INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

To:	Interested Parties
Date:	December 30, 2014
From:	Matthew Stuckey, Chief Permits Branch Office of Air Quality
Source Name:	Steel Dynamics, Inc. – Flat Roll Division
Permit Level:	Title V Administrative Amendment
Permit Number:	033-34896-00043
Source Location:	4500 County Road 59 Butler, Indiana
Type of Action Taken:	Changes that are administrative in nature

Notice of Decision: Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the matter referenced above. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

The final decision is available on the IDEM website at: http://www.in.gov/apps/idem/caats/
To view the document, select Search option 3, then enter permit 34896.

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

(continues on next page)

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

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Mr. Barry Smith
Steel Dynamics, Inc. - Flat Roll Division
4500 County Road 59
Butler, IN 46721

December 30, 2014

Re: 033-34896-00043
Administrative Amendment to
Part 70 Renewal T033-30061-00043

Dear Mr. Smith:

Steel Dynamics, Inc. - Flat Roll Division was issued a Part 70 Permit Renewal No. T033-30061-00043 on December 30, 2014, for a stationary steel minimill located at 4500 County Roady 59, Butler, IN 46721. On September 4, 2014, the Office of Air Quality (OAQ) received an application from the source requesting to replace the existing Kue Ken jaw crusher with a new Nordberg jaw crusher and a modification to conveyor #6.

Pursuant to the provisions of 326 IAC 2-7-11(a), the permit is hereby administratively amended as described in the attached Technical Support Document.

All other conditions of the permit shall remain unchanged and in effect.

Please find attached the entire Part 70 Operating Permit as amended. The permit references the below listed attachments. Since these attachments have been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this amendment:

Attachment A - Fugitive Dust Control Plan
Attachment B - New Source Performance Standards for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983 [40 CFR 60, Subpart AAa]
Attachment C - National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities [40 CFR 63, Subpart YYYYY]
Attachment D - New Source Performance Standards for Small industrial Boilers, Commercial-Institutional Steam Generating Boilers [40 CFR 60, Subpart Dc]
Attachment E - New Source Performance Standards for Metal Coil Surface Coating [40 CFR 60, Subpart TT]
Attachment F - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR 63, Subpart ZZZZ]
Attachment G - New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines [40 CFR 60, Subpart IIII]
Attachment H - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities [40 CFR 63, Subpart CCCCCC]

Previously issued approvals for this source containing these attachments are available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

If you have any questions on this matter, please contact Julie Alexander of my staff, at 317-233-1782 or 1-800-451-6027, and ask for extension 3-1782.

Sincerely,

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

Attachments: Updated Permit, Technical Support Document

JA/jla

cc: File - Dekalb County
Dekalb County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
Billing, Licensing and Training Section
Northern Regional Office

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Commissioner

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Steel Dynamics, Inc. - Flat Roll Division
4500 County Road 59
Butler, Indiana 46721

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T033-30061-00043	
Issued by: Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 30, 2014 Expiration Date: December 30, 2019

Administrative Amendment Permit No.: 033-34896-00043	
Issued by: Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 30, 2014 Expiration Date: December 30, 2019

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Attachment B - New Source Performance Standards for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983 [40 CFR 60, Subpart AAa]

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1- General Information, A.2 - Part 70 Source Definition, A.3 - Emission Units and Pollution Control Equipment Summary and A.4 - Insignificant Activities is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary steel minimill.

Source Address:	4500 County Rd 59, Butler, Indiana 46721
Phone Number:	260-868-8000
SIC Code:	3312
County Location:	DeKalb
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules 1 of 28 Source Categories Minor Source, Section 112 of the Clean Air Act

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

The source consists of:

(a) Steel Dynamics, Inc. - Flat Roll Division (SDI-Flat Roll), located at 4500 County Road 59, Butler, Indiana 46721; and

(b) Steel Dynamics, Inc. - Iron Dynamics Division (SDI-IDD), located at 4500 County Road 59, Butler, Indiana 46721.

Separate Part 70 permits will be issued to Steel Dynamics, Inc. - Flat Roll Division (033-00043) and Steel Dynamics, Inc. - Iron Dynamics Division (033-00076), solely for administrative purposes. For this permit, the Permittee is Steel Dynamics, Inc. - Flat Roll Division, the primary operation.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c),(3)][326 IAC 2-7-5(14)]

Steel Dynamics, Inc. - Flat Roll Division consists of the following emission units and pollution control devices:

Melt Shop Operations

(a) Electric Arc Furnaces (EAF)

Two (2) twin shell electric arc furnaces (EAF #1 South, permitted in 1994 for construction and EAF #2 North, permitted in 1997 for construction), each with a nominal capacity of 200 tons per hour, using a direct shell evacuation (DSE) system (“fourth hole” duct), an overhead roof exhaust system consisting of canopy hoods, DSE air gap for carbon monoxide (CO) emissions control, and low-NO_x/oxyfuel burners (combustion control) for nitrogen oxide (NO_x) emissions control. Particulate emissions from EAF #2 North are controlled by EAF Baghouse 2. All emissions from EAF #2 North exhaust to Stack 92. Particulate emissions from EAF #1 South are controlled by EAF Baghouse 1. All emissions from EAF #1 South exhaust to Stack 01.

(b) Continuous Casters

Two (2) continuous casters (CC #1 South, permitted in 1994 for construction and CC #2 North, permitted in 1997 for construction), each with a nominal capacity of 225 tons per hour. Particulate matter (PM/PM10) emissions are captured by canopy hoods over each caster exhausting to the EAF baghouse through Stack 01.

(c) Miscellaneous natural gas combustion sources

(1) Two (2) ladle dryout station (LDS), with a nominal heat input of 10 MMBtu per hour**,** permitted in 1994 for construction;

(2) Five (5) ladle preheat stations (LPS), with a nominal heat input of 10 MMBtu per hour each, three (3) permitted in 1994 and one (1) permitted in 1995 for construction;

(3) Three (3) natural gas fired tundish ladle dryers with a nominal heat input capacity of 1.5 MMBtu per hour each, one (1) permitted in 1994 and two (2) permitted in 1995 for construction;

(4) Two (2) natural gas-fired tundish preheaters with a nominal heat input capacity of 9.4 MMBtu per hour each, permitted in 1994 for construction; and

(5) Lancing and cutting of skulls, coils and steel scrap.

(d) Storage Silos and Bins

(1) Twenty - one (21) storage silos including the following:

(A) Three (3) EAF dust silos consisting of:

(i) Bin vent 5a for particulate matter control permitted in 1994 for construction,

(ii) Bin vent 5b for particulate matter control permitted in 1997 for construction and

(iii) Bin vent 5c for particulate matter control, permitted in 2007 for construction.

(B) Six (6) Lime/carbon silos with bin vents 22 through 27 for particulate matter control, permitted in 1994 and 1997 for construction, and

(C) Two (2) LMF lime silos, permitted in 1997 for construction, with emissions controlled by bin vents, and exhausting outside.

(D) Two (2) alloy silos with bin vents 28 and 29 for particulate matter control, permitted in 1994 for construction.

(E) One (1) carbon injection silo, permitted in 1997 for construction, with emissions controlled by bin vents, exhausting through Stack 46.

(F) One (1) carbon silo, approved in 2011 for construction, with a nominal throughput of 15 tons per hour, and using bin vent 93 as control.

(G) Six (6) Lime/carbon silos, permitted in 1995 for construction, with three (3) silos routed to bin vent 33 for particulate matter control and exhausting through vent 33 and three (3) silos routed to bin vent 34 for particulate matter control and exhausting through vent 34.

(2) Enclosed, indoor and/or pneumatic conveying to control fugitive emissions.

(e) Slag pit digouts associated with each electric arc furnace.

(f) Melt shop building openings, dust handling system and melt shop roof monitors.

Ladle Metallurgical Stations

Two (2) Ladle Metallurgical Stations (LMS) (South permitted in 1994 for construction and approved in 2013 for modification and North permitted in 1998 for construction), each with a nominal capacity of 200 tons per hour. Particulate (PM/PM10) emissions are controlled by the Ladle Metallurgical Furnaces (LMF) baghouse (permitted in 1998 for construction, with a nominal air flow rate of 200,000 standard cubic feet per minute) exhausting through Stack 61. The LMS consists of the following:

(a) One (1) Ladle Metallurgical Furnace (LMF1), modified in 2013 with the integration of existing stir station 1.

(b) One (1) Ladle Metallurgical Furnace (LMF2), modified in 2013 with the integration of new stir station 2.

(c) One (1) Ladle Metallurgical Furnace (LMF3) equipped with integrated stir station 3.

Hot Mill Operations - Tunnel Furnaces

(a) One (1) tunnel furnace, No. 1 South, permitted in 1994 for construction, using low NOx burners, with a nominal heat input capacity of 117.9 MMBtu per hour (nominal 92 MMBtu per hour in the heating zone and nominal 25.9 MMBtu per hour in the holding zone), exhausting through Stack 2.

(b) One (1) tunnel furnace, No. 2 North, permitted in 1997 for construction, using low NOx burners with a nominal heat input capacity of 92 MMBtu per hour in the heating zone, exhausting through Stack 42.

Cold Mill Operations – Pickling Line

One (1) pickling line, with a nominal capacity of 1.4 million ton per year, permitted in 1996 for construction, with a packed scrubber and covered tanks maintained under negative pressure, for Hydrochloric Acid (HCl) control, and a mist eliminator for PM/PM-10 control, exhausting to Stack 17.

Pickle Line Scale Breaker

One (1) scale breaker, permitted in 1996 for construction, with a nominal capacity of 1.4 million tons per year that removes scale from the rolled steel prior to the pickling process. Particulate (PM/PM10) emissions are controlled by a baghouse with a nominal air flow rate of 10,600 acfm and exhausting to Stack 60.

Pickle Line Boilers

Three (3) natural gas fired boilers Nos. 1, 2 and 3, two (2) permitted in 1996 for construction and one (1) permitted in 2006, equipped with low NOx burners, exhausting to Stacks 15, 16a and 16b. The nominal heat input for each boiler is 20.4 MMBtu per hour.

Reversing Mill

One (1) cold reversing mill, with a nominal capacity of one (1.0) million tons per year, permitted in 1996 for construction, with a mist eliminator for particulate (PM/PM10) emissions control, exhausting to Stack 18.

Galvanizing Lines

(a) One (1) hot band galvanizing line with a nominal capacity of 400,000 tons of steel per year, permitted in 1996 for construction, heated by a low NOx burner natural gas fired heater with a nominal heat input of 45 MMBtu per hour, exhausting through Stack 19.

(b) Twenty-four (24), natural gas fired radiant tube heaters associated with the galvanizing line, permitted in 2002 for construction. Each heater has a nominal heat input of 0.3 MMBtu per hour, exhausting inside the building.

(c) One (1) cold rolled galvanizing line with a nominal capacity of 300,000 tons of steel per year, permitted in 1996 for construction, heated by a low NOx burner natural gas fired heater with a nominal heat input of 55 MMBtu per hour, exhausting to Stack 19.

Annealing Furnaces

Sixteen (16) low NOx burners, natural gas fired annealing furnaces and forty (40) annealing bases, permitted in 1996 for construction. Each furnace has a nominal heat input of four (4) MMBtu per hour, exhausting through roof pipes 30, 31 and 32.

Paint Line (Coil Coating Line)

(a) One (1) 2-side, 2-coat coil coating line, permitted in 2002 for construction, using roll coating method, with a nominal capacity of 55,000 pounds per hour of the flat rolled steel, using a 60 MMBtu per hour name plate rated heat input capacity burner equipped thermal oxidizer to control VOC emissions and exhausting to Stack 78.

(b) Two (2) curing ovens, permitted in 2002 for construction, with a combined nominal heat input capacity of 16 MMBtu per hour using a 60 MMBtu per hour nominal heat input capacity burner equipped thermal oxidizer to control VOC emissions and exhausting to Stack 78.

Slag Handling Operation

The following slag handling operations are owned and operated by Edward C. Levy Company - Butler Mill Service.

(a) One (1) grizzly feeder with a nominal capacity of 300 tons per hour, permitted in 1994 for construction;

(b) One (1) 36" conveyor (#9), with a nominal capacity of 350 tons per hour, permitted in 1994 for construction;

(c) One (1) 42" conveyor (#7), with a nominal capacity of 350 tons per hour, permitted in 1994 for construction;

(d) Two (2) 5' by 12' Screens, each with a nominal capacity of 350 tons per hour, permitted in 1994 for construction;

(e) One (1) 36" conveyor (#6), with a nominal capacity of 193 tons per hour, constructed in 1994 and modified in 2014;

(f) One (1) 30" conveyor (#5), with a nominal capacity of 250 tons per hour, permitted in 1994 for construction;

(g) Three (3) 6' by 16' Screens, each with a nominal capacity of 250 tons per hour, permitted in 1994 for construction;

(h) One (1) 48" Conveyor (#1), with a nominal capacity of 75 tons per hour, permitted in 1994 for construction;

(i) One (1) 30" Stacker (#1), with a nominal capacity of 75 tons per hour, permitted in 1994 for construction;

(j) One (1) 24" Stacker (#2), with a nominal capacity of 125 tons per hour, permitted in 1994 for construction;

(k) One (1) 24" Conveyor (#12); with a nominal capacity of 40 tons per hour, permitted in 1994 for construction;

(l) One (1) 24" Stacker (#4), with a nominal capacity of 50 tons per hour, permitted in 1994 for construction;

(m) One (1) 4 ¼ Standard Crusher, with a nominal capacity of 50 tons per hour, permitted in 1994 for construction;

(n) One (1) 30" Conveyor (#8), with a nominal capacity of 25 tons per hour; permitted in 1994 for construction;

(o) Two (2) 30" Conveyors (#10 and #11), with a nominal capacity of 50 tons per hour each, permitted in 2003 for construction;

(p) One (1) jaw crusher, identified as J01, with a nominal capacity of 193 tons per hour, approved in 2014 for construction.

(q) Aggregate Storage Piles.

(r) Three (3) slag storage areas, approved in 2013 for construction, identified as Slag Area 1, 2, and 3, each with a nominal throughput of 400 tons per hour.

Fugitive emissions from parts of the slag handling operations are controlled as needed by water sprays.

Fugitive Dust Sources

(a) Paved roads,

(b) Parking areas,

(c) Unpaved roads, and

(d) Traveled open areas.

Emergency Generators

(a) Three (3) emergency diesel generators, identified as CM Watertreat, Main Watertreat (East), and Main Watertreat (West), approved in 1996, 1997, and 1995 for construction, each with a nominal capacity of 1500Kw (2011 hp).

A.4 Specifically Regulated Insignificant Activities
[326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour. [326 IAC 6-2-4]

(1) Eighteen (18) natural gas-fired heating units, each with a nominal rating of 250,000 Btu/hr. This is the total number of units for both Steel Dynamics, Inc. - Flat Roll Division and Steel Dynamics, Inc. - Iron Dynamics Division.

(b) Emergency generators as follows: Diesel generators not exceeding one thousand six hundred (1,600) horsepower. [40 CFR 63, Subpart ZZZZ]

(1) One (1) emergency diesel generator, identified as Melt Shop (Door 26), approved 2010 for construction, with a nominal capacity of 500 Kw (670 hp). [40 CFR 60, Subpart IIII]

(c) 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. This facility includes the following:

(1) One (1) gasoline storage tank, approved in 2013 for construction, identified as T2 or Gasoline Storage Tank #2, with a nominal storage capacity of two thousand (2,000) gallons. [40 CFR 63, Subpart CCCCCC]

(2) One (1) gasoline storage tank, approved in 2013 for construction, identified as T3 or Gasoline Storage Tank #3, with a nominal storage capacity of five thousand (5,000) gallons. [40 CFR 63, Subpart CCCCCC]

(d) Covered conveyors for solid raw material, including the following: [326 IAC 6-3-2]

(1) Coal or coke conveying of less than or equal to three hundred sixty (360) tons per day.

