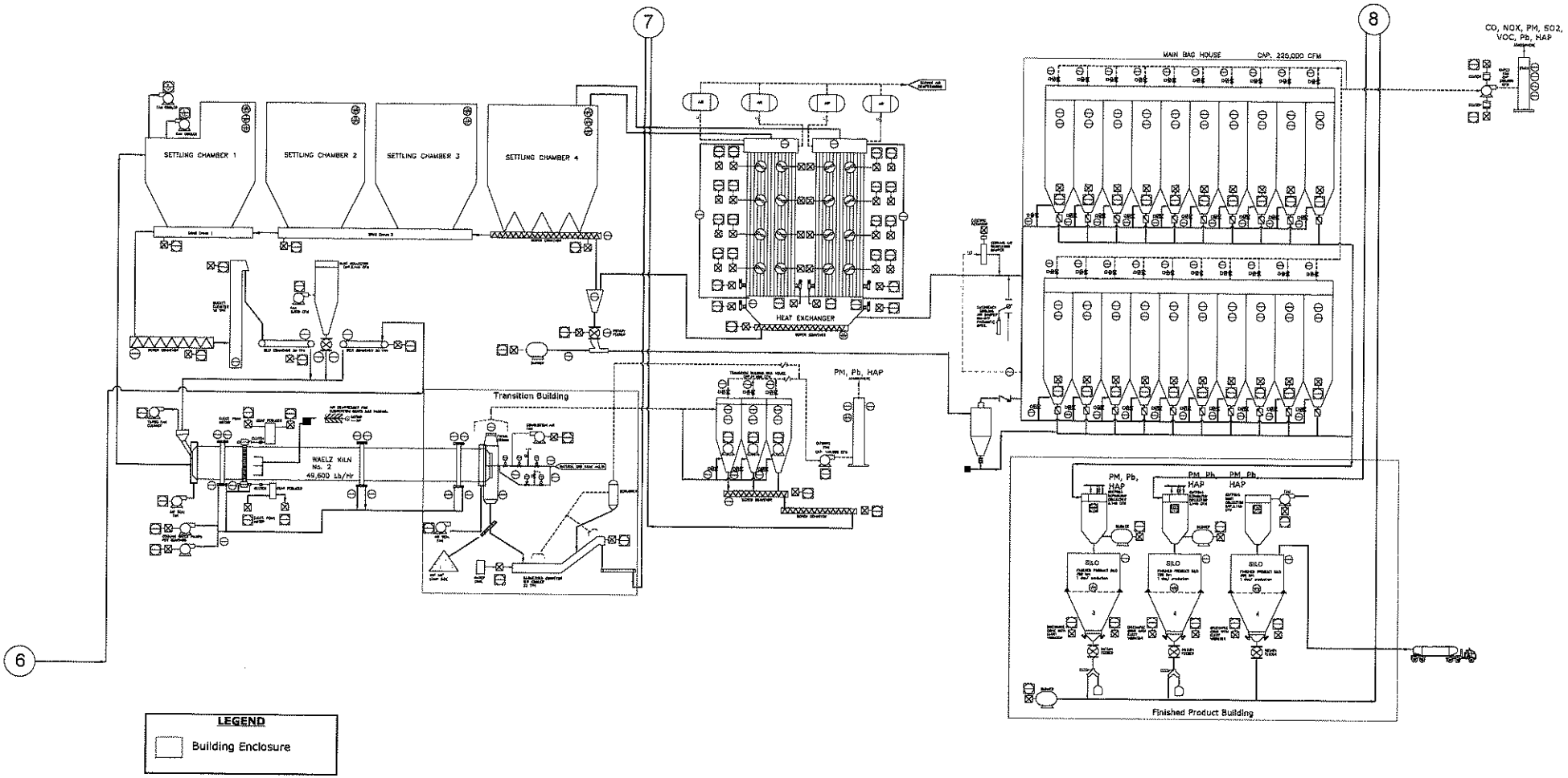
Waelz Sustainable Products, LLC
Site Process Flow Diagram
Figure 3-3



LEGEND

Building Enclosure

Waelz Sustainable Products, LLC
Site Process Flow Diagram
Figure 3-4



APPENDIX C
DETAILED EMISSIONS CALCULATIONS

Table C-1 - Facility-Wide ential Emissions Summary
Waelz Sustainable Products, LLC - Muncie, Indiana

Facility-Wide Potential Hourly Emissions

Source	Potential Hourly Emissions (lb/hr)									
	CO	NO_X	PM^2	PM_{10}^2	$PM_{2.5}^2$	SO_2	VOC	Pb	Total HAP	CO_2e
Waelz Kilns	46.62	29.76	14.76			5.21	4.46	0.17	0.79	113,496
Baghouses and Bin Vents	-	-	24.13			-	-	0.07	0.24	-
Feed Dryer Burner[1]	1.40	1.67				0.01	0.09		0.03	1,991
Emergency Generators	22.00	96.00	2.80			1.62	2.82	2.52E-04	0.05	4,581
Insignificant Activities	0.14	0.16	0.01			9.80E-04	9.22E-03	8.17E-07	0.03	195.09
Roadways	-	-	12.09	2.42	0.59	-	-	-	-	-
Total Potential Emissions	**70.16**	**127.59**	**53.79**	**44.12**	**42.29**	**6.84**	**7.38**	**0.24**	**1.13**	**120,263**

1. The products of combustion from the feed dryer burner are emitted through baghouse PBBH2.
2. $PM/PM_{10}/PM_{2.5}$ emissions represent total PM emissions.

Facility-Wide Potential Annual Emissions

Source	Potential Annual Emissions (tpy)									
	CO	NO_X	PM^2	PM_{10}^2	$PM_{2.5}^2$	SO_2	VOC	Pb^3	Total HAP	CO_2e
Waelz Kilns	169.20	108.00	53.56			18.90	16.20	0.63	3.12	417,985
Baghouses and Bin Vents	-	-	105.68			-	-	0.30	1.03	-
Feed Dryer Burner[1]	6.13	7.30				0.04	0.40		0.14	8,719
Emergency Generators	5.50	24.00	0.70			0.40	0.71	6.30E-05	0.01	1,145
Insignificant Activities	0.60	0.72	0.05			4.29E-03	0.04	3.58E-06	0.12	854.47
Roadways	-	-	16.02	3.20	0.79	-	-	-	-	-
Total Potential Emissions	**181.43**	**140.02**	**176.02**	**163.20**	**160.78**	**19.35**	**17.35**	**0.93**	**4.42**	**428,704**
Total Potential Emissions (Excluding Fugitives)	**181.43**	**140.02**	**160.00**	**160.00**	**160.00**	**19.35**	**17.35**	**0.93**	**4.42**	**428,704**
PSD Major Source Threshold	250	250	250	250	250	250	250	250	N/A	N/A
Above PSD Major Source Threshold?	No	No	No	No	No	No	No	No	N/A	N/A

1. The products of combustion from the feed dryer burner are emitted through baghouse PBBH2.
2. $PM/PM_{10}/PM_{2.5}$ emissions represent total PM emissions.
3. The facility is requesting a facility-wide PTE limit for Pb of 0.5 tpy. WSP proposes to demonstrate compliance with the facility-wide Pb limit via source testing of the kilns and feed dryer, as well as recordkeeping for material throughput of the applicable equipment.

PANEL

Table C-2 - Potential Criteria Pollutant Emissions From Waelz Kilns
Waelz Sustainable Products, LLC - Muncie, Indiana

Waelz Kilns Operations Data

Kiln 1 Throughput Capacity	24.8	tons/hr[1]
	180,000	tons/yr[1]
Kiln 2 Throughput Capacity	24.8	tons/hr[1]
	180,000	tons/yr[1]
Combined Throughput Capacity for Kiln 1 and Kiln 2[2]	49.6	tons/hr[1]
	360,000	tons/yr[1]
Potential Annual Hours of Operation	8,760	hrs/yr

1. Combined throughputs for Waelz Kilns based on information provided by Waelz Sustainable Products.
2. The facility is requesting a combined kiln throughput limit of 360000 tons/yr.