(2) 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.

A.5 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

Steel Dynamics, Inc. - Flat Roll Division also includes the following insignificant activities:

(a) Combustion source flame safety purging on startup.

(b) Fuel dispensing activities, including the following:

(1) 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. This facility includes: Two (2) gasoline dispensing operations, approved in 2013 for construction, identified as T2 and T3.

(2) 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. A petroleum fuel, other than gasoline, dispensing facility having a storage capacity

less than or equal to ten thousand five hundred (10,500) gallons, and dispensing less than or equal to two hundred thirty thousand (230,000) gallons per month. This facility includes the following:

(A) One (1) diesel storage tank, approved in 2013 for construction, identified as T1 or Diesel Storage Tank #1, with a nominal storage capacity of two thousand (2,000) gallons.

(B) One (1) diesel storage tank, approved in 2013 for construction, identified as T4 or Diesel Storage Tank #4, with a nominal storage capacity of five thousand (5,000) gallons.

(C) Two (2) diesel dispensing operations, approved in 2013 for construction, identified as T1 and T4.

(c) The following VOC and HAP storage containers:

(1) Storage tanks with capacity less than or equal to one thousand (1,000) gallons and annual throughputs equal to or less than twelve thousand (12,000) gallons.

(2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(d) Refractory storage not requiring air pollution control equipment.

(e) Equipment used exclusively for filling drums, pails, or other packaging containers with the following: Lubricating oils, Waxes and Greases.

(f) Application of: oils; greases; lubricants; and nonvolatile material; as temporary protective coatings.

(g) Machining where an aqueous cutting coolant continuously floods the machining interface.

(h) Closed loop heating and cooling systems.

(i) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(j) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the owner or Operator, that is, an on-site sewage treatment facility.

(k) Any operation using aqueous solutions containing less than or equal to one percent (1%) by weight of VOCs excluding HAPs.

(l) Noncontact cooling tower systems with the following: Forced and induced draft cooling tower system not regulated under a NESHAP.

(m) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(n) Heat exchanger cleaning and repair.

(o) Process vessel degassing and cleaning to prepare for internal repairs.

(p) Purging of gas lines and vessels that is related to 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.

(q) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(r) Blow down for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(s) On-site fire training approved by the department.

(t) Purge double block and bleed valves.

(u) Filter or coalescer media changeout.

(v) A laboratory as defined in 326 IAC 2-7-1(21)(D)

(w) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(x) Cleaners and solvents characterized as follows: Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38°C (100°F).

(y) Brazing equipment, cutting torches, soldering equipment, and welding equipment related to manufacturing activities not resulting in emissions of HAPs.

(z) One (1) electric Temper Mill, used to align steel fibers, with no emissions.

(aa) One (1) solvent recovery system, associated with the Paint Line (Coil Coating Line), with a nominal throughput of 25,410 gallons of solvent recovered per year, and exhausting inside.

A.6 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22); and

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

(a) This permit, T033-30061-00043, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7][IC 13-17-12]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(i) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and

(ii) the certification states that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(35).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, or Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877**.**

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b) (2) (Sections 502(b) (10) of the Clean Air Act changes) and 326 IAC 2-7-20(c) (2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ has issued the modifications. [326 IAC 2-7-12(c) (7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ has issued the modification. [326 IAC 2-7-12(b) (8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T033-30061-00043 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6),(C)][326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6) (C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a) (3)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b),(2)]

(a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document, all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) or (c)(1). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1) and (c)(1).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314][326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1][IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the attached plan as in Attachment A. The provisions of 326 IAC 6-5 are not federally enforceable.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust Stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require Stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64] [326 IAC 3-8]

(a) For new units:

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(d) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.12 Instrument Specifications [326 IAC 2-1.1-11][326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. The analog instrument shall be capable of measuring values outside of the normal range.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

C.13 Emergency Reduction Plans [326 IAC 1-5-2][326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-7-5(12)][40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.15 Response to Excursions or Exceedances [326 IAC 2-7-5][326 IAC 2-7-6][40 CFR 64][326 IAC 3-8]

(a) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, in this permit:

(1) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(2) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(A) initial inspection and evaluation;

(B) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(C) any necessary follow-up actions to return operation to normal or usual manner of operation.

(3) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(A) monitoring results;

(B) review of operation and maintenance procedures and records; and/or

(C) inspection of the control device, associated capture system, and the process.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(5) The Permittee shall record the reasonable response steps taken.

(b) CAM Response to excursions or exceedances.

(1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(2) Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(c) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(d) Based on the results of a determination made under paragraph (b)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a Quality Improvement Plan (QIP) if notified to in writing by the EPA or IDEM, OAQ.

(e) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

(f) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(g) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (b)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(h) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(i) CAM recordkeeping requirements.

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (b)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a Stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(a) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(b) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purpose of Section 19 of this rule") from the source, for purposes of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6][326 IAC 2-2]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, where applicable:

(1) All calibration and maintenance records.

(2) All original strip chart recordings for continuous monitoring instrumentation.

(3) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

(1) The date, place, as defined in this permit, and time of sampling or measurements.

(2) The dates analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (dd) and/or 326 IAC 2-3-1 (y) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (pp) and/or 326 IAC 2-3-1 (kk)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing emissions unit, document and maintain the following records:
  (A) A description of the project.
  (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
  (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
    (i) Baseline actual emissions;
    (ii) Projected actual emissions;
    (iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1(kk)(2)(A)(iii); and
    (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11][326 IAC 2-2] [40 CFR 64] [326 IAC 3-8]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B.11 – Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted no later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C.15 - Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or

certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C.18 - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj) at an existing emissions unit and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C.18 - General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (ww) and/or 326 IAC 2-3-1 (pp)), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C.18 - General Record Keeping Requirements (c)(1)(C)(ii).

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C.18 - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C.18 - General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the applicable standards for recycling and emissions reduction.

SECTION D.0 FACILITY OPERATION CONDITIONS

Emission Unit Description: Entire Source HAP Limitation

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.0.1 HAP Minor Limitation [40 CFR 63.1]

To ensure the Permittee meets the definition of an area source under 40 CF R 63.2, the Permittee shall comply with the following:

(a) Source wide total HAP emissions shall be less than twenty-five (25) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) Source-wide chromium HAP emissions shall be less than ten (10) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) Source-wide manganese HAP emissions shall be less than ten (10) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits shall limit the HAP emissions from the entire source to less than ten (10) tons of any single HAP and less than twenty-five (25) tons of total HAPs per twelve (12) consecutive month period, respectively, and the entire source is rendered an area source of HAP Emissions under Section 112 of the Clean Air Act (CAA).

Compliance Determination Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.0.2 Hazardous Air Pollutants

In order to demonstrate compliance with Condition D.0.1 - HAP Minor Limitation, the Permittee shall use the following equations:

(a) $\text{Chromium(total)} = [(\text{RHF Stack } 40_{\text{CHROMIUM}} + \text{RHF Stack } 77_{\text{CHROMIUM}}) \times \text{RHF}_{\text{HOURS}} + (\text{SAF Stack } 58_{\text{CHROMIUM}} \times \text{SAF}_{\text{HOURS}}) + \#79_{\text{CHROMIUM}} + (\text{IDD}_{\text{CHROMIUM CONSTANT}} + \text{FR}_{\text{CHROMIUM CONSTANT}}) \times (\text{hours each month})] / 2{,}000 \text{ (lb/ton)}$

(b) $\text{Manganese(total)} = [(\text{RHF Stack } 40_{\text{MANGANESE}} + \text{RHF Stack } 77_{\text{MANGANESE}}) \times \text{RHF}_{\text{HOURS}} + (\text{SAF Stack } 58_{\text{MANGANESE}} \times \text{SAF}_{\text{HOURS}}) + \#79_{\text{MANGANESE}} + (\text{IDD}_{\text{MANGANESE CONSTANT}} + \text{FR}_{\text{MANGANESE CONSTANT}}) \times (\text{hours each month})] / 2{,}000 \text{ (lb/ton)}$

(c) $\text{HAPS(total)} = [\text{PL}_{\text{HAPS}} + \text{Chromium(total)} + \text{Manganese(total)} (\text{IDD}_{\text{HAPS CONSTANT}} + \text{FR}_{\text{HAPS CONSTANT}}) \times (\text{hours each month})] / 2{,}000 \text{ (lb/ton)}$

Where:

PL_{HAPS} = total haps (month) as determined in Condition D.10.7 - Volatile organic Compounds (VOC) and Hazardous Air Pollutants (HAP).

$\text{RHF Stack } 40_{\text{CHROMIUM}}$ = chromium emissions from the rotary hearth furnace Stack 40 as determined in Condition D.0.3 - Hazardous Air Pollutants of the latest Operating Permit issued to Steel Dynamics, Inc. - Iron Dynamic Division (plt. ID 033-00076).

$\text{RHF Stack } 40_{\text{MANGANESE}}$ = manganese emissions from the rotary hearth furnace Stack 40 as determined in Condition D.0.3 - Hazardous Air Pollutants of the latest Operating Permit issued to Steel Dynamics, Inc. - Iron Dynamic Division (plt. ID 033-00076).

RHF Stack $77_{CHROMIUM}$ = chromium emissions from the rotary hearth furnace fugitive emissions and briquetter baghouses Stack 77 as determined in Condition D.0.3 - Hazardous Air Pollutants of the latest Operating Permit issued to Steel Dynamics, Inc. - Iron Dynamic Division (plt. ID 033-00076).

RHF Stack $77_{MANGANESE}$ = manganese emissions from the rotary hearth furnace fugitive emissions and briquetter baghouses Stack 77 multiplied as determined in Condition D.0.3 - Hazardous Air Pollutants of the latest Operating Permit issued to Steel Dynamics, Inc. - Iron Dynamic Division (plt. ID 033-00076).

SAF Stack $58_{CHROMIUM}$ = chromium emissions from the submerged arc furnace Stack 58 as determined in Condition D.0.3 - Hazardous Air Pollutants of the latest Operating Permit issued to Steel Dynamics, Inc. - Iron Dynamic Division (plt. ID 033-00076).

SAF Stack $58_{MANGANESE}$ = manganese emissions from the submerged arc furnace Stack 58 as determined in Condition D.0.3 - Hazardous Air Pollutants of the latest Operating Permit issued to Steel Dynamics, Inc. - Iron Dynamic Division (plt. ID 033-00076).

$\#79_{CHROMIUM}$ = chromium emissions from the SAF Dust Recycling System Stack as determined in Condition D.0.3 - Hazardous Air Pollutants of the latest Operating Permit issued to Steel Dynamics, Inc. - Iron Dynamic Division (plt. ID 033-00076).

$\#79_{MANGANESE}$ = manganese emissions from the SAF Dust Recycling System Stack 79 as determined in Condition D.0.3 - Hazardous Air Pollutants of the latest Operating Permit issued to Steel Dynamics, Inc. - Iron Dynamic Division (plt. ID 033-00076).

RHF_{HOURS} = Hours of RHF operation for the reporting month

SAF_{HOURS} = Hours of SAF operation for the reporting month

$IDD_{CHROMIUM\ CONSTANT}$ = 3.17E-03 Chromium (lb/hr)

$FR_{CHROMIUM\ CONSTANT}$ = 2.29E-03 Chromium (lb/hr)

$IDD_{MANGANESE\ CONSTANT}$ = 0.16 Manganese (lb/hr)

$FR_{MANGANESE\ CONSTANT}$ = 0.12 Manganese (lb/hr)

$IDD_{HAPS\ CONSTANT}$ = 1.15 HAPs (lb/hr)

$FR_{HAPS\ CONSTANT}$ = 0.37 HAPs (lb/hr)

Hours each month = hours in each reporting month; e.g., June (30 days x 24 hrs/day) = 720 hrs/month

Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.0.3 Record Keeping Requirements

(a) To document the compliance status with Conditions D.0.1 – HAP Minor Limitation and D.0.2 – Hazardous Air Pollutants, the Permittee shall maintain records in accordance with (1) through (15) below. Records maintained for (1) through (15) shall be complete and sufficient to establish compliance with the emission limits established in Condition D.0.1.

(1) Calendar dates covered in the compliance determination period.

(2) Monthly records of the HAPs(total) emissions.

(3) Monthly records of the Chromium(total) emissions.

(4) Monthly records of the Manganese(total) emissions.

(5) Monthly records of the total haps emissions from the paint line.

(6) The RHF Stack $40_{CHROMIUM}$ value used in the calculations in Condition D.0.2 – Hazardous Air Pollutants.

(7) The RHF Stack $40_{MANGANESE}$ value used in the calculations in Condition D.0.2 – Hazardous Air Pollutants.

(8) The RHF Stack $77_{CHROMIUM}$ value used in the calculations in Condition D.0.2 – Hazardous Air Pollutants.

(9) The RHF Stack $77_{MANGANESE}$ value used in the calculations in Condition D.0.2 – Hazardous Air Pollutants.

(10) The SAF Stack $58_{CHROMIUM}$ value used in the calculations in Condition D.0.2 – Hazardous Air Pollutants.

(11) The SAF Stack $58_{MANGANESE}$ value used in the calculations in Condition D.0.2 – Hazardous Air Pollutants.

(12) The $\#79_{CHROMIUM}$ value used in the calculations in Condition D.0.2 – Hazardous Air Pollutants.

(13) The $\#79_{MANGANESE}$ value used in the calculations in Condition D.0.2 – Hazardous Air Pollutants.

(14) The RHF_{hours} value used in the calculations in Condition D.0.3 - Hazardous Air Pollutants.

(15) The SAF_{hours} value used in the calculations in Condition D.0.3 - Hazardous Air Pollutants.

(b) Section C.19 - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.0.4 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.0.1 – HAP Minor Limitation shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C.19- General Reporting Requirements contains the Permittee's obligations with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35).

SECTION D.1 FACILITY OPERATION CONDITIONS (MELT SHOP)

Emission Unit Description:

Melt Shop Operations

(a) Electric Arc Furnaces (EAF)

Two (2) twin shell electric arc furnaces (EAF #1 South, permitted in 1994 for construction and EAF #2 North, permitted in 1997 for construction for construction), each with a nominal capacity of 200 tons per hour, using a direct shell evacuation (DSE) system ("fourth hole" duct), an overhead roof exhaust system consisting of a canopy hoods, DSE air gap for carbon monoxide (CO) emissions control, and low-NO_x/oxyfuel burners (combustion control) for nitrogen oxide (NO_x) emissions control. Particulate emissions from EAF #2 North are controlled by EAF Baghouse 2. All emissions from EAF #2 North exhaust to Stack 92. Particulate emissions from EAF #1 South are controlled by EAF Baghouse 1. All emissions from EAF #1 South exhaust to Stack 01.

(b) Continuous Casters

Two (2) continuous casters (CC #1 South, permitted in 1994 for construction and CC #2 North, permitted in 1997 for construction), each with a nominal capacity of 225 tons per hour. Particulate (PM/PM10) emissions are captured by canopy hoods over each caster exhausting to the EAF baghouse through Stack 01.

(c) Miscellaneous natural gas combustion sources

(1) Two (2) ladle dryout station (LDS), with a nominal heat input of 10 MMBtu per hour**,** permitted in 1994 for construction;
(2) Five (5) ladle preheat stations (LPS), with a nominal heat input of 10 MMBtu per hour each, three (3) permitted in 1994 for construction and one (1) permitted in 1995 for construction;
(3) Three (3) natural gas-fired tundish dryers with nominal heat input capacity of 1.5 MMBtu per hour each one (1) permitted in 1994 and two (2) permitted in 1995 for construction;
(4) Two (2) natural gas-fired tundish ladle preheaters with a nominal heat input capacity of 9.4 MMBtu per hour each, permitted in 1994 for construction; and
(5) Lancing and cutting of skulls, coils and steel scrap.

(d) Storage Silos and Bins

(1) Twenty-one (21) outside storage silos including the following:
  (A) Three (3) EAF dust silos, consisting of:
    (i) Bin vent 5a for particulate matter control, permitted in 1994 for construction,
    (ii) Bin vent 5b for particulate matter control, permitted in 1997 for construction;
    (iii) Bin vent 5c for particulate matter control, permitted in 2007 for construction.
  (B) Six (6) Lime/carbon silos with bin vents 22 through 27 for particulate matter control, permitted in 1994 and 1997 for construction, and
  (C) Two (2) LMF lime silos, permitted in 1997 for construction, with emissions controlled by bin vents, and exhausting outside.
  (D) Two (2) alloy silos with bin vents 28 and 29 for particulate matter control, permitted in 1994 for construction.
  (E) One (1) carbon injection silo, permitted in 1997 for construction, with emissions controlled by bin vents, exhausting through stack 46.
  (F) One (1) carbon silo, approved in 2011 for construction, with a nominal throughput of 15 tons per hour, and using bin vent 93 as control.
  (G) Six (6) Lime/carbon silos, permitted in 1995 for construction, with three (3) silos

routed to bin vent 33 for particulate matter control and exhausting through vent 33 and three (3) silos routed to bin vent 34 for particulate matter control and exhausting through vent 34.

(2) Enclosed, indoor and/or pneumatic conveying to control fugitive emissions.

(e) Slag pit dig outs associated with each electric arc furnace.

(f) Melt Shop building openings, dust handling system and Melt Shop roof monitors.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate (PM/PM-10) Limitations - Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD CP 033-8091-00043, issued June 25, 1997, PSD SSM 033-23028-00043 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements):

(1) The PM/PM10 emissions from EAF #1 South shall be controlled by a direct shell evacuation (DSE) system and canopy hood with 100 percent overall capture exhausted to EAF Baghouse 1 with a minimum 99.85 control efficiency for filterable PM/PM10, discharging through Stack 01. A negative pressure shall be maintained to draw particulate matter through the DSE duct. Baghouse 1 shall be operated at all times when the EAF #1 South is in operation.

(2) The PM/PM10 emissions from EAF #2 North shall be controlled by a direct shell evacuation (DSE) system and canopy hood with 100 percent overall capture and shall exhaust to EAF Baghouse 2 with a minimum 99.85 control efficiency for filterable PM/PM10, which discharges through Stack 92. A negative pressure shall be maintained to draw particulate matter through the DSE duct. Baghouse 2 shall be operated at all times when the EAF #2 North is in operation.

(3) The PM/PM10 emissions from EAF #2 North and EAF #1 South shall not exceed the limits in the following table:

Unit (Control)	Filterable PM/PM10 Limits		Filterable and Condensable PM10 Limits	
	(gr/dscf)	(lb/hr)	(gr/dscf)	(lb/hr)
EAF #1 South (EAF Baghouse 1)	0.0018	20.1	0.0052	57.9
EAF #2 North (EAF Baghouse 2)	0.0018	15.3	0.0052	44.3

(b) Pursuant to CP 033-9187-00043, March 24, 1998 and 326 IAC 2-2 (PSD - Control Technology Review Requirements), PM/PM10 emissions from the continuous casters shall be captured by canopy hoods and exhausted to EAF baghouse 1 and then to Stack 01. Baghouse 1 shall be operated at all times when the continuous casters are in operation.

(c) Pursuant to CP 033-3692-00043, issued October 7, 1994 and 326 IAC 2-2 (PSD Control Technology Review Requirements), the Permittee shall do the following as needed:

(1) Mechanically reduce skulls, coils and steel scrap in size.

(2) Oxygen lancing/cutting of any skulls, coils and steel scrap not mechanically reduced in size shall be conducted inside a building with adequate capture of emissions by a control system and a baghouse to control emissions.

(d) Pursuant to PSD SSM 033-23028-00076 and 326 IAC 2-2-3 (BACT), the filterable PM/PM10 emissions from EAF dust silo 5c shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf).

D.1.2 Nitrogen Oxides (NOx) Limitations - Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to CP 033-8091-00043, issued June 25, 1997 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the total NO_x emissions from the EAF#1 South (Stack 01) and EAF#2 North (Stack 92) using low-NOx natural gas fired burners shall not exceed 0.51 pounds per ton of steel produced and 204.0 pounds per hour.

(b) Pursuant to A 033-4997-00043, issued November 16, 1995 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the Ladle Dryout Station (LDS) shall be limited to the use of natural gas, shall not exceed 10 MMBtu per hour heat input and NOx emissions shall not exceed 0.10 lbs/MMBtu.

(c) Pursuant to A 033-4997-00043, issued November 16, 1995 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the four (4) Ladle Preheat Stations (LPS) shall be limited solely to the use of low-NOx natural gas-fired burners. The four (4) horizontal preheater stations combined shall not exceed 40 MMBtu per hour heat input and the NOx emissions shall not exceed 0.14 lbs/MMBtu.

(d) Pursuant to CP 033-3692-00043, issued October 7, 1994 and 326 IAC 2-2 (PSD -Control Technology Review; Requirements), the three (3) Tundish dryers shall use low-NOx burners. Each burner shall be limited to 1.5 MMBtu per hour heat input and the NOx emissions shall not exceed 0.10 lbs/MMBtu.

(e) Pursuant to A 033-4997-00043, issued November 16, 1995 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the two (2) Tundish Preheaters shall use low-NOx burners. Each burner shall not exceed 9.4 MMBtu per hour heat input and the NOx emissions shall not exceed 0.10 lbs/MMBtu.

D.1.3 Sulfur Dioxide (SO2) Limitations - Best Available Control Technology [326 IAC 2-2][326 IAC 7-1.1]

(a) Pursuant to CP 033-9187-00043, issued March 24, 1998 and 326 IAC 2-2 (PSD - Control Technology Review Requirements), the combined SO2 emissions from the LMF (Stack 61), EAF #1 South (Stack 01) and EAF #2 North (Stack 92) shall not exceed 0.2 pounds per ton of steel produced and 80 pounds of SO2 per hour.

(b) Pursuant to CP 033-8091-00043, issued June 24, 1997 and 326 IAC 2-2 (PSD - Control Technology Review Requirements), the SO2 emissions from the EAFs shall be controlled by the use of high quality scrap and monitoring the sulfur content of the coke.

D.1.4 Carbon Monoxide (CO) Limitations - Best Available Control Technology [326 IAC 2-2]

Pursuant to CP 033-8091-00043, issued June 25, 1997 and 326 IAC 2-2 (PSD – Control Technology Review; Requirements), the CO emissions from EAFs shall be controlled by an adjustment gap between the EAF direct shell evacuation system (DSE) and the remaining water cooled duct to common baghouse. The CO emissions from each EAF shall not exceed 2.0 pounds per ton of hot steel produced. The total emissions from EAF #1 South (Stack 1) and EAF #2 North (Stack 92) shall not exceed 800 pounds per hour. A negative pressure shall be maintained at the gap. The direct shell evacuation system, Baghouse 1, and Baghouse 2 shall be operated at all times when the EAF exhausting to it is in operation.

D.1.5 Volatile Organic Compounds (VOC) Limitations - Best Available Control Technology [326 IAC 2-2][326 IAC 8-1-6]

Pursuant to CP 033-8091-00043, issued June 25, 1997 and 326 IAC 2-2 (PSD - Control Technology Review Requirements):

(a) VOC emissions from EAFs shall be controlled through a scrap management program. The Permittee shall implement the SMP, which shall be in writing and available for inspection. The SMP shall provide at a minimum:

(1) All grades of scrap charged to the furnaces shall not contain excessive non-metallics.

(2) All grades of scrap shall not contain excessive oil and grease.

(3) Heavily oiled scrap shall not be used.

(b) Total VOC emissions from the EAF EAF#1 South (Stack 01) and EAF#2 North (Stack 92) shall be limited to 0.13 pounds of VOC emissions per ton of steel produced and shall not exceed 52.0 pounds per hour.

D.1.6 Lead Limitations - Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to CP 033-8091-00043, issued June 25, 1997 and 326 IAC 2-2 (PSD Control Technology Review Requirements), the total lead emissions from EAF Baghouse 1 (Stack 1) and EAF Baghouse 2 (Stack 92) shall not exceed 0.19 pounds per hour.

D.1.7 Mercury PSD Minor Limit [326 IAC 2-2]

The total mercury emissions from EAF Baghouse 1 and EAF Baghouse 2 shall not exceed 0.022 pounds per hour. Compliance with this limit will render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to CP 033-8091-00043.

D.1.8 Visible Emission Limitations - Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to CP 033-8091-00043, issued June 25, 1997 and 326 IAC 2-2 (PSD - Control Technology Review Requirements), visible emissions from the EAF Baghouse 1 and EAF Baghouse 2 stack exhausts (Stack 1 and Stack 92, respectively) shall not exceed three percent (3%) opacity, based on a six (6) minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

(b) Pursuant to CP 033-8091-00043, issued June 25, 1997 and 326 IAC 2-2 (PSD - Control Technology Review Requirements), the fugitive emissions generated by the EAFs shall not exceed three percent (3%) opacity from any building opening as determined by a six (6) minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9). Three percent (3%) opacity is reflective of 100 percent capture.

(c) Pursuant to CP 033-3692-00043, issued October 7, 1994 and 326 IAC 2-2 (PSD - Control Technology Review Requirements), the EAF slag pit dig out operation located beneath each furnace shall not exceed five (5%) percent opacity. Each EAF slag pit dig out operation shall be controlled with the use of its associated EAF's baghouse.

(d) Pursuant to CP 033-3692-00043, issued October 7, 1994 and 326 IAC 2-2 (PSD -Control Technology Review Requirements), visible emissions from the building opening and EAF dust handling system shall not exceed three percent (3%) opacity based on a six-minute average(24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

(e) Pursuant to CP 033-3692-00043, issued October 7, 1994 and 326 IAC 2-2 (PSD - Control Technology Review Requirements), the carbon and flux additive system conveyors and transfer points shall be enclosed and vented indoors.

(f) Pursuant to PSD SSM 033-23028-00076 and 326 IAC 2-2-3 (BACT), visible emissions of the exhaust from EAF dust silo 5c shall not exceed three percent (3%) opacity, based on a six (6) minute average (24 readings taken in accordance with EPA Method 9, Appendix A).

D.1.9 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the two (2) EAF dust silos (bin vent 5a and bin vent 5b), twelve (12) Lime/carbon silos, two (2) alloy silos and the carbon silo shall be calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the EAFs, continuous casters (#1 and #2), EAF dust silo 5c and associated control devices. Condition B.10 - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.11 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.1.1(a) - Particulate (PM/PM10) Limitations - Best Available Control Technology, the Permittee shall perform PM/PM10 testing on the EAF #1 South and EAF #2 North (Stack 01 and Stack 92) utilizing methods as approved by the Commissioner at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration

(b) In order to demonstrate compliance with Condition D.1.2(a) - Nitrogen Oxides (NO_x) Limitations - Best Available Control Technology, the Permittee shall perform NOx testing on EAF #1 South and EAF #2 North (Stack 01 and Stack 92), utilizing methods as approved by the Commissioner at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration.

(c) In order to demonstrate compliance with Conditions D.1.3(a) - Sulfur Dioxide (SO_2) Limitations - Best Available Control Technology, the Permittee shall perform simultaneous, SO2 testing on EAF #1 South, EAF #2 North and the LMF (Stack 01, Stack 92 and LMF Stack 61), utilizing methods as approved by the Commissioner at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration.

(d) In order to demonstrate compliance with Conditions D.1.4 - Carbon Monoxide (CO) Limitations - Best Available Control Technology, the Permittee shall perform CO testing on EAF #1 South and EAF #2 North (Stack 01 and Stack 92) utilizing methods as approved by the Commissioner at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration.

(e) In order to demonstrate compliance with Condition D.1.5(b) - Volatile Organic Compounds (VOC) Limitations - Best Available Control Technology, the Permittee shall perform VOC testing on EAF #1 South and EAF #2 North (Stack 01 and Stack 92)

utilizing methods as approved by the Commissioner at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration.

(f) In order to demonstrate compliance with Conditions D.1.6 - Lead Limitations - Best Available Control Technology and D.1.8 - Mercury Limitations, the Permittee shall perform lead and mercury testing on EAF #1 South (Stack 01) and EAF #2 North (Stack 92) utilizing methods as approved by the Commissioner at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration.

(g) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Condition C.8 - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.1.12 Particulate Control

Bin vent filter 5c shall control filterable emissions from EAF dust silo 5c at all times necessary to meet the requirements of Condition D.1. 1(d) – Particulate (PM/PM-10) Limitations – Best Available Control Technology.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.1.13 Visible Emission Notations

(a) Pursuant to CP 033-8091-00043, issued June 25, 1997, and PSD SSM 033-23028-00043, visible emission notations of the melt shop building openings, dust handling system, melt shop roof monitors and bin vent filter 5c shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Condition C.15 - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.14 Bag Leak Detection System (BLDS)

The Permittee shall comply with the following:

(a) The Permittee shall install and operate a continuous bag leak detection system (BLDS) on EAF Baghouse #1 and EAF Baghouse #2.

(b) The BLDS shall meet the following requirements:

(1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.00044 grains per actual cubic foot or less.

(2) The bag leak detection system sensor must provide output of relative particulate matter loading.

(3) The bag leak detection system must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset level established or verified during a stack test or established according to paragraph (4). The alarm must be located such that it can be heard by the appropriate plant personnel.

(4) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the U.S. Environmental Protection Agency or the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.

(5) In no event shall the sensitivity be increased by more than 100 percent or decreased by more than 50 percent over a 365 day period unless such adjustment follows a complete baghouse inspection, which demonstrates the baghouse, is in good operating condition.

(6) Failure to take response steps shall be considered a deviation from this permit.

(7) Whenever a BLDS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup BLDS is not online within twenty-four (24) hours of shutdown or malfunction of the primary BLDS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.

(A) Opacity from the EAF Baghouse #1 and EAF Baghouse #2 shall be performed at least once per day during normal daylight operations. A certified opacity observer shall observe the opacity when the rotary hearth furnace is in operation.

(B) These observations shall be taken in accordance with 40 CFR 60 Appendix A, Method 9 for at least two six (6) minute averages.

(C) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C.15 – Response to Excursions or Exceedances contains the Permittee's obligations with regard to the reasonable response steps required by this condition. Abnormal emissions are not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements

D.1.15 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.8 - Visible Emission Limitations - Best Available Control Technology and 1.13 - Visible Emissions Notations, the Permittee shall maintain records of visible emission notations required by Condition D.1.13 - Visible Emissions Notations. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with condition D.1.14 – Bag Leak Detection System (BLDS), the Permittee shall maintain records of the dates and times of all bag leak detection system alarms, the cause of each alarm, and an explanation of all corrective actions taken.