Potential Criteria Pollutant Emissions from Waelz Kilns

Pollutant	Emission Factor (lb/ton)[1]	Potential Hourly Emissions (lb/hr)	Potential Annual Emissions (tpy)
CO	0.94	46.62	169.20
NO_X	0.60	29.76	108.00
$PM/PM_{10}/PM_{2.5}$ Filterable	0.20	9.84	35.71
$PM/PM_{10}/PM_{2.5}$ Condensable[3]	0.10	4.92	17.85
Total $PM/PM_{10}/PM_{2.5}$	0.30	14.76	53.56
SO_2	0.11	5.21	18.90
VOC[2]	0.09	4.46	16.20

1. Emission factors for all pollutants except PM Condensable are based on maximum emissions rate from stack testing conducted at a similar facility between 2009 and 2018. All emission factors include a 50% contingency factor, except for the maximum CO emission rate which was considered to already represent the maximum potential to emit scenario.
2. Conservatively assumed VOC=THC.
3. PM Condensable emission factor conservatively assumes that PM condensable = 50% of PM filterable.

Table C-2 - Potential Criteria Pollutant Emissions From Waelz Kilns
Waelz Sustainable Products, LLC - Muncie, Indiana

Potential GHG Emissions from Zinc Production in Waelz Kilns

Kiln	Potential EAF Dust Throughput[1]		Max. Carbon Content of EAF Dust[2]	Potential Carbonaceous Material Throughput[1]		Max. Carbon Content of Carbonaceous Material[2]	CO_2 Potential Emissions from Zinc Production[3]	
	tons/hr	tons/yr		tons/hr	tons/yr		lb/hr	tpy
PC1	24.8	180,000	5%	5.7	41,004	100%	50,893	183,348
PC2	24.8	180,000	5%	5.7	41,004	100%	50,893	183,348
Total CO_2 Emissions (Zinc Production)							101,787	366,696

1. Combined throughput for both Waelz Kilns.
2. Conservative estimates based on historical site-specific analyses from the Millport, Alabama facility.
3. Per Equation GG-1 in 40 CFR 98 Subpart GG:

$E_{CO2} = 44/12 * [(Zinc) * (C_{zinc}) + (Carbon) * (C_{carbon})]$

where:

E_{CO2} = CO_2 process emissions from the kilns

44/12 = Ratio of CO_2 and C molecular weights

(Zinc) = Mass of zinc-bearing material (EAF dust) charged to the kilns

(C_{zinc}) = Carbon content of zinc-bearing material

(Carbon) = Mass of carbonaceous material (e.g., metallurgical coke breeze, anthracite, petroleum coke) charged to the kilns

(C_{carbon}) = Carbon content of carbonaceous material

Potential GHG Emissions from Natural Gas Combustion in Waelz Kilns

Kiln	Heat Input Capacity	Natural Gas Combustion Emission Factor (lb/MMBtu)[1]			Potential Hourly Emissions (lb/hr)				Potential Annual Emissions (tpy)			
	MMBtu/hr	CO_2	CH_4	N_2O	CO_2	CH_4	N_2O	CO_2e^2	CO_2	CH_4	N_2O	CO_2e^2
PC1	50	116.98	2.20E-03	2.20E-04	5,849	0.11	0.01	5,855	25,618	0.48	0.05	25,644
PC2	50				5,849	0.11	0.01	5,855	25,618	0.48	0.05	25,644
Total Potential Emissions					**11,698**	**0.22**	**0.02**	**11,710**	**51,236**	**0.97**	**0.10**	**51,289**

1. Emission factors for natural gas combustion from 40 CFR 98 Subpart C, Tables C-1 and C-2, converted from kg/MMBtu to lb/MMBtu.
2. CO_2e is based on the sum of the emissions for each GHG pollutant multiplied by that pollutant's global warming potential from 40 CFR 98 Subpart A, Table A-1:

CO_2:	1
CH_4:	25
N_2O:	298

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Table C-3 - Potential HAP Emissions from Waelz Kilns
Waelz Sustainable Products, LLC - Muncie, Indiana

Potential HAP Emissions from the Waelz Kilns

Pollutant	HAP	Concentration in EAF Dust (%)[1]	Potential Emissions	
			Max (lb/hr)[2]	Annual (tpy)
Aluminum	N	0.525%	4.76E-02	0.17
Arsenic	Y	0.008%	7.10E-04	2.58E-03
Barium	N	0.280%	2.54E-02	0.09
Cadmium	Y	0.160%	1.45E-02	0.05
Chromium	Y	0.460%	4.17E-02	0.15
Chromium (VI)	Y	0.012%	1.09E-03	3.95E-03
Cobalt	Y	0.003%	2.49E-04	9.05E-04
Copper	N	0.540%	4.90E-02	0.18
Pb	Y	1.900%	1.72E-01	0.63
Manganese	Y	2.100%	1.90E-01	0.69
Mercury	Y	Mass Balance	0.17	0.77
Nickel	Y	0.050%	4.53E-03	0.02
Selenium	Y	0.005%	4.49E-04	1.63E-03
Silver	N	0.007%	6.23E-04	2.26E-03
Vanadium	N	0.140%	1.27E-02	0.05
Zinc	N	35.000%	3.17	11.52
		Total HAP	**0.60**	**2.31**

1. Potential HAP concentrations in EAF dust are based on test data from a similar facility.
2. Emission factor for lead is based on 2018 stack testing at a similar facility and includes a 50% contingency. For pollutants other than lead and mercury, emission rates were proportioned from the emission rate of lead based on the ratio of the concentration of lead to the ratio of the concentrations of each metal in EAF dust and WZO, respectively. For mercury, the emission rate is based on a mass balance from a similar facility.

Table C-3 - Potential HAP Emissions from Waelz Kilns

Waelz Sustainable Products, LLC - Muncie, Indiana

Potential HAP Emissions from Natural Gas Combustion in the Waelz Kilns

Pollutant	HAP	Emission Factor[1] (lb/MMScf)	Potential Emissions	
			Max (lb/hr)	Annual (tpy)
2-Methylnaphthalene	Y	2.4E-05	2.35E-06	1.03E-05
3-Methylchloranthrene	Y	1.8E-06	1.76E-07	7.73E-07
7,12-Dimethylbenz(a)anthracene	Y	1.6E-05	1.57E-06	6.87E-06
Acenaphthene	Y	1.8E-06	1.76E-07	7.73E-07
Acenaphthylene	Y	1.8E-06	1.76E-07	7.73E-07
Acetaldehyde	Y	1.5E-05	1.49E-06	6.53E-06
Acrolein	Y	1.8E-05	1.76E-06	7.73E-06
Ammonia	N	3.2	3.14E-01	1.37E+00
Anthracene	Y	2.4E-06	2.35E-07	1.03E-06
Arsenic	Y	2.0E-04	1.96E-05	8.59E-05
Benz(a)anthracene	Y	1.8E-06	1.76E-07	7.73E-07
Benzene	Y	2.1E-03	2.06E-04	9.02E-04
Benzo(a)pyrene	Y	1.2E-06	1.18E-07	5.15E-07
Benzo(b)fluoranthene	Y	1.8E-06	1.76E-07	7.73E-07
Benzo(g,h,i)perylene	Y	1.2E-06	1.18E-07	5.15E-07
Benzo(k)fluoranthene	Y	1.8E-06	1.76E-07	7.73E-07
Beryllium	Y	1.2E-05	1.18E-06	5.15E-06
Cadmium	Y	1.1E-03	1.08E-04	4.72E-04
Chromium VI	Y	1.4E-03	1.37E-04	6.01E-04
Chrysene	Y	1.8E-06	1.76E-07	7.73E-07
Cobalt	Y	8.4E-05	8.24E-06	3.61E-05
Dibenzo(a,h)anthracene	Y	1.2E-06	1.18E-07	5.15E-07
Dichlorobenzene	Y	1.2E-03	1.18E-04	5.15E-04
Fluoranthene	Y	3.0E-06	2.94E-07	1.29E-06
Fluorene	Y	2.8E-06	2.75E-07	1.20E-06
Formaldehyde	Y	7.5E-02	7.35E-03	3.22E-02
Hexane	Y	1.8	1.76E-01	7.73E-01
Indeno(1,2,3-cd)pyrene	Y	1.8E-06	1.76E-07	7.73E-07
Lead	Y	5.0E-04	4.90E-05	2.15E-04
Manganese	Y	3.8E-04	3.73E-05	1.63E-04
Mercury	Y	2.6E-04	2.55E-05	1.12E-04
Naphthalene	Y	6.1E-04	5.98E-05	2.62E-04
Nickel	Y	2.1E-03	2.06E-04	9.02E-04
Phenanthrene	Y	1.7E-05	1.67E-06	7.30E-06
Pyrene	Y	5.0E-06	4.90E-07	2.15E-06
Selenium compounds	Y	2.4E-05	2.35E-06	1.03E-05
Toluene	Y	3.4E-03	3.33E-04	1.46E-03
		Total HAP	**1.85E-01**	**8.11E-01**

1. Emission factors for natural gas combustion are from NCDAQ Natural Gas Combustion Spreadsheet and AP-42, Fifth Edition, Volume 1, Chapter 1.4 - Natural Gas Combustion, 07/98. The emission factors for acetaldehyde, acrolein, and ammonia are cited in the NCDAQ spreadsheet as being sourced from the USEPA's WebFIRE database.