(c) Condition C.17 - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.16 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, for the Electric Arc Furnaces, except as otherwise specified in 40 CFR Part 60, Subpart AAa.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Ave.
MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

D.1.17 Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983 NSPS [40 CFR 60, Subpart AAa][326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart AAa, the Permittee shall comply with the provisions of 40 CFR 60, Subpart AAa, which are incorporated by reference as 326 IAC 12 (included as Attachment B to this permit), for the Electric Arc Furnaces:

(1) 40 CFR 60.270a
(2) 40 CFR 60.271a
(3) 40 CFR 60.272a
(4) 40 CFR 60.273a
(5) 40 CFR 60.274a
(6) 40 CFR 60.275a
(7) 40 CFR 60.276a

D.1.18 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants Under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.10690, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, for the electric arc furnace steelmaking facilities as specified in 40 CFR 63, Subpart YYYYY, in accordance with schedule in 40 CFR 63 Subpart YYYYY.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

D.1.19 Area Sources: Electric Arc Furnace Steelmaking Facilities NESHAP [40 CFR Part 63, Subpart YYYYY]

Pursuant to 40 CFR Part 63, Subpart YYYYY, the Permittee shall comply with the following provisions of 40 CFR 63, Subpart YYYYY (included as Attachment C to this permit), for the electric arc furnace steelmaking facilities:

(1) 40 CFR 63.10680(a), (b)(1), (c) and (d)
(2) 40 CFR 63.10681(a)
(3) 40 CFR 63.10685
(4) 40 CFR 63.10686(a), (b), (d)(1) – (d)(4), (d)(6)
(5) 40 CFR 63.10690
(6) 40 CFR 63.10692
(7) Table 1 to 40 CFR 63, Subpart YYYYY

SECTION D.2FACILITY OPERATION CONDITIONS (LADLE METALLURGICAL STATIONS)

Emission Unit Description:

Ladle Metallurgical Stations

Two (2) Ladle Metallurgical Stations (LMS) (South permitted in 1994 for construction and approved in 2012 for modification and North permitted in 1998 for construction), each with a nominal capacity of 200 tons per hour. Particulate (PM/PM10) emissions are controlled by the Ladle Metallurgical Furnaces (LMF) baghouse (permitted in 1998 for construction, with a nominal air flow rate of 200,000 standard cubic feet per minute) exhausting through Stack 61. The LMS consists of the following:

(a) One (1) Ladle Metallurgical Furnace (LMF1), modified in 2013 with the integration of existing stir station 1.

(b) One (1) Ladle Metallurgical Furnace (LMF2), modified in 2013 with the integration of new stir station 2.

(c) One (1) Ladle Metallurgical Furnace (LMF3) equipped with integrated stir station 3.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate (PM/PM-10) Limitations - Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to CP 033-9187-00043, issued March 24, 1998 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), PM**/**PM-10 emissions from the ladle metallurgical stations (LMS) and stir stations shall be captured by a side draft hood and exhausted to the LMF baghouse to Stack 61.

(b) Pursuant to CP 033-9187-00043, March 24, 1998 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), PM**/**PM-10 filterable emissions from the LMF Stack 61 shall not exceed 0.0032 grains per dry standard cubic foot and 5.49 pounds per hour.

D.2.2 Nitrogen Oxides (NOx) Limitations- Best Available Control Technology [326 IAC 2-2]

Pursuant to CP 033-9187-00043 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the NOx emissions from the LMF Stack 61 shall not exceed 0.025 pounds per ton of steel produced and 10 pounds of NOx emissions per hour.

D.2.3 Carbon Monoxide (CO) Limitations- Best Available Control Technology [326 IAC 2-2]

Pursuant to CP 033-9187-00043, issued March 24, 1998 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), CO emissions from LMF Stack 61 shall not exceed 0.1 pounds per ton of steel produced and 40 pounds of CO per hour.

D.2.4 VOC Minor Limitations [326 IAC 2-2]

Pursuant to CP 033-9187-00043, issued March 24, 1998, and Significant Permit Modification No. 033-28134-00043, VOC emissions from the LMF Stack 61 shall not exceed 0.0082 pounds per ton of steel produced and 3.28 pounds of VOC per hour.

Compliance with these emission limits will ensure that the VOC emissions from CP 033-9187-00043 are less than forty (40) tons per year and therefore will render the requirements of 326 IAC 2-2 not applicable to CP 033-9187-00043 for VOC.

D.2.5 Visible Emission Limitations - Best Available Control Technology [326 IAC 2-2]

Pursuant to CP 033-9187-00043, issued March 24, 1998 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), visible emissions from the LMF baghouse Stack 61 shall not

exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the LMF and the associated control devices. Condition B.10 - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.2.1- Particulate (PM/PM-10) Limitations – Best Available Control Technology, the Permittee shall perform PM/PM10 testing on the LMF Stack 61 utilizing methods as approved by the Commissioner at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration.

(b) In order to demonstrate compliance with Condition D.2.2 - Nitrogen Oxide (NOx) Limitations - Best Available Control Technology, the Permittee shall perform NOx testing on the LMF Stack 61 utilizing methods as approved by the Commissioner at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration.

(c) In order to demonstrate compliance with Conditions D.2.3 - Carbon Monoxide (CO) Limitations - Best Available Control Technology, the Permittee shall perform CO testing on the LMF Stack 61 utilizing methods as approved by the Commissioner at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration.

(d) In order to demonstrate compliance with Condition D.2.4 – VOC Minor Limitations, the Permittee shall perform VOC testing on the LMF Stack 61, utilizing testing methods approved by the Commissioner at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration.

(e) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Condition C.8 - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.2.8 Particulate Control [326 IAC 2-7-6(6)]

(a) The LMF baghouse shall be operated at all times when the LMSs are in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.2.9 Visible Emission Notations [40 CFR 64]

(a) Visible emission notations of the LMF Baghouse Stack 61 exhaust, shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Condition C.15 - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.10 Parametric Monitoring [40 CFR 64]

The Permittee shall record the pressure drop across the baghouse used in conjunction with the LMF at least once per day when the LMF is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 2.0 and 10.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Condition C.15 - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Condition C.11 - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.2.11 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.9 - Visible Emission Notations, the Permittee shall maintain records of visible emission notations of the LMF Stack 61 exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.2.10 - Parametric Monitoring, the Permittee shall maintain records of the pressure drop during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) Condition C.17 - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.3 FACILITY OPERATION CONDITIONS

Emission Unit Description:

Hot Mill Operations – Tunnel Furnaces

(a) One (1) tunnel furnace, No. 1 South, permitted in 1994 for construction, using low NOx burners, with a nominal heat input capacity of 117.9 MMBtu per hour (nominal 92 MMBtu per hour in the heating zone and nominal 25.9 MMBtu per hour in the holding zone), exhausting through Stack 2.

(b) One (1) tunnel furnace, No. 2 North, permitted in 1997 for construction, using low NOx burners with a nominal heat input capacity of 92 MMBtu per hour in the heating zone, exhausting through Stack 42.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Nitrogen Oxides (NOx) Limitations - Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to CP 033-3692-00043, issued October 7, 1994 and 326 IAC 2-2 (PSD- Control Technology Review; Requirements), Tunnel Furnace No. 1 shall be equipped with low NOx natural gas fired burners and total NOx emissions shall not exceed 0.17 pounds per MMBtu and 20.0 pounds per hour through Stack 2.

(b) Pursuant to CP 033-8091-00043, issued June 25, 1997 and 326 IAC 2-2 (PSD- Control Technology Review; Requirements), Tunnel Furnace No. 2 heating zone shall be equipped with low NOx natural gas fired burners and total NOx emissions shall not exceed 0.10 pounds per MMBtu and 9.2 pounds per hour through Stack 42.

D.3.2 Visible Emissions Limitations - Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to CP 033-3692-00043, issued October 7, 1994 and 326 IAC 2-2 (PSD- Control Technology Review; Requirements), visible emissions from Tunnel furnace No. 1 (Stack 2), shall not exceed five percent (5%). The opacity shall be determined by 40 CFR 60, Appendix A, Method 9.

(b) Pursuant to CP 033-8091-00043, issued June 25, 1997 and 326 IAC 2-2 (PSD- Control Technology Review; Requirements), visible emissions from Tunnel Furnace No. 2 (Stack 42), shall not exceed three percent (3%) opacity based on a six (6) minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the Tunnel Furnace No. 1 and Tunnel Furnace No.2 natural gas fired burners. Condition B.10 - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION D.4 FACILITY OPERATION CONDITIONS (PICKLE LINE)

Emission Unit Description:

Cold Mill Operations - Pickling Line

One (1) pickling line, with a nominal capacity of 1.4 million ton per year, permitted in 1996 for construction, with a packed scrubber and covered tanks maintained under negative pressure, for Hydrochloric Acid (HCl) control, and a mist eliminator for PM/PM-10 control, exhausting to Stack 17.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter Emissions Limitations - Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to CP 033-5625-00043, issued August 8, 1996 and 326 IAC 2-2 (BACT), the pickle line particulate matter emissions shall be controlled by a scrubber with mist eliminator and the filterable particulate matter emissions from Stack 17 shall not exceed 1.23 pounds per hour. The scrubber with mist eliminator shall be operated at all times when the pickle line is in operation.

D.4.2 Hydrochloric Acid (HCl) Pickling HAP Minor Emission Limitation [40 CFR 63.1]

Pursuant to CP 033-5625-00043, issued August 8, 1996, and to ensure the Permittee meets the definition of an area source under 40 CF R 63.2, the hydrochloric acid mist from the pickle line shall be controlled by a scrubber with mist eliminator. Emissions shall not exceed 0.32 pounds per hour. The scrubber and mist eliminator shall be operated at all times when the pickle line is in operation.

Compliance with this limit and the potential to emit from all other units, limits the source-wide PTE of a single HAP and a combination of HAPs to less than ten (10) and twenty-five (25) tons per twelve (12) consecutive month period, respectively, and renders this an area source under 40 CFR Part 63.

D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the pickle line, scrubber and mist eliminator. Condition B.10 - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.4.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.4.2 - Hydrochloric Acid (HCl) Pickling HAP Minor Emission Limitation, the Permittee shall perform a hydrochloric acid test on the pickle line Stack 17, utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Condition C.8 - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.4.5 Parametric Monitoring [40 CFR 64]

(a) The Permittee shall record the flow rate of the packed scrubber used in conjunction with the Pickling Line, at least once per day when the Pickling Line is in operation

(b) The Permittee shall determine the minimum flow rate from the latest valid stack test that demonstrates compliance with limits in Condition D.4.2 - Hydrochloric Acid (HCL) Pickling HAP Minor Emission Limitation.

(c) On and after the date the stack test results are available, the Permittee shall maintain a flow rate at or above the minimum rate as observed during the latest compliant stack test.

(d) When for any one reading, the flow rate falls below the above mentioned minimum, the Permittee shall take a reasonable response. Condition C.15 - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.4.6 Scrubber Failure Detection

In the event, a scrubber failure has been observed:

For a scrubber controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately upon removal of the coil from the process until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Condition B.11 - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.4.7 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.5 - Parametric Monitoring, the Permittee shall maintain records of the once per day pickle line scrubber flow rate reading. The Permittee shall include in its daily record when a flow rate reading is not taken and the reason for the lack of a flow rate reading (e.g. the process did not operate that day).

(b) Condition C.17 - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.5FACILITY OPERATION CONDITIONS (PICKLE LINE SCALE BREAKER)

Emission Unit Description:

Pickle Line Scale Breaker

One (1) scale breaker, permitted in 1996 for construction, with a nominal capacity of 1.4 million tons per year that removes scale from the rolled steel prior to the pickling process. Particulate (PM/PM10) emissions are controlled by a baghouse with a nominal air flow rate of 10,600 acfm and exhausting to Stack 60.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Particulate Matter Emissions - Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to 326 IAC 2-2 BACT, the pickle line scale breaker particulate matter PM/PM10 emissions shall be controlled by a baghouse with an outlet grain loading of 0.003 gr/dscf and PM/PM10 emissions shall not exceed 1.19 lb/hr.

D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the scale breaker and baghouse. Condition B.10 - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.5.3 Particulate Control

The scale breaker baghouse shall be in operation at all times the scale breaker is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.5.4 Visible Emission Notations [40 CFR 64]

(a) Visible emission notations of the pickle line scale breaker Stack exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Condition C.15 - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.5.5 Record Keeping Requirements

(a) To document the compliance status with Condition D.5.4 - Visible Emission Notations, the Permittee shall maintain records of the once per day visible emission notations. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g. the process did not operate that day).

(b) Condition C.17 - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.6 FACILITY OPERATION CONDITIONS (PICKLE LINE BOILERS)

Emission Unit Description:

Pickle Line Boilers

Three (3) natural gas fired boilers Nos. 1, 2 and 3, two (2) permitted in 1996 for construction and one (1) permitted in 2006, equipped with low NOx burners, exhausting to Stacks 15, 16a and 16b. The nominal heat input for each boiler is 20.4 MMBtu per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Nitrogen Oxides (NOx) Limitations – Best Available Control Technology (BACT) [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2 (BACT), only two of the three boilers Nos. 1, 2 and 3, shall be utilized at any time.

(b) Pursuant to CP 033-5625-00043, issued August 8, 1996 and 326 IAC 2-2 (BACT), the NOx emissions from the pickle line boilers shall not exceed 81 pounds per million cubic feet (MMCF) of gas burned.

D.6.2 Particulate Emission Limitations [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the particulate emissions from the following units shall be limited to Pt pounds per MMBtu heat input, as follows:

Emission Unit	Unit ID	Pt (lb/MMBtu)
Pickle Line Boiler	No. 1	0.40
Pickle Line Boiler	No. 2	0.40
Pickle Line Boiler	No. 3	0.40

D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the pickle line boilers. Condition B.10 - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

D.6.4 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, for the above listed emissions units, except as otherwise specified in 40 CFR Part 60, Subpart Dc.

D.6.5 Small industrial Boilers, Commercial-Institutional Steam Generating Boilers NSPS [40 CFR 60, Subpart Dc][326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall comply with the provisions of 40 CFR 60, Subpart Dc, which are incorporated by reference in 326 IAC 12 (included as Attachment D to this permit), for the above listed emissions units as specified as follows.

(1) 40 CFR 60.40c (a)
(2) 40 CFR 60.41c
(3) 40 CFR 60.48c (a)(1 - 3), (g), (i)

SECTION D.7 FACILITY OPERATION CONDITIONS (REVERSING MILL)

Emission Unit Description:

Reversing Mill

One (1) cold reversing mill, with a nominal capacity of one (1.0) million tons per year, permitted in 1996 for construction, with a mist eliminator for particulate (PM/PM10) emissions control, exhausting to Stack 18.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate Matter Emissions - Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to CP 033-5625-00043, issued August 8, 1996 and 326 IAC 2-2 (BACT), the filterable particulate matter emissions from the cold reversing mill shall be controlled by a mist eliminator. Particulate matter emissions from Stack 18 shall not exceed 7.2 pounds per hour.

Compliance Determination Requirements

D.7.2 Particulate Control

The reversing mill mist eliminator shall be in operation at all times the reversing mill is in operation.

SECTION D.8 FACILITY OPERATION CONDITIONS (GALVANIZING LINE)

Emission Unit Description:

Galvanizing Lines

(a) One (1) hot band galvanizing line with a nominal capacity of 400,000 tons of steel per year, permitted in 1996 for construction, heated by a low NOx burner natural gas fired heater with a nominal heat input of 45 MMBtu per hour, exhausting through Stack 19.

(b) Twenty-four (24), natural gas fired radiant tube heaters associated with the galvanizing line, permitted in 2002 for construction. Each heater has a nominal heat input of 0.3 MMBtu per hour, exhausting inside the building.

(c) One (1) cold rolled galvanizing line with a nominal capacity of 300,000 tons of steel per year, permitted in 1996 for construction, heated by a low NOx burner natural gas fired heater with a nominal heat input of 55 MMBtu per hour, exhausting to Stack 19.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Particulate Matter Emissions - Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to CP 033-5625-00043, issued August 8, 1996 and 326 IAC 2-2 (BACT), the hot band and cold roll galvanizing lines heaters shall burn natural gas only.

D.8.2 Nitrogen Oxides (NOx) - Best Available Control Technology (BACT) [326 IAC 2-2]

(a) Pursuant to CP 033-5625-00043, issued August 8, 1996 and 326 IAC 2-2 (BACT), the NOx emissions from the hot band galvanizing line heater shall not exceed 200 pounds per MMCF of natural gas burned.

(b) Pursuant to CP 033-5625-00043, issued August 8, 1996 and 326 IAC 2-2 (BACT), the hot band galvanizing line heater shall use low-NOx burners.

(c) Pursuant to CP 033-5625-00043, issued August 8, 1996 and 326 IAC 2-2 (BACT), the NOx emissions from the cold roll galvanizing line heater shall not exceed 200 pounds per MMCF of natural gas burned.

(d) Pursuant to CP 033-5625-00043, issued August 8, 1996 and 326 IAC 2-2 (BACT), the cold roll galvanizing line heater shall use low-NOx burners.

D.8.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the hot band line and cold roll line heaters and low NOx burners. Condition B.10 - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

SECTION D.9 FACILITY OPERATION CONDITIONS (ANNEALING)

Emission Unit Description:

Annealing Furnaces

Sixteen (16) low NOx burners, natural gas fired annealing furnaces and forty (40) annealing bases, permitted in 1996 for construction. Each furnace has a nominal heat input of four (4) MMBtu per hour, exhausting through roof pipes 30, 31 and 32.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Particulate Matter Emissions - Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to CP 033-5625-00043, issued August 8, 1996 and 326 IAC 2-2 (BACT), the annealing furnaces shall burn natural gas only.

D.9.2 Nitrogen Oxides (NOx) - Best Available Control Technology (BACT) [326 IAC 2-2]

(a) Pursuant to CP 033-5625-00043, issued August 8, 1996 and 326 IAC 2-2 (BACT), the NOx emissions from the annealing furnaces shall not exceed 200 pounds per MMCF of natural gas burned.

(b) Pursuant to CP 033-5625-00043, issued August 8, 1996 and 326 IAC 2-2 (BACT), the annealing furnaces shall be equipped with low-NOx burners.

SECTION D.10 FACILITY OPERATION CONDITIONS (PAINT LINE)

Emission Unit Description:

Paint Line (Coil Coating Line)

(a) One (1) 2-side, 2-coat coil coating line, permitted in 2002 for construction, using roll coating method, with a nominal capacity of 55,000 pounds per hour of the flat rolled steel, using a 60 MMBtu per hour nominal heat input capacity burner equipped thermal oxidizer to control VOC emissions and exhausting to Stack 78.

(b) Two (2) curing ovens, permitted in 2002 for construction, with a combined nominal heat input capacity of 16 MMBtu per hour using a 60 MMBtu per hour nominal heat input capacity burner equipped thermal oxidizer to control VOC emissions and exhausting to Stack 78.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.10.1 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit [326 IAC 2-2][40 CFR 63.1]

Pursuant to SSM 033-15836-00043, issued December 31, 2002, to maintain the minor status for this modification, the VOC emissions shall be limited as follows:

(a) For the 2-side, 2-coat, coil-coating line the input of VOC shall be limited to less than 3894 tons per twelve (12) consecutive month period, with the compliance status demonstrated at the end of each month.

(b) The combined heat input rate for the two curing ovens shall not exceed 140,160 million Btu per twelve (12) consecutive month period and for the thermal oxidizer shall not exceed 525,600 million Btu per twelve (12) consecutive month period.

(c) The thermal oxidizer controlling the 2-side, 2-coat, coil-coating line shall be in operation and achieve 99% overall VOC control at all times the 2-side, 2-coat, coil-coating line is in operation.

(d) Compliance with items (a), (b), and (c) combined, limits the VOC emissions from the 2-side, 2-coat coil coating line modification to less than forty (40) tons per 12 consecutive months period, with the compliance status demonstrated at the end of each month and renders the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD)) not applicable to this modification.

(e) Pursuant to PSD SSM 033-23028-00043, issued October 26, 2007:

(1) The single HAP emissions from the coil coating line shall be limited to less than 10 tons per twelve (12) consecutive month period, with the compliance status demonstrated at the end of each month.

(2) The combined HAP emissions from the coil coating line shall be limited to less than 14.6 tons per twelve (12) consecutive month period, with compliance demonstrated at the end of each month.

(3) The thermal oxidizer for the coil coating line shall be in operation whenever the coating line is in operation.

Compliance with these limits and requirements, in conjunction with HAP limits on SDI - IDD's rotary hearth furnace, SDI-IDD's RHF Fugitives Baghouse, SDI - IDD's submerged

arc furnace, SDI - IDD Unit S79, SDI - Flat Roll Division's pickle line, and the potential to emit from all other units, limits the source-wide PTE of a single HAP and a combination of HAPs to less than ten (10) and twenty-five (25) tons per twelve (12) consecutive month period, respectively, and renders this an area source under 40 CFR Part 63.

D.10.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-4]

(a) Pursuant to SSM 033-15836-00043, issued December 21, 2002 and 326 IAC 8-2-4 (Coil Coating Operations), the volatile organic compound (VOC) discharge to the atmosphere shall be limited to 2.6 pounds VOC per gallon of coating less water delivered to the coating applicator from prime and topcoat or single coat operations.

(b) Pursuant to 326 IAC 8-1-2 (b), the coil coating line VOC emissions shall be limited to no greater than the equivalent emissions, 4.02 pounds of VOC per gallon of coating solids, allowed in (a).

The equivalency emissions are determined by the following equation:

$$E = L / (1 - (L/D))$$

Where:

L	=	Applicable emission limit from 326 IAC 8 in pounds of VOC per gallon of coating.
D	=	Density of VOC in coating in pounds per gallon of VOC.
E	=	Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.

Actual solvent density shall be used to determine the compliance status of the coil coating operation using the compliance methods in 326 IAC 8-1-2 (a).

(c) Pursuant to 326 IAC 8-1-2(c) the overall control efficiency of the thermal oxidizer shall be no less than the equivalent overall efficiency of 46.04% calculated by the following equation:

$$O = \frac{V - E}{V} \times 100$$

Where:

V	=	The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied.
E	=	Equivalent emission limit in pounds of VOC per gallon of coating solids as applied.
O	=	Equivalent overall efficiency of the capture system and control device as a percentage.

D.10.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for the thermal oxidizer associated with the coil coating operation. Condition B.10 - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.10.4 Permanent Total Enclosure

In order to maintain the minor status for the 2-side, 2-coat, coil coating line, the Permittee shall use a permanent total enclosure:

(a) The capture system for the 2-side, 2-coat, coil coating line shall meet the criteria for a Permanent Total Enclosure as described in 40 CFR 51, Method 204.

-or-

(b) Verify 100% capture through other methods as approved by the Commissioner.

D.10.5 Thermal Oxidizer

(a) The thermal oxidizer shall operate with a control efficiency of not less than 99% at all times that the 2-side, 2-coat, coil coating line is in operation. This efficiency is necessary to ensure compliance with conditions D.10.1 - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit.

(b) In order to demonstrate compliance with Condition D.10.2 - Volatile Organic Compounds (VOC), the thermal oxidizer shall be in operation and control emissions from the 2-side, 2-coat, coil coating line at all times that the 2-side, 2-coat, coil coating line is in operation.

D.10.6 Testing Requirements [326 IAC 3-6] [326 IAC 2-7-6(1),(6)]

(a) In order to demonstrate compliance with Conditions D.10.1- Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit and D.10.2 - Volatile Organic Compounds (VOC), the Permittee shall perform VOC emissions and thermal oxidizer control efficiency testing utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) The Permittee shall determine the hourly average temperature and duct pressure or fan amperage for the thermal oxidizer from the most recent valid stack test that demonstrates compliance with the limits in conditions D.10.1 - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit and D.10.2 - Volatile Organic Compounds (VOC) as approved by IDEM.

(c) In order to demonstrate compliance with Condition D.10.1(d) - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit, within 180 days of the end of the month in which it is determined that VOC emissions equal or exceed nine (9) tons for any twelve (12) consecutive month period, the Permittee shall perform inlet and outlet HAP testing on the thermal oxidizer controlling emissions from the coil coating line (Step #1). Testing shall be done utilizing Method 18 or other methods approved by the Commissioner, for the HAP used at the source that has the lowest destruction efficiency, as estimated by the manufacturer and approved by IDEM or using an estimation method approved by IDEM. If the VOC emissions equal or exceed nine (9) tons for any twelve (12) consecutive month period more than once in a period of 4.5 years, then a subsequent test shall be conducted within 5 years from the date of the last valid compliance demonstration (Step #2). If within 4.5 years after the second valid compliance demonstration the VOC emissions do not equal or exceed nine (9) tons for any twelve (12) consecutive month period, then the Permittee is not required to repeat inlet and outlet HAP testing until the VOC emissions equal or exceed nine (9) tons for any twelve (12) consecutive month period at which time the Permittee shall repeat Step #1. If within 4.5 years after the second valid compliance demonstration the VOC emissions equal or exceed nine (9) tons for any twelve (12) consecutive month period, then the Permittee shall repeat Step #2.

(d) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Condition C.8 - Performance Testing contains the Permittee's obligations with regard to the testing required by this condition.

D.10.7 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP)

(a) The compliance status with Condition D.10.1 - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit shall be demonstrated at the end of each

month. This shall be based on the total volatile organic compound emitted for the previous month, and adding it to previous 11 months total VOC emitted so as to arrive at the VOC emission rate for 12 consecutive months period. The VOC emissions for a month can be arrived at using the following equation for VOC usage:

VOC emitted = [(VOC input) x (100% – Percent Overall control efficiency of thermal oxidizer)]

Where VOC input is based on the formulation data supplied by the coating manufacturer. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(b) If VOC emissions from the 2-side, 2-coat coil line exceed nine (9) tons for any twelve consecutive month period, or the Permittee chooses to demonstrate compliance with Condition D.10.1(d) - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit using the HAP control efficiency, the Permittee shall determine the single and combination HAP emissions for each month using the following methodology:

HAP emitted = [(HAP input) x (100% - Percent Overall control efficiency of thermal oxidizer)]

Where:

HAP input is based on the formulation data supplied by the coating manufacturer.

Until the initial Method 18 stack test is performed, an overall control efficiency of 99% shall be used in the equation above.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)

D.10.8 Thermal Oxidizer [40 CFR 64]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer to continuously record the combustion temperature of any effluent gases incinerated to achieve compliance with D.10.1 - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit and D.10.2 - Volatile Organic Compounds (VOC). This system shall have an accuracy of ±2.5^{o}C or ±0.75 percent of the temperature being measured expressed in degrees Celsius, whichever is greater.

(b) The Permittee shall record all periods (during actual coating operations) in excess of 3 hours during which the 3-hour average temperature in the thermal oxidizer used to control VOC emissions from an affected facility remains more than 28^{o}C (50^{o}F) below the temperature at which compliance with limit in D.10.1 - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit-and D.10.2 - Volatile Organic Compounds (VOC) was demonstrated during the most recent measurement of thermal oxidizer efficiency required by D.10.6 - Testing Requirements.

(c) The Permittee shall observe the duct pressure or fan amperage at least once per day when the thermal oxidizer is in operation. The duct pressure or fan amperage shall be maintained within the normal range as established in the most recent compliant stack test.

(d) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with the limits in Condition D.10.1 - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP), as approved by IDEM.

(e) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature as observed during the compliant stack test.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.10.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.10.1 - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.10.1 - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit.

(1) The VOC content of each coating material and solvent used less water.

(2) The amount of coating material and solvent used on a monthly basis.

Records may include, for example, purchase orders, invoices, and material safety data sheets (MSDS) or any other information necessary to verify the type and amount used.

(3) The total VOC usage for each month.

(b) To document the compliance status with Conditions D.10.1 - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit and D.10.8 - Thermal Oxidizer, the Permittee shall maintain records in accordance with (1) through (2) below.

(1) The continuous temperature records (on a three hour average basis) for the thermal oxidizer and the average temperature used to demonstrate compliance during the most recent compliant stack test. The Permittee shall include in its continuous record when a temperature is not taken and the reason for the lack of a temperature recording (e.g. the process was not in operation).

(2) Daily records of the duct pressure or fan amperage. The Permittee shall include in its daily record when a pressure or amperage reading is not taken and the reason for the lack of pressure or amperage reading (e.g. the process did not operate that day).

(c) If VOC emissions from the 2-side, 2-coat coil coating line equal or exceed nine (9) tons for any twelve (12) consecutive month period, then the Permittee shall determine the compliance status with the HAP limits in Condition D.10.1(d) - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit using the HAP control efficiency, the Permittee shall thereafter maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP emission limits established in Condition D.10.1(d) - Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit.

(1) The amount and HAP content of each coating material and solvent used each month. Records may include, for example, inventory records and Material Safety Data Sheets (MSDS) necessary to verify the type and amount used.

(2) The single and combined HAP usage for each month.

(3) The weight of the single and combined HAPs emitted for each compliance period.

(d) Condition C.17 - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.10.10 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.10.1- Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP) Minor Limit shall be submitted, using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days after the end of the quarter being reported. Condition C.18 - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

D.10.11 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the above listed emissions units, except as otherwise specified in 40 CFR Part 60, Subpart TT.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Ave.
MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

D.10.12 Metal Coil Surface Coating NSPS [40 CFR 60, Subpart TT][326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart TT, the Permittee shall comply with the provisions of 40 CFR 60, Subpart TT, which are incorporated by reference as 326 IAC 12 (included as Attachment E of this permit), for the above listed emissions units as specified as follows:

(1) 40 CFR 60.460
(2) 40 CFR 60.461
(3) 40 CFR 60.462 (a)(2), (a)(3)
(4) 40 CFR 60.463 (a), (b), (c)(2)
(5) 40 CFR 60.464 (a), (c)
(6) 40 CFR 60.465
(7) 40 CFR 60.466 (a - c)

SECTION D.11 FACILITY OPERATION CONDITIONS (SLAG PROCESSING)

Emission Unit Description:

A Slag Handling Operation owned and operated by Edward C. Levy Company - Butler Mill Service.

(a) One (1) grizzly feeder with a nominal capacity of 300 tons per hour, permitted in 1994 for construction;

(b) One (1) 36" conveyor (#9), with a nominal capacity of 350 tons per hour, permitted in 1994 for construction;

(c) One (1) 42" conveyor (#7), with a nominal capacity of 350 tons per hour, permitted in 1994 for construction;

(d) Two (2) 5' by 12' Screens, each with a nominal capacity of 350 tons per hour, permitted in 1994 for construction;

(e) One (1) 36" conveyor (#6), with a nominal capacity of 193 tons per hour, constructed in 1994 and modified in 2014;

(f) One (1) 30" conveyor (#5), with a nominal capacity of 250 tons per hour, permitted in 1994 for construction;

(g) Three (3) 6' by 16' Screens, each with a nominal capacity of 250 tons per hour, permitted in 1994 for construction;

(h) One (1) 48" Conveyor (#1), with a nominal capacity of 75 tons per hour, permitted in 1994 for construction;

(i) One (1) 30" Stacker (#1), with a nominal capacity of 75 tons per hour, permitted in 1994 for construction;

(j) One (1) 24" Stacker (#2), with a nominal capacity of 125 tons per hour, permitted in 1994 for construction;

(k) One (1) 24" Conveyor (#12); with a nominal capacity of 40 tons per hour, permitted in 1994 for construction;

(l) One (1) 24" Stacker (#4), with a nominal capacity of 50 tons per hour, permitted in 1994 for construction;

(m) One (1) 4 ¼ Standard Crusher, with a nominal capacity of 50 tons per hour, permitted in 1994 for construction;

(n) One (1) 30" Conveyor (#8), with a nominal capacity of 25 tons per hour; permitted in 1994 for construction;

(o) Two (2) 30" Conveyors (#10 and #11), with a nominal capacity of 50 tons per hour each, permitted in 2003 for construction;

(p) One (1) jaw crusher, identified as J01, with a nominal capacity of 193 tons per hour, approved in 2014 for construction.