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Table C-4 - Baghouses Potential to Emit Calculations
Waelz Sustainable Products, LLC - Muncie, Indiana

Potential HAP Concentrations in EAF Dust, WZO, and WIP

Pollutant	Concentration in EAF Dust (%)[1]	Concentration in WZO (%)[1]	Concentration in WIP (%)[1]
Aluminum	0.525%	0.054%	-
Arsenic	0.008%	0.003%	-
Barium	0.280%	-	-
Cadmium	0.160%	0.122%	-
Chromium	0.460%	0.027%	0.175%
Chromium (VI)	0.012%	-	-
Cobalt	0.003%	0.005%	-
Copper	0.540%	0.058%	0.280%
Pb	1.900%	2.431%	0.008%
Manganese	2.100%	0.222%	5.100%
Mercury	Mass Balance		
Nickel	0.050%	0.021%	-
Selenium	0.005%	-	-
Silver	0.007%	0.024%	-
Vanadium	0.140%	-	-
Zinc	35.00%	64.950%	3.997%

1. Potential metal concentrations in EAF dust, WZO, and WIP are based on test data from a similar facility.

Table C-4 - Baghouses ...ial to Emit Calculations
Waelz Sustainable Products, LLC - Muncie, Indiana

Potential Emissions from Baghouses

Baghouse ID	Baghouse Description	Exhaust Gas Flow Rate (scfm)	PM Emission Factor (gr/dscf)[1,2]	Potential Hours of Operation (hrs/yr)	PM		Pb		Aluminum		Arsenic		Barium		Cadmium	
					(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
RBBH1	EAF Receiving Building Baghouse	140,000	3.00E-03	8,760	3.6	15.77	0.014	0.06	3.79E-03	1.66E-02	5.65E-05	2.48E-04	2.02E-03	8.86E-03	1.16E-03	5.06E-03
CBBH1	Carbon/Limestone Receiving Building Baghouse	140,000	3.00E-03	8,760	3.6	15.77	0.014	0.06	3.79E-03	1.66E-02	5.65E-05	2.48E-04	2.02E-03	8.86E-03	1.16E-03	5.06E-03
PBBH1	Pelletizing Building / Cone Pelletizers Baghouse	140,000	3.00E-03	8,760	3.6	15.77	0.014	0.06	3.79E-03	1.66E-02	5.65E-05	2.48E-04	2.02E-03	8.86E-03	1.16E-03	5.06E-03
PBBH2	Pelletizing Building / Rotary Dryer Baghouse	140,000	4.50E-03	8,760	5.4	23.65	0.014	0.06	3.79E-03	1.66E-02	5.65E-05	2.48E-04	2.02E-03	8.86E-03	1.16E-03	5.06E-03
TBBH1	Kiln 1 Transition Building / WIP Building Baghouse	140,000	3.00E-03	8,760	3.6	15.77	5.78E-05	2.53E-04	-	-	-	-	-	-	-	-
TBBH2	Kiln 2 Transition Building / WIP Building Baghouse	140,000	3.00E-03	8,760	3.6	15.77	5.78E-05	2.53E-04	-	-	-	-	-	-	-	-
FPBV1	Finished Product Silo No. 1 (Railway) Bin Vent Filter	3,145	3.00E-03	8,760	0.1	0.35	0.0016	0.0071	3.59E-05	1.57E-04	2.00E-06	8.74E-06	-	-	8.09E-05	3.55E-04
FPBV2	Finished Product Silo No. 2 (Railway) Bin Vent Filter	3,145	3.00E-03	8,760	0.1	0.35	0.0016	0.0071	3.59E-05	1.57E-04	2.00E-06	8.74E-06	-	-	8.09E-05	3.55E-04
FPBV3	Finished Product Silo No. 3 (Load Supersack) Bin Vent Filter	3,145	3.00E-03	8,760	0.1	0.35	0.0016	0.0071	3.59E-05	1.57E-04	2.00E-06	8.74E-06	-	-	8.09E-05	3.55E-04
FPBV4	Finished Product Silo No. 4 (Load Supersack) Bin Vent Filter	3,145	3.00E-03	8,760	0.1	0.35	0.0016	0.0071	3.59E-05	1.57E-04	2.00E-06	8.74E-06	-	-	8.09E-05	3.55E-04
FPBV5	Finished Product Silo No. 5 (Load Supersack) Bin Vent Filter	3,145	3.00E-03	8,760	0.1	0.35	0.0016	0.0071	3.59E-05	1.57E-04	2.00E-06	8.74E-06	-	-	8.09E-05	3.55E-04
RMBV1	EAF Hopper No. 1 (Feed to Cone Pelletizer) Bin Vent Filter	3,145	3.00E-03	8,760	0.1	0.35	0.0016	0.0071	4.47E-04	1.96E-03	6.67E-06	2.92E-05	2.38E-04	1.04E-03	1.36E-04	5.97E-04
RMBV2	EAF Hopper No. 2 (Feed to Cone Pelletizer) Bin Vent Filter	3,145	3.00E-03	8,760	0.1	0.35	0.0016	0.0071	4.47E-04	1.96E-03	6.67E-06	2.92E-05	2.38E-04	1.04E-03	1.36E-04	5.97E-04
RMBV3	EAF Hopper No. 3 (Feed to Cone Pelletizer) Bin Vent Filter	3,145	3.00E-03	8,760	0.1	0.35	0.0016	0.0071	4.47E-04	1.96E-03	6.67E-06	2.92E-05	2.38E-04	1.04E-03	1.36E-04	5.97E-04
RMBV4	EAF Hopper No. 4 (Feed to Cone Pelletizer) Bin Vent Filter	3,145	3.00E-03	8,760	0.1	0.35	0.0016	0.0071	4.47E-04	1.96E-03	6.67E-06	2.92E-05	2.38E-04	1.04E-03	1.36E-04	5.97E-04
				HAP	N		Y		N		Y		N		Y	
				Total Potential Emissions	**24.1**	**105.68**	**0.07**	**0.30**	**0.02**	**0.08**	**2.63E-04**	**1.15E-03**	**0.01**	**0.04**	**0.01**	**0.02**

1. Baghouse/bin vent filter exit grain loading based on a similar facility.
2. Exit grain loading for PBBH2 also includes PM condensable emissions. PM Condensable grain loading conservatively assumes that PM condensable = 50% of PM filterable.
3. Potential hourly Pb emissions for the bin vents assume a lead fraction of 0.02 gr Pb/gr PM based on a similar facility. Potential hourly Pb emissions for RBBH1, CBBH1, PBBH1, and PBBH2 were estimated using the February 2008 source testing results at a similar facility and a 50% safety factor, as shown in the following equation:
   Potential Hourly Pb Emissions (lb/hr) = Max. Pb Emission Rate from February 2008 Source Testing of PBH1 and PBH2 (0.0049 lb/hr) * [100% + Safety Factor (50%)] *
   Baghouse Exhaust Gas Flow Rate (scfm) / Exhaust Gas Flow Rate for PBH1 and PBH2 (75,000 scfm)
   Potential hourly Pb emissions for TBBH1 and TBBH2 were estimated using the same equation above, and scaled Pb emissions to account for the lead concentration in WIP as compared to EAF dust.
4. Potential hourly emissions for pollutants other than PM and Pb were proportioned from the emission rate of lead based on the ratio of the concentration of lead to the ratio of the concentrations of each metal in EAF dust and WZO, respectively. See Table C-3 for each compound's assumed concentration in EAF dust.
5. Mercury emissions are based on a facility-wide mass balance. As such, all potential mercury emissions from the facility's EAF dust, WIP, and WZO product handling are captured under the Kilns calculations.

EXHIBIT A.1

Table C-4 - Baghouses Potential to Emit Calculations
Waelz Sustainable Products, LLC - Muncie, Indiana

Potential Emissions from Baghouses

Baghouse ID	Baghouse Description	Exhaust Gas Flow Rate (scfm)	Potential Hours of Operation	Chromium		Chromium (VI)		Cobalt		Copper		Manganese	
				(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
RBBH1	EAF Receiving Building Baghouse	140,000	8,760	3.32E-03	1.45E-02	8.67E-05	3.80E-04	1.99E-05	8.70E-05	3.90E-03	1.71E-02	1.52E-02	6.64E-02
CBBH1	Carbon/Limestone Receiving Building Baghouse	140,000	8,760	3.32E-03	1.45E-02	8.67E-05	3.80E-04	1.99E-05	8.70E-05	3.90E-03	1.71E-02	1.52E-02	6.64E-02
PBBH1	Pelletizing Building / Cone Pelletizers Baghouse	140,000	8,760	3.32E-03	1.45E-02	8.67E-05	3.80E-04	1.99E-05	8.70E-05	3.90E-03	1.71E-02	1.52E-02	6.64E-02
PBBH2	Pelletizing Building / Rotary Dryer Baghouse	140,000	8,760	3.32E-03	1.45E-02	8.67E-05	3.80E-04	1.99E-05	8.70E-05	3.90E-03	1.71E-02	1.52E-02	6.64E-02
TBBH1	Kiln 1 Transition Building / WIP Building Baghouse	140,000	8,760	1.26E-03	5.53E-03	-	-	-	-	0.00	0.01	3.68E-02	1.61E-01
TBBH2	Kiln 2 Transition Building / WIP Building Baghouse	140,000	8,760	1.26E-03	5.53E-03	-	-	-	-	0.00	0.01	3.68E-02	1.61E-01
FPBV1	Finished Product Silo No. 1 (Railway) Bin Vent Filter	3,145	8,760	1.80E-05	7.87E-05	-	-	3.33E-06	1.46E-05	3.84E-05	1.68E-04	1.47E-04	6.46E-04
FPBV2	Finished Product Silo No. 2 (Railway) Bin Vent Filter	3,145	8,760	1.80E-05	7.87E-05	-	-	3.33E-06	1.46E-05	3.84E-05	1.68E-04	1.47E-04	6.46E-04
FPBV3	Finished Product Silo No. 3 (Load Supersack) Bin Vent Filter	3,145	8,760	1.80E-05	7.87E-05	-	-	3.33E-06	1.46E-05	3.84E-05	1.68E-04	1.47E-04	6.46E-04
FPBV4	Finished Product Silo No. 4 (Load Supersack) Bin Vent Filter	3,145	8,760	1.80E-05	7.87E-05	-	-	3.33E-06	1.46E-05	3.84E-05	1.68E-04	1.47E-04	6.46E-04
FPBV5	Finished Product Silo No. 5 (Load Supersack) Bin Vent Filter	3,145	8,760	1.80E-05	7.87E-05	-	-	3.33E-06	1.46E-05	3.84E-05	1.68E-04	1.47E-04	6.46E-04
RMBV1	EAF Hopper No. 1 (Feed to Cone Pelletizer) Bin Vent Filter	3,145	8,760	3.92E-04	1.72E-03	1.02E-05	4.47E-05	2.34E-06	1.03E-05	4.60E-04	2.01E-03	1.79E-03	7.83E-03
RMBV2	EAF Hopper No. 2 (Feed to Cone Pelletizer) Bin Vent Filter	3,145	8,760	3.92E-04	1.72E-03	1.02E-05	4.47E-05	2.34E-06	1.03E-05	4.60E-04	2.01E-03	1.79E-03	7.83E-03
RMBV3	EAF Hopper No. 3 (Feed to Cone Pelletizer) Bin Vent Filter	3,145	8,760	3.92E-04	1.72E-03	1.02E-05	4.47E-05	2.34E-06	1.03E-05	4.60E-04	2.01E-03	1.79E-03	7.83E-03
RMBV4	EAF Hopper No. 4 (Feed to Cone Pelletizer) Bin Vent Filter	3,145	8,760	3.92E-04	1.72E-03	1.02E-05	4.47E-05	2.34E-06	1.03E-05	4.60E-04	2.01E-03	1.79E-03	7.83E-03
			HAP	Y		Y		Y		N		Y	
			Total Potential Emissions	**0.02**	**0.08**	**3.87E-04**	**1.70E-03**	**1.05E-04**	**4.62E-04**	**0.02**	**0.09**	**0.14**	**0.62**

1. Baghouse/bin vent filter exit grain loading based on a similar facility.
2. Exit grain loading for PBBH2 also includes PM condensable emissions. PM Condensable grain loading conservatively assumes that PM condensable = 50% of PM filterable.
3. Potential hourly Pb emissions for the bin vents assume a lead fraction of 0.02 gr Pb/gr PM based on a similar facility. Potential hourly Pb emissions for RBBH1, CBBH1, PBBH1, and PBBH2 were estimated using the February 2008 source testing results at a similar facility and a 50% safety factor, as shown in the following equation:
   Potential Hourly Pb Emissions (lb/hr) = Max. Pb Emission Rate from February 2008 Source Testing of PBH1 and PBH2 (0.0049 lb/hr) * [100% + Safety Factor (50%)] *
   Baghouse Exhaust Gas Flow Rate (scfm) / Exhaust Gas Flow Rate for PBH1 and PBH2 (75,000 scfm)
   Potential hourly Pb emissions for TBBH1 and TBBH2 were estimated using the same equation above, and scaled Pb emissions to account for the lead concentration in WIP as compared to EAF dust.
4. Potential hourly emissions for pollutants other than PM and Pb were proportioned from the emission rate of lead based on the ratio of the concentration of lead to the ratio of the concentrations of each metal in EAF dust and WZO, respectively. See Table C-3 for each compound's assumed concentration in EAF dust.
5. Mercury emissions are based on a facility-wide mass balance. As such, all potential mercury emissions from the facility's EAF dust, WIP, and WZO product handling are captured under the Kilns calculations.

Table C-4 - Baghouses dial to Emit Calculations
Waelz Sustainable Products, LLC - Muncie, Indiana