(q) Aggregate Storage Piles.

(r) Three (3) slag storage areas, approved in 2013 for construction, identified as Slag Area 1, 2, and 3, each with a nominal throughput of 400 tons per hour.

Fugitive emissions from the slag handling operations are controlled as needed by water sprays.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.11.1 Fugitive Dust Limitations (BACT) [326 IAC 2-2]

(a) Pursuant to CP 033-3692-00043 issued October 7, 1994, the fugitive dust control plan shall be implemented to reduce emissions from slag processing by at least 95 percent (95%) based on a filterable PM10 emission basis.

(b) Pursuant to CP 033-3692-00043, issued October 7, 1994, the fugitive dust control plan shall be implemented to reduce emissions from storage piles by eighty percent (80%).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.11.2 Record Keeping Requirements

(a) To document the compliance status with Condition D.11.1 - Fugitive Dust Limitations (BACT), the Permittee shall maintain records of the times and type of fugitive dust control measures applied to the slag handling and storage piles, as specified in the Fugitive Dust Control Plan.

(b) Condition C.17- General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.12 FACILITY OPERATIONS CONDITIONS (FUGITIVE DUST)

Emission Unit Description:

Fugitive Dust Sources consisting of but not limited to the following:

(a) Paved roads,

(b) Parking areas,

(c) Unpaved roads and

(d) Traveled open areas.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.12.1 Fugitive Dust Limitations (BACT) [326 IAC 2-2]

Pursuant to CP 033-3692-00043, issued October 7, 1994, the fugitive dust control plan shall be implemented to reduce emissions from the paved roads, parking lots, unpaved roads, and traveled open areas by eighty percent (80%).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.12.2 Record Keeping Requirements

(a) To document the compliance status with Condition D.12.1 - Fugitive Dust Limitations (BACT), the Permittee shall maintain records of the times and type of fugitive dust control measures (dust suppressants, water sprays and vacuum/sweeping of paved areas) used as specified in the Fugitive Dust Control Plan.

(b) Condition C.17 General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.13 FACILITY OPERATION CONDITIONS

Emission Unit Description:

Emergency Generators

(a) Three (3) emergency diesel generators, identified as CM Watertreat, Main Watertreat (East), and Main Watertreat (West), approved in 1996, 1997, and 1995 for construction, each with a nominal capacity of 1500Kw (2011 hp).

Insignificant Activities

(b) Emergency generators as follows: Diesel generators not exceeding one thousand six hundred (1,600) horsepower. [40 CFR 63, Subpart ZZZZ]

(1) One (1) emergency diesel generator, identified as Melt Shop (Door 26), approved 2010 for construction, with a nominal capacity of 500 Kw. [40 CFR 60, Subpart IIII]

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.13.1 General Provisions Relating to National Emissions Standards for Hazardous Air Pollutants Under 40 CFR Part 63 [326 IAC 20-1][40 CFR 63, Subpart A]

Pursuant to 40 CFR 63.6565, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, for the above listed emissions units, as specified in 40 CFR Part 63, Subpart ZZZZ, in accordance with the schedule in 40 CFR Part 63, Subpart ZZZZ.

D.13.2 Stationary Reciprocating Internal Combustion Engines NESHAP [40 CFR 63, Subpart ZZZZ] [326 IAC 20-82]

Pursuant to 40 CFR Part 63, Subpart ZZZZ, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart ZZZZ, which are incorporated by reference as 326 IAC 20-82 (included as Attachment F to this permit), for the above listed emissions units, as specified as follows.

(1) 40 CFR 63.6585 (a), (c)
(2) 40 CFR 63.6590 (a)(1)(iii), (a)(2)(iii), (c)(1)
(3) 40 CFR 63.6595 (a)(1), (c)
(4) 40 CFR 63.6603 (a)
(5) 40 CFR 63.6604 (b)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625 (e)(3), (f), (h), (i)
(8) 40 CFR 63.6640 (a), (b), (e), (f)(1), (f)(2), f(4)
(9) 40 CFR 63.6645 (a)(5)
(10) 40 CFR 63.6650 (a), (h)
(11) 40 CFR 63.6655 (a), (d), (e)(2), (f)
(12) 40 CFR 63.6660
(13) 40 CFR 63.6665
(14) 40 CFR 63.6675
(15) Table 2d to 40 CFR 63, Subpart ZZZZ (item 4)
(16) Table 6 to 40 CFR 63, Subpart ZZZZ (item 4)
(17) Table 7 to 40 CFR 63, Subpart ZZZZ (item 9)
(18) Table 8 to 40 CFR 63, Subpart ZZZZ

D.13.3 General Provisions Relating to New Source Performance Standards Under 40 CFR Part 60 [326 IAC 12-1][40 CFR 60, Subpart A]

Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12, for the

emergency diesel generator, identified as Melt Shop (Door 26), except as otherwise specified in 40 CFR 60, Subpart IIII.

D.13.4 Stationary Compression Ignition Internal Combustion Engines NSPS [40 CFR 60, Subpart IIII] [326 IAC 12]

Pursuant to 40 CFR 60, Subpart IIII, the Permittee shall comply with the provisions of 40 CFR 60, Subpart IIII, which are incorporated by reference as 326 IAC 12, (included as Attachment G of this permit) for the emergency diesel generator, identified as Melt Shop (Door 26):

(1) 40 CFR 60.4200 (a)(2)(i), (a)(4)
(2) 40 CFR 60.4205 (b)
(3) 40 CFR 60.4206
(4) 40 CFR 60.4207 (a), (b)
(5) 40 CFR 60.4208
(6) 40 CFR 60.4209 (a)
(7) 40 CFR 60.4211 (a), (c), (f)
(8) 40 CFR 60.4218
(9) 40 CFR 60.4219
(10) Table 8

SECTION D.14 FACILITY OPERATION CONDITIONS

Emission Unit Description: Insignificant Activities

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.[326 IAC 6-2-4]

(1) Eighteen (18) natural gas-fired heating units, each with a nominal rating of 250,000 Btu/hr. This is the total number of units for both Steel Dynamics, Inc. - Flat Roll Division and Steel Dynamics, Inc. - Iron Dynamics Division.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.14.1 Particulate Emissions Limitation [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from each natural gas-fired heating unit shall be limited to 0.6 pounds per MMBtu heat input.

SECTION D.15 FACILITY OPERATION CONDITIONS

Emission Unit Description: Insignificant Activities

(c) 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. This facility includes the following:

(1) One (1) gasoline storage tank, approved in 2013 for construction, identified as T2 or Gasoline Storage Tank #2, with a nominal storage capacity of two thousand (2,000) gallons. [40 CFR 63, Subpart CCCCCC]

(2) One (1) gasoline storage tank, approved in 2013 for construction, identified as T3 or Gasoline Storage Tank #3, with a nominal storage capacity of five thousand (5,000) gallons. [40 CFR 63, Subpart CCCCCC]

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.15.1 Volatile Organic Compounds (VOC) [326 IAC 8-4-6]

In order to render the requirements of 326 IAC 8-4-6 not applicable for the Gasoline Storage Tanks #2 and #3 (or T2 and T3), the Permittee shall comply with the following:

(a) The monthly gasoline throughput from the Gasoline Storage Tank #2 (or T2) shall be less than 10,000 gallons per month, with compliance determined at the end of each month.

(b) The monthly gasoline throughput from the Gasoline Storage Tank #3 (or T3) shall be less than 10,000 gallons per month, with compliance determined at the end of each month.

Compliance with this limit shall render the requirements of 326 IAC 8-4-6 (Gasoline Dispensing Facilities) not applicable.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.15.2 Record Keeping Requirements

(a) To document the compliance status with Condition D.13.2 - Volatile Organic Compounds (VOC), the Permittee shall maintain records of the monthly gasoline throughput from Gasoline Storage Tanks #2 and #3 (or T2 and T3).

(b) Condition C.17 General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.15.3 General Provisions Relating to National Emissions Standards for Hazardous Air Pollutants Under 40 CFR Part 63 [326 IAC 20-1][40 CFR 63, Subpart A]

Pursuant to 40 CFR 63.11130, the Permittee shall comply with the applicable provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the above listed emissions units except as specified in 40 CFR Part 63, Subpart CCCCCC in accordance with the schedule in 40 CFR 63, Subpart CCCCCC.

D.15.4 Source Category: Gasoline Dispensing Facilities NESHAP [40 CFR 63, Subpart CCCCCC]

Pursuant to 40 CFR Part 63, Subpart CCCCCC, the Permittee shall comply with the provisions of 40 CFR 63, Subpart CCCCCC (included as Attachment H of this permit), for the above listed emissions units, as specified below:

(1) 40 CFR 63.11111 (a), (b), (e), (h), (i)
(2) 40 CFR 63.11112 (a), (d)

(3) 40 CFR 63.11113 (b)
(4) 40 CFR 63.11115
(5) 40 CFR 63.11116
(6) 40 CFR 63.11125 (d)
(7) 40 CFR 63.11130
(8) 40 CFR 63.11132
(9) Table 3

SECTION D.16 FACILITY OPERATION CONDITIONS

Emission Unit Description: Insignificant Activities

(d) Covered conveyors for solid raw material, including the following: [326 IAC 6-3-2]

(1) Coal or coke conveying of less than or equal to three hundred sixty (360) tons per day.

(2) 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.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.16.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission pound per hour limitation from the insignificant activities listed in this section shall be calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour;
and P = process weight rate in tons per hour

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Steel Dynamics, Inc. - Flat Roll Division
Source Address: 4500 County Rd 59, Butler, Indiana 46721
Part 70 Permit No.: T033-30061-00043

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)

☐ Report (specify)

☐ Notification (specify)

☐ Affidavit (specify)

☐ Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Steel Dynamics, Inc. - Flat Roll Division
Source Address: 4500 County Rd 59, Butler, Indiana 46721
Part 70 Permit No.: T033-30061-00043

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Steel Dynamics, Inc. - Flat Roll Division
Source Address: 4500 County Rd 59, Butler, Indiana 46721
Part 70 Permit No.: T033-30061-00043

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Steel Dynamics, Inc. - Flat Roll Division
Source Address: 4500 County Road 59, Butler, IN 46721
Part 70 Permit No.: T033-30061-00043
Facility: 2-side, 2-coat, coil coating line (paint line)
Parameter: single HAP emission
Limits: Less than 10 tons per 12 consecutive month period with compliance demonstrated on a monthly basis

Quarter _____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

□ No deviation occurred in this quarter.

□ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature:_____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Steel Dynamics, Inc. - Flat Roll Division
Source Address: 4500 County Road 59, Butler, IN 46721
Part 70 Permit No.: T033-30061-00043
Facility: 2-side, 2-coat, coil coating line (paint line)
Parameter: combination of HAP emissions
Limits: 14.60 tons per 12 consecutive month period with compliance demonstrated on a monthly basis

Quarter _____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature:_____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

QUARTERLY REPORT

Source Name: Steel Dynamics, Inc. - Flat Roll Division
Source Address: 4500 County Road 59, Butler, IN 46721
Part 70 Permit No.: T033-30061-00043
Facility: 2-side, 2-coat, coil coating line (paint line)
Parameter: VOC usage for the coil coating line (paint line)
Limits: 3894 tons per 12 consecutive month period with compliance demonstrated on a monthly basis

Quarter _____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature:_____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Steel Dynamics, Inc. - Flat Roll Division
Source Address: 4500 County Road 59, Butler, IN 46721
Part 70 Permit No.: T033-30061-00043
Facility: Entire Source
Parameter: combination of HAP emissions
Limits: less than twenty-five (25) tons per twelve (12) consecutive month period with compliance demonstrated on a monthly basis

Quarter _____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature:_____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Steel Dynamics, Inc. - Flat Roll Division
Source Address: 4500 County Road 59, Butler, IN 46721
Part 70 Permit No.: T033-30061-00043
Facility: Entire Source
Parameter: chromium emissions
Limits: less than ten (10) tons per twelve (12) consecutive month period with compliance demonstrated on a monthly basis

Quarter _____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature:_____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Steel Dynamics, Inc. - Flat Roll Division
Source Address: 4500 County Road 59, Butler, IN 46721
Part 70 Permit No.: T033-30061-00043
Facility: Entire Source
Parameter: manganese emissions
Limits: less than ten (10) tons per twelve (12) consecutive month period with compliance demonstrated on a monthly basis

Quarter _____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature:_____
Date: _____
Phone: _____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Administrative Amendment

Source Description and Location

Source Name:	Steel Dynamics, Inc. - Flat Roll Division
Source Location:	4500 County Road 59, Butler, IN 46721
County:	Dekalb
SIC Code:	3312
Permit Renewal No.:	T033-30061-00043
Administrative Amendment No.:	033-34896-00043
Permit Reviewer:	Julie Alexander

Source Definition

The source consists of:

(a) Steel Dynamics, Inc. - Flat Roll Division (SDI-Flat Roll), located at 4500 County Road 59, Butler, Indiana 46721; and

(b) Steel Dynamics, Inc. - Iron Dynamics Division (SDI-IDD), located at 4500 County Road 59, Butler, Indiana 46721.

Separate Part 70 permits will be issued to Steel Dynamics, Inc. - Flat Roll Division (033-00043) and Steel Dynamics, Inc. - Iron Dynamics Division (033-00076), solely for administrative purposes. For this permit, the Permittee is Steel Dynamics, Inc. - Flat Roll Division, the primary operation.

Existing Approvals

The source was issued Part 70 Operating Permit No. T033-30061-00043 on December 30, 2014. There have been no subsequent approvals issued.

County Attainment Status

The source is located in Dekalb County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.[1]
$PM_{2.5}$	Unclassifiable or attainment effective April 5, 2005, for the annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient

Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Dekalb County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Dekalb County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(e) Other Criteria Pollutants
Dekalb County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this source is classified as an iron and steel mill plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Source Status - Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	**Emissions** (ton/yr)
PM	Greater than 100
PM_{10}	Greater than 100
$PM_{2.5}$	Greater than 100
SO_2	Greater than 100
VOC	Greater than 100
CO	Greater than 100
NO_x	Greater than 100
Single HAP	Less than 10
Total HAP	Less than 25

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability

to a source or modification.

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant, excluding GHGs, is emitted at a rate of one-hundred (100) tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

(c) These emissions are based upon Part 70 Operating Permit No. T033-30061-00043.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Steel Dynamics, Inc. - Flat Roll Division (SDI) on September 2, 2014, relating to the replacement of the existing Kue Ken jaw crusher with a new Nordberg jaw crusher. The new Nordberg jaw crusher is larger than the older Kue Ken jaw crusher, by 93 tons per hour.

This modification also includes a modification to conveyor #6. The conveyor will be run at a rate of 193 tons per hour instead of 100 tons per hour. Conveyor #6 recirculates the crushed slag back onto the screen #2 and back to the jaw crusher. The planned modifications to Conveyor #6 will not affect how much slag can be produced.

SDI has also submitted an application for another project, the cold mill expansion project. The cold mill expansion project will not increase steel production at the SDI facility. Because the production of slag is the direct result of the production of steel and these projects will not result in an increase in the production of steel, there will be no increase in slag production. This modification only affects the way slag is being processed and does not affect the steel making process or finishing process.

The following is a list of the new emission unit:

(a) One (1) jaw crusher, identified as J01, with a nominal capacity of 193 tons per hour, approved in 2014 for construction.

The following is a list of the modified emission units and pollution control devices:

(a) One (1) 36" conveyor (#6), with a nominal capacity of 193 tons per hour, constructed in 1994 and modified in 2014.

Enforcement Issues

There are no pending enforcement actions.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount

of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. If the control equipment has been determined to be integral, the table reflects the PTE after consideration of the integral control device.

Increase in PTE Before Controls of the Modification (New CrusherJ01)	
Pollutant	**Potential To Emit** (ton/yr)
PM	0.59
PM_{10}	0.28
$PM_{2.5}$	0.28
SO_2	-
VOC	-
CO	-
NO_X	-
Single HAPs	-
Total HAPs	-

Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

PTE Change of the Modified Process (Modified Conveyor C6)			
Pollutant	**PTE Before Modification** (ton/yr)	**PTE After Modification** (ton/yr)	**Increase from Modification** (ton/yr)
PM	1.31	2.53	1.22
PM_{10}	0.48	0.93	0.45
$PM_{2.5}$	0.48	0.93	0.45
SO_2	-	-	-
VOC	-	-	-
CO	-	-	-
NO_X	-	-	-
HAPs	-	-	-

Total PTE Increase due to the Modification			
Pollutant	**PTE New Emission Units** (ton/yr)	**Net Increase to PTE of Modified Emission Units** (ton/yr)	**Total PTE for New and Modified Units** (ton/yr)
PM	0.59	1.22	1.81
PM_{10}	0.28	0.45	0.73
$PM_{2.5}$	0.28	0.45	0.73
SO_2	-	-	-
VOC	-	-	-
CO	-	-	-
NO_X	-	-	-
HAPs	-	-	-

Pursuant to 326 IAC 2-7-11(a)(8)(B), this change is considered an administrative amendment because the permit is amended to incorporate an exempt unit as described in 326 IAC 2-1.1-3 that does not otherwise constitute a modification for purposes of 326 IAC 2-7-10.5 (Source Modifications) or 326 IAC 2-7-12 (Permit Modifications).

Permit Level Determination – PSD

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 administrative amendment, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential to Emit (ton/yr)							
Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$***	**SO_2**	**VOC**	**CO**	**NO_X**	**GHGs**
JC01	0.59	0.28	0.28	-	-	-	-	-
C6	2.53	0.93	0.93	-	-	-	-	-
Total for Modification	**3.13**	**1.21**	**1.21**	**-**	**-**	**-**	**-**	**-**
PSD Major Source Thresholds	100	100	100	100	100	100	100	---
Significant Thresholds	25	15	10	40	40	100	40	75,000 CO_2e

*$PM_{2.5}$ listed is direct $PM_{2.5}$.

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

This modification to an existing minor PSD stationary source is not major because the emissions increase of each PSD regulated pollutant are less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

This modification to an existing major PSD stationary source is not major because:

(a) The emissions increase of each PSD regulated pollutant, excluding GHGs, are less than the PSD significant thresholds; and

(b) The emissions increase of GHGs from this modification to an existing major PSD source are less than seventy-five thousand (75,000) tons of CO_2 equivalent (CO_2e) emissions per year

Therefore, pursuant to 326 IAC 2-2, the GHG emissions are not subject to regulation and the PSD requirements do not apply.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

NSPS:

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

NESHAP:

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.

CAM

(c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

(1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The modified unit and new unit do not utilize a control device. Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new and modified units as part of this modification.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 (PSD)
PSD applicability is discussed under the Permit Level Determination – PSD section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operations associated with C6 and JC01 will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)
Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially. The first report is due no later than July 1, 2004, and subsequent reports are due every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The jaw crusher has a potential to emit of less than 0.551 pound per hour. Therefore, these units are exempt from the requirements of 326 IAC 6-3.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination

Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no changes to the compliance determination and monitoring requirements of the permit based on this amendment.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T033-30061-00043. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Section A - Amendments

(a) The slag handling operation has been updated to include the new jaw crusher and modified conveyor.

Section A has been Amendment as follows:

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c),(3)][326 IAC 2-7-5(14)]

***

Slag Handling Operation

***

(e) One (1) **36**~~30~~" conveyor (#6), with a nominal capacity of **193** ~~100~~ tons per hour, **constructed** ~~permitted~~ in 1994 ~~for construction~~ **and modified in 2014**;

***

(p) ~~One (1) jaw crusher, with a nominal capacity of 100 tons per hour, permitted in 2003 for construction, and~~ **One (1) jaw crusher, identified as J01, with a nominal capacity of 193 tons per hour, approved in 2014 for construction.**

***

Section D.11 - Amendments

(a) The slag handling operation has been updated to include the new jaw crusher and modified conveyor.

Section D.11 has been Amendment as follows:

SECTION D.11 FACILITY OPERATION CONDITIONS (SLAG PROCESSING)

***

(e) One (1) **36**~~30~~" conveyor (#6), with a nominal capacity of **193** ~~100~~ tons per hour, **constructed** ~~permitted~~ in 1994 ~~for construction~~ **and modified in 2014**;

***

(p) ~~One (1) jaw crusher, with a nominal capacity of 100 tons per hour, permitted in 2003 for construction, and~~ **One (1) jaw crusher, identified as J01, with a nominal capacity of 193 tons per hour, approved in 2014 for construction.**

***

***

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 administrative amendment No. 033-34896-00043.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Julie Alexander at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-1782 or toll free at 1-800-451-6027 extension 3-1782.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A: Emissions Calculations

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00043
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

1. **Part 70 Source Modification Determination**
Uncontrolled PTE

	PM	PM10	PM2.5	SO_2	VOC	CO	NO_X	GHGs
PTE before Modification (C6)	1.31	0.48	0.48	-	-	-	-	-
PTE after Modification (C6)	2.53	0.93	0.93	-	-	-	-	-
Increase from C6 Modification	**1.22**	**0.45**	**0.45**	-	-	-	-	-
New Emission Units (JC01)	0.59	0.28	0.28	-	-	-	-	-
Change in PTE	**1.81**	**0.73**	**0.73**	-	-	-	-	-

2. **Permit Level Determination - PSD**

	PM	PM10	PM2.5	SO_2	VOC	CO	NO_X	GHGs
JC01	0.59	0.28	0.28	-	-	-	-	-
C6	2.53	0.93	0.93	-	-	-	-	-
PTE	**3.13**	**1.21**	**1.21**	-	-	-	-	-
PSD Significant Thresholds	25	15	10	40	40	100	40	75,000 CO_2e

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00043
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

New Jaw Crusher PTE

Uncontrolled Emission Factors			Controlled Emission Factors		
PM	**PM_{10}**	**$PM_{2.5}$**	**PM**	**PM_{10}**	**$PM_{2.5}$**
lb/ton	*lb/ton*	*lb/ton*	*lb/ton*	*lb/ton*	*lb/ton*
0.0007	0.00033	0.00033	0.00021	0.0001	0.0001

	Throughput Capacity	Uncontrolled Emissions			Controlled Emissions		
		PM	**PM_{10}**	**$PM_{2.5}$**	**PM**	**PM_{10}**	**$PM_{2.5}$**
EUID	*tons/hr*	*tpy*	*tpy*	*tpy*	*tpy*	*tpy*	*tpy*
JC01	193	0.59	0.28	0.28	0.18	0.08	0.08

Notes:
SCC 3-05-020-01
Uncontrolled and controlled emissions from the proposed jaw crusher are calculated according to the following equation:
Emissions (tpy) = Emission Factor (lb/ton) x Hourly Throughput Capacity (ton/hr) x 8,760 (hr/yr) / 2,000 (lb/ton)

Conveyor #6 PTE

Uncontrolled Emission Factors			Controlled Emission Factors		
PM	**PM_{10}**	**$PM_{2.5}$**	**PM**	**PM_{10}**	**$PM_{2.5}$**
lb/ton	*lb/ton*	*lb/ton*	*lb/ton*	*lb/ton*	*lb/ton*
3.0E-03	1.1E-03	1.1E-03	1.4E-04	4.6E-05	1.3E-05

	Throughput Capacity	Uncontrolled Emissions			Controlled Emissions		
		PM	**PM_{10}**	**$PM_{2.5}$**	**PM**	**PM_{10}**	**$PM_{2.5}$**
EUID	*tons/hr*	*tpy*	*tpy*	*tpy*	*tpy*	*tpy*	*tpy*
Before Modification (C6)	100	1.31	0.48	0.48	0.06	0.02	0.01
After Modification (C6)	193	2.53	0.93	0.93	0.12	0.04	0.01

Notes:
AP-42, Section 11.19.2 (8/04), Table 11.19.2-2 for Conveyor Transfer Point and Conveyor Transfer Point (controlled).
Controlled AP-42 emission factors assume wet suppression.
Uncontrolled and controlled emissions from the proposed jaw crusher are calculated according to the following equation:
Emissions (tpy) = Emission Factor (lb/ton) x Hourly Throughput Capacity (ton/hr) x 8,760 (hr/yr) / 2,000 (lb/ton)

Appendix A: Emissions Calculations

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00043
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

Potential to Emit (ton/yr)											
Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_x**	**VOC**	**CO**	**CO_2e**	**Pb**	**Fluorides**	**HG**
Electric Arc Furnaces & Casters	103294.86	298407.38	>100	>100	>100	>100	>100	NA	565.90	-	0.19
Ladle Metallurgical Stations	2402.74	2402.74	245.28	61.32	42.05	5.78	43.80	NA	-	-	-
Combustion	4.83	19.30	19.30	1.52	370.99	13.97	213.32	306,556	1.27E-03	-	-
Emergency Generators	0.36	0.21	0.20	0.18	11.60	0.33	3.08	600	-	-	-
Storage Silo 5c	45.05	45.05	45.05	-	-	-	-	-	0.01	-	0.25
Cold Mill Operations - Pickling Line	659.34	659.34	659.34	-	-	-	-	-	-	-	-
Reversing Mill	3153.60	3153.60	3153.60	-	-	-	-	-	-	-	-
Paint Line	0.62	2.48	2.48	0.20	32.64	3895.84	27.41	39,395	1.63E-04	-	-
Fuel Dispensing Operation	-	-	-	-	-	1.66	-	-	-	-	-
Steel Dynamics, Inc. - Flat Roll	109561.40	304690.10	4125.25	63.22	457.28	3917.58	287.62	346,551	565.90	0.00	0.44
Steel Dynamics, Inc. - IDD	14,592.16	17,067.92	17,066.88	422.15	553.37	1,830.23	670.57	36,744	0.66	0.14	-
Jaw Crusher Project	*1.81*	*0.73*	*0.73*	-	-	-	-	-	-	-	-
Total	124,155.38	321,758.75	21,192.86	485.37	1,010.65	5,747.81	958.19	383,295	566.56	0.14	0.44

Potential to Emit After Issuance (ton/yr)											
Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_x**	**VOC**	**CO**	**CO_2e**	**Pb**	**Fluorides**	**HG**
Electric Arc Furnaces & Casters	155.05	447.64	>100	350.40	893.52	227.76	3,504.00	NA	0.83	-	0.10
Ladle Metallurgical Stations	24.05	24.05	245.28		43.80	14.37	175.20	NA	-	-	-
Combustion	4.66	18.63	19.30	1.47	363.89	13.49	205.96	295,981	1.23E-03	-	-
Emergency Generators	0.36	0.21	0.20	0.18	11.60	0.33	3.08	600	-	-	-
Storage Silo 5c	0.45	0.45	45.05	-	-	-	-	-	0.01	-	0.25
Cold Mill Operations - Pickling Line	6.59	6.59	659.34	-	-	-	-	-	-	-	-
Reversing Mill	31.54	31.54	3153.60	-	-	-	-	-	-	-	-
Paint Line	0.62	2.48	2.48	0.20	32.64	38.96	0.27	39,395	1.63E-04	-	-
Fuel Dispensing Operation	-	-	-	-	-	1.66	-	-	-	-	-
Steel Dynamics, Inc. - Flat Roll	223.32	531.58	4,125.25	352.25	1,345.45	296.56	3,888.52	335,977	0.84	0.00	0.35
Steel Dynamics, Inc. - IDD	>100	>100	>100	>100	>100	>100	>100	36,744	0.29	0.04	-
Jaw Crusher Project	*1.81*	*0.73*	*0.73*	-	-	-	-	-	-	-	-
Total	>100	>100	>100	>100	>100	>100	>100	>100,000	1.13	0.04	0.35

The "Potential to Emit After Issuance Table" only includes limits if they are federally enforcable in the permit. Otherwise it inlcudes uncontrolled potential emissions.

Total Potential HAPs	**(tons/yr)**
Iron Dynamics Division	93.54
Flat Roll Division	1470.67
Steel Dynamics, Inc. Total	1564.21

Total Limited HAPs	**(tons/yr)**
Iron Dynamics Division	6.85
Flat Roll Division	16.81
Steel Dynamics, Inc. Total	23.66

Single Potential HAP - Glycol Ethers	**(tons/yr)**
Iron Dynamics Division	-
Flat Roll Division	6.36
Steel Dynamics, Inc. Total	6.36

NA - This data was not needed for rule applicability determination.

The above tables do not reflect the total source wide emissions. They are only the sum of the units that were calculated for CAM and source wide HAP applicability determinations.

TSD Appendix A: Emission Calculations
Limited HAPs Emissions Summary

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00076
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

	Emission Source							
Pollutant	**EAF (ton/yr)**	**Combustion (ton/yr)**	**Emergency Generators (ton/yr)**	**Cold Mill Operations - Pickle Line (ton/yr)**	**Surface Coating (ton/yr)**	**EAF Dust Silo 5c (ton/yr)**	****Fuel Dispensing Operation (ton/yr)**	**Total Facility (ton/yr)**
Acetaldehyde	---	---	9.14E-05	---	---	---	---	9.1E-05
Acrolein	---	---	2.86E-05	---	---	---	---	2.9E-05
Benzene	---	5.15E-03	2.81E-03	---	6.85E-04	---	---	8.6E-03
Dichlorobenzene	---	2.94E-03	---	---	3.92E-04	---	---	3.3E-03
Ethyl Benzene	---	---	---	---	0.48	---	---	4.8E-01
Formaldehyde	---	0.18	2.86E-04	---	0.03	---	---	2.1E-01
Glycol Ethers*	---	---	---	---	6.36	---	---	6.4E+00
Hexane	---	---	---	---	---	---	---	0.0E+00
Isophorone	---	---	---	---	0.49	---	---	4.9E-01
Naphthalene	---	1.50E-03	---	---	0.92	---	---	9.2E-01
Toluene	---	8.34E-03	1.02E-03	---	1.11E-03	---	---	1.0E-02
1,2,4-Trimethylbenzene	---	---	---	---	4.56	---	---	4.6E+00
Xylene	---	---	7.00E-04	---	1.88	---	---	1.9E+00
Arsenic	1.09E-02	---	---	---	---	2.74E-04	---	1.1E-02
Beryllium	4.91E-04	---	---	---	---	1.24E-05	---	5.0E-04
Cadmium	8.76E-03	2.70E-03	---	---	3.59E-04	2.21E-04	---	1.2E-02
Chromium	6.13E-03	3.43E-03	---	---	4.57E-04	1.55E-04	---	1.0E-02
Hydrochloric Acid	---	---	---	1.40	---	---	---	1.4E+00
Manganese	5.26E-01	9.32E-04	---	---	1.24E-04	1.33E-02	---	5.4E-01
Nickel	9.64E-03	5.15E-03	---	---	6.85E-04	2.43E-04	---	1.6E-02
PAH/POM	---	---	7.69E-04	---	---	---	---	7.7E-04
Totals (ton/yr)	0.56	0.21	0.01	1.40	14.60	0.01	0.01	**16.81**

*Largest individual HAP.
**Speciated HAP emission are not available for this operation only total.
***The total HAP emissions from the surface coating is based on the permit limit.