Potential Emissions from Baghouses

Baghouse ID	Baghouse Description	Exhaust Gas Flow Rate (scfm)	Potential Hours of Operation	Nickel		Selenium		Silver		Vanadium		Zinc	
				(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
RBBH1	EAF Receiving Building Baghouse	140,000	8,760	3.61E-04	1.58E-03	3.57E-05	1.57E-04	4.96E-05	2.17E-04	1.01E-03	4.43E-03	2.53E-01	1.11
CBBH1	Carbon/Limestone Receiving Building Baghouse	140,000	8,760	3.61E-04	1.58E-03	3.57E-05	1.57E-04	4.96E-05	2.17E-04	1.01E-03	4.43E-03	2.53E-01	1.11
PBBH1	Pelletizing Building / Cone Pelletizers Baghouse	140,000	8,760	3.61E-04	1.58E-03	3.57E-05	1.57E-04	4.96E-05	2.17E-04	1.01E-03	4.43E-03	2.53E-01	1.11
PBBH2	Pelletizing Building / Rotary Dryer Baghouse	140,000	8,760	3.61E-04	1.58E-03	3.57E-05	1.57E-04	4.96E-05	2.17E-04	1.01E-03	4.43E-03	2.53E-01	1.11
TBBH1	Kiln 1 Transition Building / WIP Building Baghouse	140,000	8,760	-	-	-	-	-	-	-	-	0.03	0.13
TBBH2	Kiln 2 Transition Building / WIP Building Baghouse	140,000	8,760	-	-	-	-	-	-	-	-	0.03	0.13
FPBV1	Finished Product Silo No. 1 (Railway) Bin Vent Filter	3,145	8,760	1.40E-05	6.12E-05	-	-	1.60E-05	6.99E-05	-	-	4.32E-02	1.89E-01
FPBV2	Finished Product Silo No. 2 (Railway) Bin Vent Filter	3,145	8,760	1.40E-05	6.12E-05	-	-	1.60E-05	6.99E-05	-	-	4.32E-02	1.89E-01
FPBV3	Finished Product Silo No. 3 (Load Supersack) Bin Vent Filter	3,145	8,760	1.40E-05	6.12E-05	-	-	1.60E-05	6.99E-05	-	-	4.32E-02	1.89E-01
FPBV4	Finished Product Silo No. 4 (Load Supersack) Bin Vent Filter	3,145	8,760	1.40E-05	6.12E-05	-	-	1.60E-05	6.99E-05	-	-	4.32E-02	1.89E-01
FPBV5	Finished Product Silo No. 5 (Load Supersack) Bin Vent Filter	3,145	8,760	1.40E-05	6.12E-05	-	-	1.60E-05	6.99E-05	-	-	4.32E-02	1.89E-01
RMBV1	EAF Hopper No. 1 (Feed to Cone Pelletizer) Bin Vent Filter	3,145	8,760	4.26E-05	1.86E-04	4.21E-06	1.85E-05	5.85E-06	2.56E-05	1.19E-04	5.22E-04	2.98E-02	0.13
RMBV2	EAF Hopper No. 2 (Feed to Cone Pelletizer) Bin Vent Filter	3,145	8,760	4.26E-05	1.86E-04	4.21E-06	1.85E-05	5.85E-06	2.56E-05	1.19E-04	5.22E-04	2.98E-02	0.13
RMBV3	EAF Hopper No. 3 (Feed to Cone Pelletizer) Bin Vent Filter	3,145	8,760	4.26E-05	1.86E-04	4.21E-06	1.85E-05	5.85E-06	2.56E-05	1.19E-04	5.22E-04	2.98E-02	0.13
RMBV4	EAF Hopper No. 4 (Feed to Cone Pelletizer) Bin Vent Filter	3,145	8,760	4.26E-05	1.86E-04	4.21E-06	1.85E-05	5.85E-06	2.56E-05	1.19E-04	5.22E-04	2.98E-02	0.13
			HAP	Y		Y		N		N		N	
			Total Potential Emissions	**1.68E-03**	**7.38E-03**	**1.60E-04**	**7.00E-04**	**3.02E-04**	**1.32E-03**	**4.52E-03**	**0.020**	**1.40**	**6.15**

1. Baghouse/bin vent filter exit grain loading based on a similar facility.
2. Exit grain loading for PBBH2 also includes PM condensable emissions. PM Condensable grain loading conservatively assumes that PM condensable = 50% of PM filterable.
3. Potential hourly Pb emissions for the bin vents assume a lead fraction of 0.02 gr Pb/gr PM based on a similar facility. Potential hourly Pb emissions for RBBH1, CBBH1, PBBH1, and PBBH2 were estimated using the February 2008 source testing results at a similar facility and a 50% safety factor, as shown in the following equation:

   Potential Hourly Pb Emissions (lb/hr) = Max. Pb Emission Rate from February 2008 Source Testing of PBH1 and PBH2 (0.0049 lb/hr) * [100% + Safety Factor (50%)] * Baghouse Exhaust Gas Flow Rate (scfm) / Exhaust Gas Flow Rate for PBH1 and PBH2 (75,000 scfm)

   Potential hourly Pb emissions for TBBH1 and TBBH2 were estimated using the same equation above, and scaled Pb emissions to account for the lead concentration in WIP as compared to EAF dust.
4. Potential hourly emissions for pollutants other than PM and Pb were proportioned from the emission rate of lead based on the ratio of the concentration of lead to the ratio of the concentrations of each metal in EAF dust and WZO, respectively. See Table C-3 for each compound's assumed concentration in EAF dust.
5. Mercury emissions are based on a facility-wide mass balance. As such, all potential mercury emissions from the facility's EAF dust, WIP, and WZO product handling are captured under the Kilns calculations.

RAMBOLL

Table C-5 - Feed Dryer Potential to Emit Calculations for Criteria Pollutants
Waelz Sustainable Products, LLC - Muncie, Indiana

Feed Dryer Burner Operational Data

Fuel Combusted	Natural Gas
Heat Input Capacity	17 MMBtu/hr
Natural Gas Heating Value[1]	1,020 Btu/scf
Potential Annual Hours of Operation	8,760 hrs/yr

1. Average natural gas heating value, per the EPA's AP-42, Section 1.4, *Natural Gas Combustion* (July 1998).

Potential Criteria Pollutant Emissions from Natural Gas Combustion in the Feed Dryer

Pollutant	Natural Gas Combustion Emission Factor (lb/MMscf)[1]	Potential Hourly Emissions (lb/hr)[2]	Potential Annual Emissions (tpy)
CO	84	1.40	6.13
NO_X	100	1.67	7.30
PM	7.6	Included with PBBH2	
SO_2	0.6	0.01	0.04
VOC	5.5	0.09	0.40
Pb	5.0E-04	Included with PBBH2	

1. Emission factors per the EPA's AP-42, Section 1.4, *Natural Gas Combustion,* Tables 1.4-1 and 1.4-2 (July 1998) for small (< 100 MMBtu/hr), uncontrolled boilers.
2. Potential hourly emissions were calculated using the following equation:
   Hourly Emissions (lb/hr) = Natural Gas Combustion Emission Factor (lb/MMscf) * Heat Input Capacity (MMBtu/hr) / Natural Gas Heating Value (Btu/scf)

Potential GHG Emissions from Natural Gas Combustion in the Feed Dryer

Pollutant	Natural Gas Combustion Emission Factor (lb/MMBtu)[1]	Potential Hourly Emissions (lb/hr)	Potential Annual Emissions (tpy)
CO_2	116.98	1,989	8,710
CH_4	2.20E-03	0.04	0.16
N_2O	2.20E-04	3.75E-03	0.02
CO_2e^2	117.10	1,991	8,719

1. Emission factors for natural gas combustion from 40 CFR 98 Subpart C, Tables C-1 and C-2, converted from kg/MMBtu to lb/MMBtu.
2. CO_2e is based on the sum of the emissions for each GHG pollutant multiplied by that pollutant's global warming potential from 40 CFR 98 Subpart A, Table A-1:

CO_2: 1
CH_4: 25
N_2O: 298

Table C-6 - Feed Dryer Potential to Emit Calculations for HAP Emissions
Waelz Sustainable Products, LLC - Muncie, Indiana

Potential HAP Emissions from Natural Gas Combustion in the Feed Dryer

Pollutant	HAP	Emission Factor[1] (lb/MMScf)	Potential Emissions	
			Max (lb/hr)	Annual (tpy)
2-Methylnaphthalene	Y	2.4E-05	4.00E-07	1.75E-06
3-Methylchloranthrene	Y	1.8E-06	3.00E-08	1.31E-07
7,12-Dimethylbenz(a)anthracene	Y	1.6E-05	2.67E-07	1.17E-06
Acenaphthene	Y	1.8E-06	3.00E-08	1.31E-07
Acenaphthylene	Y	1.8E-06	3.00E-08	1.31E-07
Acetaldehyde	Y	1.5E-05	2.53E-07	1.11E-06
Acrolein	Y	1.8E-05	3.00E-07	1.31E-06
Ammonia	N	3.2	5.33E-02	2.34E-01
Anthracene	Y	2.4E-06	4.00E-08	1.75E-07
Arsenic	Y	2.0E-04	3.33E-06	1.46E-05
Benz(a)anthracene	Y	1.8E-06	3.00E-08	1.31E-07
Benzene	Y	2.1E-03	3.50E-05	1.53E-04
Benzo(a)pyrene	Y	1.2E-06	2.00E-08	8.76E-08
Benzo(b)fluoranthene	Y	1.8E-06	3.00E-08	1.31E-07
Benzo(g,h,i)perylene	Y	1.2E-06	2.00E-08	8.76E-08
Benzo(k)fluoranthene	Y	1.8E-06	3.00E-08	1.31E-07
Beryllium	Y	1.2E-05	2.00E-07	8.76E-07
Cadmium	Y	1.1E-03	1.83E-05	8.03E-05
Chromium VI	Y	1.4E-03	2.33E-05	1.02E-04
Chrysene	Y	1.8E-06	3.00E-08	1.31E-07
Cobalt	Y	8.4E-05	1.40E-06	6.13E-06
Dibenzo(a,h)anthracene	Y	1.2E-06	2.00E-08	8.76E-08
Dichlorobenzene	Y	1.2E-03	2.00E-05	8.76E-05
Fluoranthene	Y	3.0E-06	5.00E-08	2.19E-07
Fluorene	Y	2.8E-06	4.67E-08	2.04E-07
Formaldehyde	Y	7.5E-02	1.25E-03	5.48E-03
Hexane	Y	1.8	3.00E-02	1.31E-01
Indeno(1,2,3-cd)pyrene	Y	1.8E-06	3.00E-08	1.31E-07
Lead	Y	5.0E-04	8.33E-06	3.65E-05
Manganese	Y	3.8E-04	6.33E-06	2.77E-05
Mercury	Y	2.6E-04	4.33E-06	1.90E-05
Naphthalene	Y	6.1E-04	1.02E-05	4.45E-05
Nickel	Y	2.1E-03	3.50E-05	1.53E-04
Phenanthrene	Y	1.7E-05	2.83E-07	1.24E-06
Pyrene	Y	5.0E-06	8.33E-08	3.65E-07
Selenium compounds	Y	2.4E-05	4.00E-07	1.75E-06
Toluene	Y	3.4E-03	5.67E-05	2.48E-04
		Total HAP	**3.15E-02**	**1.38E-01**

1. Emission factors for natural gas combustion are from NCDAQ Natural Gas Combustion Spreadsheet and AP-42, Fifth Edition, Volume 1, Chapter 1.4 - Natural Gas Combustion, 07/98. The emission factors for acetaldehyde, acrolein, and ammonia are cited in the NCDAQ spreadsheet as being sourced from the USEPA's WebFIRE database.

Table C-7 - Emergency Generator Potential to Emit Calculations
Waelz Sustainable Products, LLC - Muncie, Indiana

Emergency Generators Operational Data

Fuel Fired		Diesel	
Capacity	Generator 1 (EG1)	2,000	hp
	Generator 2 (EG2)	2,000	hp
Max. Fuel Sulfur Content[1]		0.05	%
Potential Annual Hours of Operation[1]		500	hrs/yr

2. Diesel fuel sulfur content limit and potential hours of operation based on a similar facility.

Potential Criteria Pollutant Emissions from Emergency Generators

Pollutant	Diesel Combustion Emission Factor (lb/hp-hr)[1,2]	Potential Hourly Emissions (lb/hr)			Potential Annual Emissions (tpy)		
		EG1	EG2	Total	EG1	EG2	Total
CO	5.50E-03	11.00	11.00	**22.00**	2.75	2.75	**5.50**
NO_X	0.024	48.00	48.00	**96.00**	12.00	12.00	**24.00**
PM	7.00E-04	1.40	1.40	**2.80**	0.35	0.35	**0.70**
SO_2	4.05E-04	0.81	0.81	**1.62**	0.20	0.20	**0.40**
VOC[3]	7.05E-04	1.41	1.41	**2.82**	0.35	0.35	**0.71**
Pb	6.30E-08	1.26E-04	1.26E-04	**2.52E-04**	3.15E-05	3.15E-05	**6.30E-05**

1. Except for Pb, emission factors are from the EPA's AP-42, Section 3.4, *Large Stationary Diesel and All Stationary Dual-fuel Engines,* Table 3.4-1 (October 1996) for diesel fuel firing.
2. The Pb emission factor was taken from the EPA's AP-42, Section 1.3, *Fuel Oil Combustion,* Table 1.3-10 (May 2010) for distillate fuel oil combustion. The emission factor was converted from lb/10^{12} Btu to lb/hp-hr using the following equation:
   Pb Emission Factor (lb/hp-hr) = Pb Emission Factor (lb/10^{12} Btu) / (10^{12}) * Average Diesel Engine Brake-Specific Fuel Consumption from AP-42 Table 3.3-1 (7,000 Btu/hp-hr)
3. Conservatively assumed VOC=THC.

Potential GHG Emissions from Emergency Generators

Pollutant	No. 2 Fuel Oil Combustion Emission Factor (lb/MMBtu)[1]	Potential Hourly Emissions (lb/hr)[2]			Potential Annual Emissions (tpy)		
		EG1	EG2	Total	EG1	EG2	Total
CO_2	163.05	2,283	2,283	**4,566**	570.69	570.69	**1,141**
CH_4	6.61E-03	0.09	0.09	**0.19**	0.02	0.02	**0.05**
N_2O	1.32E-03	0.02	0.02	**0.04**	4.63E-03	4.63E-03	**9.26E-03**
CO_2e[3]	163.61	2,291	2,291	**4,581**	572.65	572.65	**1,145**

1. Emission factors for natural gas combustion from 40 CFR 98 Subpart C, Tables C-1 and C-2, converted from kg/MMBtu to lb/MMBtu.
2. Emissions were estimated using an average brake-specific fuel consumption (BSFC) of 7,000 Btu/hp-hr, per AP-42, Table 3.3-1:
   GHG Emissions (lb/hr) = GHG Emission Factor (lb/MMBtu) * (7,000 Btu/hp-hr) / (10^6 Btu/MMBtu) * Engine Capacity (hp)

3. CO_2e is based on the sum of the emissions for each GHG pollutant multiplied by that pollutant's global warming potential from 40 CFR 98 Subpart A, Table A-1:

CO_2:	1
CH_4:	25
N_2O:	298

Table C-7 - Emergency Generator Potential to Emit Calculations
Waelz Sustainable Products, LLC - Muncie, Indiana

Potential HAP Emissions

Pollutant[3]	No. 2 Fuel Oil Combustion Emission Factor (lb/MMBtu)[1]	Potential Hourly Emissions (lb/hr)			Potential Annual Emissions (tpy)[2]		
		EG1	EG2	Total	EG1	EG2	Total
Acetaldehyde	2.52E-05	3.53E-04	3.53E-04	**7.06E-04**	8.82E-05	8.82E-05	**1.76E-04**
Acrolein	7.88E-06	1.10E-04	1.10E-04	**2.21E-04**	2.76E-05	2.76E-05	**5.52E-05**
Benzene	7.76E-04	0.01	0.01	**0.02**	2.72E-03	2.72E-03	**5.43E-03**
Benzo(a)pyrene	2.57E-07	3.60E-06	3.60E-06	**7.20E-06**	9.00E-07	9.00E-07	**1.80E-06**
Formaldehyde	7.89E-05	1.10E-03	1.10E-03	**2.21E-03**	2.76E-04	2.76E-04	**5.52E-04**
Naphthalene	1.30E-04	1.82E-03	1.82E-03	**3.64E-03**	4.55E-04	4.55E-04	**9.10E-04**
Total PAH (POM)	2.12E-04	2.97E-03	2.97E-03	**5.94E-03**	7.42E-04	7.42E-04	**1.48E-03**
Toluene	2.81E-04	3.93E-03	3.93E-03	**7.87E-03**	9.84E-04	9.84E-04	**1.97E-03**
Xylene	1.93E-04	2.70E-03	2.70E-03	**5.40E-03**	6.76E-04	6.76E-04	**1.35E-03**
				Total HAP Emissions	**5.51E-03**	**5.51E-03**	**1.10E-02**

1. Emission factors obtained from AP-42 Section 3.4 - Large Stationary Diesel and All Stationary Duel-fuel Engines, 10/96, Table 3.4-3 and Table 3.4-4.

2. NSPS allows for only 100 hrs/yr of non-emergency operation of these engines. Potential emissions for the emergency generator are conservatively based on 500 hr/yr.

3. Benzo(a)pyrene and naphthalene are included as HAPs in Total PAH.

Table C-8 - Insignificant Activities Potential to Emit Calculations
Waelz Sustainable Products, LLC - Muncie, Indiana

Potential Emissions from Insignificant Diesel Fuel Storage Tank

Tank Capacity (gal)	Max. Annual Throughput[2] (gal/yr)	Annual Turnovers	Potential VOC Emissions (tpy)[1]
10,000	102,200	10.2	1.05E-03

1. Emissions were estimated using the EPA's TANKS 4.09.d.
2. Using factors from AP-42 3.3 and 3.4, the annual throughput is calculated as follows: (gal/yr) = (EG_1 hp + EG_2 hp) * (7,000 Btu/hp-hr) / (19,300 Btu/lb) / (7.1 lb/gal) * (EG hrs/yr)

Insignificant Water Heaters and Space Heaters Operational Data

Fuel Combusted	Natural Gas
Number of Gas-Fired Water Heaters	2 units
Combined Heat Input Capacity for Water Heaters	1.00 MMBtu/hr
Number of Gas-Fired Space Heaters	5 units
Combined Heat Input Capacity for Space Heaters	0.67 MMBtu/hr
Natural Gas Heating Value[1]	1,020 Btu/scf
Potential Annual Hours of Operation	8,760 hrs/yr

1. Average natural gas heating value, per the EPA's AP-42, Section 1.4, *Natural Gas Combustion* (July 1998).

Potential Criteria Pollutant Emissions from Natural Gas Combustion in the Insignificant Water Heaters and Space Heaters

Pollutant	Natural Gas Combustion Emission Factor (lb/MMscf)[1]	Potential Hourly Emissions (lb/hr)[2]			Potential Annual Emissions (tpy)		
		Water Heaters	Space Heaters	Total	Water Heaters	Space Heaters	Total
CO	84	0.08	0.05	**0.14**	0.36	0.24	**0.60**
NO_X	100	0.10	0.07	**0.16**	0.43	0.29	**0.72**
PM	7.6	7.45E-03	4.96E-03	**0.01**	0.03	0.02	**0.05**
SO_2	0.6	5.88E-04	3.92E-04	**9.80E-04**	2.58E-03	1.72E-03	**4.29E-03**
VOC	5.5	5.39E-03	3.59E-03	**8.98E-03**	0.02	0.02	**0.04**
Pb	5.0E-04	4.90E-07	3.26E-07	**8.17E-07**	2.15E-06	1.43E-06	**3.58E-06**

1. Emission factors per the EPA's AP-42, Section 1.4, *Natural Gas Combustion,* Tables 1.4-1 and 1.4-2 (July 1998) for small (< 100 MMBtu/hr), uncontrolled boilers.
2. Potential hourly emissions were calculated using the following equation:
   Hourly Emissions (lb/hr) = Natural Gas Combustion Emission Factor (lb/MMscf) * Heat Input Capacity (MMBtu/hr) / Natural Gas Heating Value (Btu/scf)

Potential GHG Emissions from Natural Gas Combustion in the Insignificant Water Heaters and Space Heaters

Pollutant	Natural Gas Combustion Emission Factor (lb/MMBtu)[1]	Potential Hourly Emissions (lb/hr)			Potential Annual Emissions (tpy)		
		Water Heaters	Space Heaters	Total	Water Heaters	Space Heaters	Total
CO_2	116.98	116.98	77.91	**194.88**	512.36	341.23	**853.59**
CH_4	2.20E-03	2.20E-03	1.47E-03	**3.67E-03**	9.66E-03	6.43E-03	**0.02**
N_2O	2.20E-04	2.20E-04	1.47E-04	**3.67E-04**	9.66E-04	6.43E-04	**1.61E-03**
CO_2e^2	117.10	117.10	77.99	**195.09**	512.89	341.58	**854.47**

1. Emission factors for natural gas combustion from 40 CFR 98 Subpart C, Tables C-1 and C-2, converted from kg/MMBtu to lb/MMBtu.
2. CO_2e is based on the sum of the emissions for each GHG pollutant multiplied by that pollutant's global warming potential from 40 CFR 98 Subpart A, Table A-1:

CO_2:	1
CH_4:	25
N_2O:	298

Potential HAP Emissions from Natural Gas Combustion in the Insignificant Water Heaters and Space Heaters

Pollutant	HAP	Emission Factor[1] (lb/MMScf)	Potential Hourly Emissions (lb/hr)			Potential Annual Emissions (tpy)		
			Water Heaters	Space Heaters	Total	Water Heaters	Space Heaters	Total
2-Methylnaphthalene	Y	2.4E-05	4.71E-08	7.84E-08	1.25E-07	2.06E-07	3.43E-07	5.49E-07
3-Methylchloranthrene	Y	1.8E-06	3.53E-09	5.88E-09	9.41E-09	1.55E-08	2.57E-08	4.12E-08
7,12-Dimethylbenz(a)anthracene	Y	1.6E-05	3.14E-08	5.22E-08	8.36E-08	1.37E-07	2.29E-07	3.66E-07
Acenaphthene	Y	1.8E-06	3.53E-09	5.88E-09	9.41E-09	1.55E-08	2.57E-08	4.12E-08
Acenaphthylene	Y	1.8E-06	3.53E-09	5.88E-09	9.41E-09	1.55E-08	2.57E-08	4.12E-08
Acetaldehyde	Y	1.5E-05	2.98E-08	4.96E-08	7.94E-08	1.31E-07	2.17E-07	3.48E-07
Acrolein	Y	1.8E-05	3.53E-08	5.88E-08	9.41E-08	1.55E-07	2.57E-07	4.12E-07
Ammonia	N	3.2	6.27E-03	1.04E-02	1.67E-02	2.75E-02	4.58E-02	7.32E-02
Anthracene	Y	2.4E-06	4.71E-09	7.84E-09	1.25E-08	2.06E-08	3.43E-08	5.49E-08
Arsenic	Y	2.0E-04	3.92E-07	6.53E-07	1.05E-06	1.72E-06	2.86E-06	4.58E-06
Benz(a)anthracene	Y	1.8E-06	3.53E-09	5.88E-09	9.41E-09	1.55E-08	2.57E-08	4.12E-08
Benzene	Y	2.1E-03	4.12E-06	6.86E-06	1.10E-05	1.80E-05	3.00E-05	4.81E-05
Benzo(a)pyrene	Y	1.2E-06	2.35E-09	3.92E-09	6.27E-09	1.03E-08	1.72E-08	2.75E-08
Benzo(b)fluoranthene	Y	1.8E-06	3.53E-09	5.88E-09	9.41E-09	1.55E-08	2.57E-08	4.12E-08
Benzo(g,h,i)perylene	Y	1.2E-06	2.35E-09	3.92E-09	6.27E-09	1.03E-08	1.72E-08	2.75E-08
Benzo(k)fluoranthene	Y	1.8E-06	3.53E-09	5.88E-09	9.41E-09	1.55E-08	2.57E-08	4.12E-08
Beryllium	Y	1.2E-05	2.35E-08	3.92E-08	6.27E-08	1.03E-07	1.72E-07	2.75E-07
Cadmium	Y	1.1E-03	2.16E-06	3.59E-06	5.75E-06	9.45E-06	1.57E-05	2.52E-05
Chromium VI	Y	1.4E-03	2.75E-06	4.57E-06	7.32E-06	1.20E-05	2.00E-05	3.20E-05
Chrysene	Y	1.8E-06	3.53E-09	5.88E-09	9.41E-09	1.55E-08	2.57E-08	4.12E-08
Cobalt	Y	8.4E-05	1.65E-07	2.74E-07	4.39E-07	7.21E-07	1.20E-06	1.92E-06
Dibenzo(a,h)anthracene	Y	1.2E-06	2.35E-09	3.92E-09	6.27E-09	1.03E-08	1.72E-08	2.75E-08
Dichlorobenzene	Y	1.2E-03	2.35E-06	3.92E-06	6.27E-06	1.03E-05	1.72E-05	2.75E-05
Fluoranthene	Y	3.0E-06	5.88E-09	9.79E-09	1.57E-08	2.58E-08	4.29E-08	6.87E-08
Fluorene	Y	2.8E-06	5.49E-09	9.14E-09	1.46E-08	2.40E-08	4.00E-08	6.41E-08
Formaldehyde	Y	7.5E-02	1.47E-04	2.45E-04	3.92E-04	6.44E-04	1.07E-03	1.72E-03
Hexane	Y	1.8	3.53E-03	5.88E-03	9.41E-03	1.55E-02	2.57E-02	4.12E-02
Indeno(1,2,3-cd)pyrene	Y	1.8E-06	3.53E-09	5.88E-09	9.41E-09	1.55E-08	2.57E-08	4.12E-08
Lead	Y	5.0E-04	9.80E-07	1.63E-06	2.61E-06	4.29E-06	7.15E-06	1.14E-05
Manganese	Y	3.8E-04	7.45E-07	1.24E-06	1.99E-06	3.26E-06	5.43E-06	8.70E-06
Mercury	Y	2.6E-04	5.10E-07	8.49E-07	1.36E-06	2.23E-06	3.72E-06	5.95E-06
Naphthalene	Y	6.1E-04	1.20E-06	1.99E-06	3.19E-06	5.24E-06	8.72E-06	1.40E-05
Nickel	Y	2.1E-03	4.12E-06	6.86E-06	1.10E-05	1.80E-05	3.00E-05	4.81E-05
Phenanthrene	Y	1.7E-05	3.33E-08	5.55E-08	8.88E-08	1.46E-07	2.43E-07	3.89E-07
Pyrene	Y	5.0E-06	9.80E-09	1.63E-08	2.61E-08	4.29E-08	7.15E-08	1.14E-07
Selenium compounds	Y	2.4E-05	4.71E-08	7.84E-08	1.25E-07	2.06E-07	3.43E-07	5.49E-07
Toluene	Y	3.4E-03	6.67E-06	1.11E-05	1.78E-05	2.92E-05	4.86E-05	7.78E-05
		Total HAP Emissions	**9.96E-03**	**1.66E-02**	**2.66E-02**	**4.36E-02**	**7.27E-02**	**1.16E-01**

1. Emission factors for natural gas combustion are from NCDAQ Natural Gas Combustion Spreadsheet and AP-42, Fifth Edition, Volume 1, Chapter 1.4 - Natural Gas Combustion, 07/98. The emission factors for acetaldehyde, acrolein, and ammonia are cited in the NCDAQ spreadsheet as being sourced from the USEPA's WebFIRE database.

TRINITY

Table C-9 - Potential to Emit Calculations from Roadways
Waelz Sustainable Products, LLC - Muncie, Indiana

Potential Emissions from Paved Roads

Type	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Carbon Trucks	2	20	40	2,640	0.5	1.0	365
Diesel Trucks[1]	1	40	40	2,640	0.5	0.5	183
EAF Dust Dump Trucks	24	20	480	2,640	0.5	12.0	4,380
EAF Dust PD Trucks	1	20	20	2,640	0.5	0.5	183
Finished Product Trucks	60	25	1,500	2,640	0.5	30.0	10,950
Total	**88**	--	**2,080**	--	--	**44.0**	**16,060**

[1] Maximum weight loaded is assumed to 80,000 lbs based on legal weight limit to be conservative.

[2] Assumed a 1/2 mile one-way trip based on plot plan layout of facility.

Average Vehicle Weight Per Trip = 23.6 tons/trip
Average Miles Per Trip = 0.50 miles/trip

Unmitigated Emission Factor, Ef = $[k * (sL)^{0.91} * (W)^{1.02}]$ (Equation 1 from AP-42 13.2.1)

	PM	PM_{10}	$PM_{2.5}$	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	23.6	23.6	23.6	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m^2 = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E * [1 - (p/4N)]$ (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, $E_{ext} = Ef * [1 - (p/4N)]$

where p = 130 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2 for Muncie, IN)
N = 365 days per year

	PM	PM_{10}	$PM_{2.5}$	
Unmitigated Emission Factor, Ef =	2.190	0.438	0.1075	lb/mile
Mitigated Emission Factor, E_{ext} =	1.995	0.399	0.0979	lb/mile
Dust Control Efficiency =	0%	0%	0%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Mitigated PTE of PM (lb/hr)	Mitigated PTE of PM_{10} (lb/hr)	Mitigated PTE of $PM_{2.5}$ (lb/hr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM_{10} (tons/yr)	Mitigated PTE of $PM_{2.5}$ (tons/yr)
Carbon Trucks	0.08	0.02	0.00	0.36	0.07	0.02
Diesel Trucks	0.04	0.01	0.00	0.18	0.04	0.01
EAF Dust Dump Trucks	1.00	0.20	0.05	4.37	0.87	0.21
EAF Dust PD Trucks	0.04	0.01	0.00	0.18	0.04	0.01
Product Trucks	10.92	2.18	0.54	10.92	2.18	0.54
Total Potential Emissions	**12.09**	**2.42**	**0.59**	**16.02**	**3.20**	**0.79**

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (Before Control) (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (After Control) (tons/yr) = [Mitigated PTE (Before Control) (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

PM = Particulate Matter
PM_{10} = Particulate Matter (<10 um)
$PM_{2.5}$ = Particle Matter (<2.5 um)
PTE = Potential to Emit

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	TANK1
City:	Indianapolis
State:	Indiana
Company:	WSP
Type of Tank:	Vertical Fixed Roof Tank
Description:	Diesel Fuel Storage Tank

Tank Dimensions

Shell Height (ft):	11.95
Diameter (ft):	11.95
Liquid Height (ft) :	11.92
Avg. Liquid Height (ft):	11.90
Volume (gallons):	10,000.00
Turnovers:	10.20
Net Throughput(gal/yr):	102,000.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Dome
Height (ft)	4.00
Radius (ft) (Dome Roof)	11.95

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meterological Data used in Emissions Calculations: Indianapolis, Indiana (Avg Atmospheric Pressure = 14.33 psia)

TANKS 4.0.9d
Emissions Report - Detail Format
Liquid Contents of Storage Tank

TANK1 - Vertical Fixed Roof Tank
Indianapolis, Indiana

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	54.01	48.91	59.11	52.28	0.0053	0.0043	0.0063	130.0000			188.00	Option 1: VP50 = .0045 VP60 = .0065

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

TANK1 - Vertical Fixed Roof Tank
Indianapolis, Indiana

Annual Emission Calculations	
Standing Losses (lb):	0.4285
Vapor Space Volume (cu ft):	263.4318
Vapor Density (lb/cu ft):	0.0001
Vapor Space Expansion Factor:	0.0357
Vented Vapor Saturation Factor:	0.9993
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	263.4318
Tank Diameter (ft):	11.9500
Vapor Space Outage (ft):	2.3488
Tank Shell Height (ft):	11.9500
Average Liquid Height (ft):	11.9000
Roof Outage (ft):	2.2988
Roof Outage (Dome Roof)	
Roof Outage (ft):	2.2988
Dome Radius (ft):	11.9500
Shell Radius (ft):	5.9750
Vapor Density	
Vapor Density (lb/cu ft):	0.0001
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0053
Daily Avg. Liquid Surface Temp. (deg. R):	513.6827
Daily Average Ambient Temp. (deg. F):	52.2583
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	511.9483
Tank Paint Solar Absorptance (Shell):	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,297.9516
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.0357
Daily Vapor Temperature Range (deg. R):	20.3982
Daily Vapor Pressure Range (psia):	0.0020
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0053
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.0043
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.0063
Daily Avg. Liquid Surface Temp. (deg R):	513.6827
Daily Min. Liquid Surface Temp. (deg R):	508.5831
Daily Max. Liquid Surface Temp. (deg R):	518.7822
Daily Ambient Temp. Range (deg. R):	19.7500
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.9993
Vapor Pressure at Daily Average Liquid: Surface Temperature (psia):	0.0053
Vapor Space Outage (ft):	2.3488
Working Losses (lb):	1.6741
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0053
Annual Net Throughput (gal/yr.):	102,000.0000
Annual Turnovers:	10.2000
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	10,000.0000
Maximum Liquid Height (ft):	11.9200
Tank Diameter (ft):	11.9500
Working Loss Product Factor:	1.0000
Total Losses (lb):	2.1026

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

TANK1 - Vertical Fixed Roof Tank
Indianapolis, Indiana

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	1.67	0.43	2.10

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State of Indiana

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Dept of Environmetal Management
Office of Air Quality

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