TSD Appendix A: Emission Calculations
Unlimited HAPs Emissions Summary

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00076
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

Pollutant	Emission Source							
	EAF (ton/yr)	Combustion (ton/yr)	Insignificant Activity Combustion (ton/yr)	**Cold Mill Operations - Pickle Line (ton/yr)	Surface Coating (ton/yr)	EAF Dust Silo 5c (ton/yr)	***Fuel Dispensing Operation (ton/yr)	Total Facility (ton/yr)
Acetaldehyde	---	---	9.14E-05	---	---	---	---	9.1E-05
Acrolein	---	---	2.86E-05	---	---	---	---	2.9E-05
Benzene	---	5.33E-03	2.81E-03	---	6.85E-04	---	---	8.8E-03
Dichlorobenzene	---	3.05E-03	---	---	3.92E-04	---	---	3.4E-03
Ethyl Benzene	---	---	---	---	48.18	---	---	4.8E+01
Formaldehyde	---	0.19	2.86E-04	---	0.58	---	---	7.7E-01
Glycol Ethers*	---	---	---	---	635.91	---	---	6.4E+02
Isophorone	---	---	---	---	48.54	---	---	4.9E+01
Naphthalene	---	1.55E-03	---	---	91.87	---	---	9.2E+01
Toluene	---	8.63E-03	1.02E-03	---	1.11E-03	---	---	1.1E-02
1,2,4-Trimethylbenzene	---	---	---	---	455.77	---	---	4.6E+02
Xylene	---	---	7.00E-04	---	187.60	---	---	1.9E+02
Arsenic	1.09E-02	---	---	---	---	2.74E-04	---	1.1E-02
Beryllium	4.91E-04	---	---	---	---	1.24E-05	---	5.0E-04
Cadmium	8.76E-03	2.79E-03	---	---	3.59E-04	2.21E-04	---	1.2E-02
Chromium	6.13E-03	3.56E-03	---	---	4.57E-04	1.55E-04	---	1.0E-02
Hydrochloric Acid	---	---	---	1.40	---	---	---	1.4E+00
Manganese	5.26E-01	9.65E-04	---	---	1.24E-04	1.33E-02	---	5.4E-01
Nickel	9.64E-03	5.33E-03	---	---	6.85E-04	2.43E-04	---	1.6E-02
PAH/POM	---	---	7.69E-04	---	---	---	---	7.7E-04
Totals (ton/yr)	0.56	0.22	0.01	1.40	1468.45	0.01	0.01	**1470.67**

*Largest individual HAP.
**These are limited values. There are no uncontrolled emission calculations for this operation.
***Speciated HAP emission are not avaliable for this operaiton only total.

Appendix A: Emission Calculations
Electric Arc Furnaces (EAF)

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00076
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

			Pollutant									
			SO2	NO_x	VOC	CO	Pb	HG	Pb	HG	Pb	HG
Limited Emission Factor (lb/ton)			0.2	0.51	0.13	2.0	0.323	1.10E-04	Controlled Emissions	Controlled Emissions	Limited Emissions	Limited Emissions
Unit	Throughput (tons/hr)	Control Efficiency (%)	Potential Emission (tons/yr)						(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
EAF #1 South	200	99.85%	175.2	446.76	113.88	1,752.0	282.95	0.10	0.42	0.10	0.83	0.10
EAF #2 North	200	99.85%	175.2	446.76	113.88	1,752.0	282.95	0.10	0.42			
Total			**350.4**	**893.52**	**227.76**	**3,504.0**	**565.90**	**0.19**	**0.85**	**0.10**	**0.83**	**0.10**

Methodology:

Potential Emissions (ton/yr) = Limited Emission Factor (lb/ton) * Throughput (tons/hr) * 8760 (hr/yr) * 1 ton / 2000 lb

Controlled Emissions (tons/yr) = Potential Emissions (ton/yr) * (1 - Control Efficiency (%))

Note: Lead and Mercury are regulated under 326 IAC 2-2 and are not included in the total for HAPs.

Unit	Flow Rate	PM outlet Grain loading	PM10 outlet Grain loading	Control Efficiency	Uncontrolled PM	Uncontrolled PM10	Controlled PM	Controlled PM10	Limited PM	Limited PM10
	(dscfm)	(gr/dscf)	(gr/dscf)	(%)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)
EAF #1 South	1,300,000	0.0018	0.0052	99.85%	58,566.86	169,193.14	9.11	41.61	88.038	253.60
EAF #2 North	992,821	0.0018	0.0052	99.85%	44,728.00	129,214.23	8.76	30.53	67.014	194.03
				Total	**103,294.86**	**298,407.38**	**17.87**	**72.14**	**155.05**	**447.64**

Methodology:

Controlled Emissions (ton/yr) are based on test data from 7/27/2010

Uncontrolled Emissions (ton/yr) = Flow rate (dscfm) x Grain Loading (gr/dscf) x 1 lb/7000 grains x 60 minutes/hr x 8760 hr/yr x 1 ton/2000 lb / (1- Control Efficiency (%))

			Pollutant					
			Arsenic	Beryllium	Cadmium	Chromium	Magnanese	Nickel
Limited Emission Factor (lb/ton)			6.20E-06	2.80E-07	5.00E-06	3.50E-06	3.00E-04	5.50E-06
Unit	Throughput (tons/hr)	Control Efficiency (%)	Potential Emission (tons/yr)					
EAF #1 South	200	99.85%	5.43E-03	2.45E-04	4.38E-03	3.07E-03	0.26	4.82E-03
EAF #2 North	200	99.85%	5.43E-03	2.45E-04	4.38E-03	3.07E-03	0.26	4.82E-03
Total			**0.01**	**4.91E-04**	**0.01**	**0.01**	**0.53**	**0.01**

			Pollutant					
			Arsenic	Beryllium	Cadmium	Chromium	Magnanese	Nickel
Limited Emission Factor (lb/ton)			6.20E-06	2.80E-07	5.00E-06	3.50E-06	3.00E-04	5.50E-06
Unit	Throughput (tons/hr)	Control Efficiency (%)	Controlled Potential Emission (tons/yr)					
EAF #1 South	200	99.85%	8.15E-06	3.68E-07	6.57E-06	4.60E-06	3.94E-04	7.23E-06
EAF #2 North	200	99.85%	8.15E-06	3.68E-07	6.57E-06	4.60E-06	3.94E-04	7.23E-06
Total			**1.63E-05**	**7.36E-07**	**1.31E-05**	**9.20E-06**	**7.88E-04**	**1.45E-05**

Methodology:

Potential Emissions (ton/yr) = AP-42 Table 12.5.1-9 Emission Factor (lb/ton) * Throughput (tons/hr) * 8760 (hr/yr) * 1 ton / 2000 lb

Controlled Emissions (tons/yr) = Potential Emissions (ton/yr) * (1 - Control Efficiency (%))

Note: There is an AP-42 emission factor for Fluoride which was not included here because this source does not use Fluorspar which is the source of the Fluoride emissions at other mini-mills.

Appendix A: Emission Calculations
Ladle Metallurgical Stations (LMS)

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00076
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

Stack Test Data - Controlled Emissions		
Year	Pollutant	
	PM/PM10	
	(lb/hr)	(ton/yr)
2008		
Run 1	1.24	5.45
Run 2	0.23	1.02
Run 3	0.22	0.98
Average of 3 runs	0.57	**2.48**

Unit	Flow Rate	PM/PM10 outlet Grain loading	Control Efficiency	Controlled PM/PM10	Uncontrolled PM/PM10	Limited PM/PM10
	(dscfm)	(gr/dscf)	(%)	(ton/yr)	(ton/yr)	(ton/yr)
Ladle Metallurgical Stations (LMS)	200,000	0.0032	99%	24.03	2,402.74	24.05
			Total	**24.03**	**2,402.74**	**24.05**

Methodology:

Outlet grain loading based on BACT limit.

PM_{10} assumed to be the equal to PM.

Controlled Emissions (ton/yr) = Flow rate (dscfm) x Grain Loading (gr/dscf) x 1 lb/7000 grains x 60 minutes/hr x 8760 hr/yr x 1 ton/2000 lb

Uncontrolled Emissions (ton/yr) = Controlled Emissions (ton/yr) / (1 - Control Efficiency (%))

Limited Emissions (ton/yr) = Permit limit (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Steel Dynamics, Inc. - Flat Roll Division

Butler, IN

Ladle Metallurgical Stations (LMS) Continued

T033-30061-00043

		Pollutant				
		PM2.5	SO2	NO_x	VOC	CO
Emission Factor (lb/ton)		0.14	0.035	0.024	0.0033	0.025
Unit	Throughput (tons/hr)	Potential Emission (tons/yr)				
Ladle Metallurgical Station (South)	200	122.64	30.66	21.02	2.89	21.90
Ladle Metallurgical Station (North)	200	122.64	30.66	21.02	2.89	21.90
Total		**245.28**	**61.32**	**42.05**	**5.78**	**43.80**

Methodology:

Emission Factors from AP-42 Chapter 12.5.1.

Potential Emissions (ton/yr) = Emission Factor (lb/ton) * Throughput (tons/hr) * 8760 (hr/yr) * 1 ton / 2000 lb

		Pollutant				
		PM2.5	SO2	NO_x	VOC	CO
Limited Emission Factor (lb/ton)		NA	**	0.025	0.0082	0.100
Unit	Throughput (tons/hr)	Potential Emission (tons/yr)				
Ladle Metallurgical Station (Total)	400	--	**	43.80	14.37	175.20
Total		**--**	****	**43.80**	**14.37**	**175.20**

**Limited SO2 emissions are combined with the EAF limited emissions.

Methodology:

Limited Emission Factors from permit.

Limited Potential Emissions (ton/yr) = Limited Emission Factor (lb/ton) * Throughput (tons/hr) * 8760 (hr/yr) * 1 ton / 2000 lb

Appendix A: Emission Calculations
Natural Gas Combustion (Less than 100 MMBtu/hr)

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00076
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

*NO_X Manufacturer Guarantee Emission Factors (lb/MMCF)	*NOx PSD Permit Limits (lb/MMBtu)		(lb/MMCF)
	0.17	0.1	200
	Tunnel Furnace #1	Tunnel Furnace # 2	Galv 1 - Preheat & Radiant
81			Galv 2- Preheat & Radiant
Pickle Line Boilers			Annealing Furnaces

			Pollutant						
			PM**	PM10**	PM2.5**	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF			1.9	7.6	7.6	0.6	100.0	5.5	84.0
							**see below		
Emissions Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emissions (tons/yr)						
Tunnel Furnace No. 1	117.9	1012.553	0.962	3.848	3.848	0.304	87.788	2.785	42.527
Tunnel Furnace No. 2	92	790.118	0.751	3.002	3.002	0.237	40.296	2.173	33.185
Ladle Preheaters (5)	50	429.412	0.408	1.632	1.632	0.129	21.471	1.181	18.035
Ladle Dryout (2)	20	171.765	0.163	0.653	0.653	0.052	8.588	0.472	7.214
Tundish Dryers (3)	4.5	38.647	0.037	0.147	0.147	0.012	1.932	0.106	1.623
Tundish Preheaters (2)	18.8	161.459	0.153	0.614	0.614	0.048	8.073	0.444	6.781
Hot Band Galvanizing Line (Galv 1)*	54.5	468.059	0.445	1.779	1.779	0.140	46.806	1.287	19.658
Hot Band Galvanizing Line (Galv 1)	31.2	267.953	0.255	1.018	1.018	0.080	13.398	0.737	11.254
Cold Rolled Galvanizing Line (Galv 2)*	77.3	663.871	0.631	2.523	2.523	0.199	66.387	1.826	27.883
Annealing Furnaces (16)	64	549.647	0.522	2.089	2.089	0.165	54.965	1.512	23.085
Pickle Line Boiler No. 1*	20.4	175.200	0.166	0.666	0.666	0.053	7.096	0.482	7.358
Pickle Line Boiler No. 2*	20.4	175.200	0.166	0.666	0.666	0.053	7.096	0.482	7.358
Pickle Line Boiler No. 3*	20.4	175.200	0.166	0.666	0.666	0.053	7.096	0.482	7.358
Total Unlimited			4.83	19.30	19.30	1.52	370.99	13.97	213.32
Total Limited***			4.66	18.63	18.63	1.47	363.89	13.49	205.96

**PM emission factor is filterable PM only. PM10 and PM2.5 emission factors are filterable and condensable PM combined.

*** Total Limited Emissions based on PSD limit that only 2 of the 3 Pickle Line Boilers can be in operation at a time.

Steel Dynamics, Inc. - Flat Roll Division
Butler, IN

Natural Gas Combustion (Less than 100 MMBtu/hr) Continued

033-34896-00043

			HAPs - Organics				
			Benzene	Dichlorobenzene	Formaldehyde	Naphthalene	Toluene
Emission Factor in lb/MMCF			2.1E-03	1.2E-03	7.5E-02	6.1E-04	3.4E-03
Emissions Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emissions (tons/yr)				
Tunnel Furnace (heating zone)	92	790.118	8.3E-04	4.7E-04	3.0E-02	2.4E-04	1.3E-03
Tunnel Furnace (holding zone)	25.9	222.435	2.3E-04	1.3E-04	8.3E-03	6.8E-05	3.8E-04
Tunnel Furnace	92	790.118	8.3E-04	4.7E-04	3.0E-02	2.4E-04	1.3E-03
Ladle Preheaters (5)	50	429.412	4.5E-04	2.6E-04	1.6E-02	1.3E-04	7.3E-04
Ladle Dryout (2)	20	171.765	1.8E-04	1.0E-04	6.4E-03	5.2E-05	2.9E-04
Tundish Dryers (3)	4.5	38.647	4.1E-05	2.3E-05	1.4E-03	1.2E-05	6.6E-05
Tundish Preheaters (2)	18.8	161.459	1.7E-04	9.7E-05	6.1E-03	4.9E-05	2.7E-04
Hot Band Galvanizing Line (Galv 1)	85.7	736.012	7.7E-04	4.4E-04	2.8E-02	2.2E-04	1.3E-03
Cold Rolled Galvanizing Line (Galv 2)	77.3	663.871	7.0E-04	4.0E-04	2.5E-02	2.0E-04	1.1E-03
Annealing Furnaces (16)	64	549.647	5.8E-04	3.3E-04	2.1E-02	1.7E-04	9.3E-04
Pickle Line Boiler No. 1	20.4	175.200	1.8E-04	1.1E-04	6.6E-03	5.3E-05	3.0E-04
Pickle Line Boiler No. 2	20.4	175.200	1.8E-04	1.1E-04	6.6E-03	5.3E-05	3.0E-04
Pickle Line Boiler No. 3	20.4	175.200	1.8E-04	1.1E-04	6.6E-03	5.3E-05	3.0E-04
Total Unlimited			5.3E-03	3.0E-03	1.9E-01	1.5E-03	8.6E-03
Total Limited			5.1E-03	2.9E-03	1.8E-01	1.5E-03	8.3E-03

			HAPs - Metals					
			Lead*	Cadmium	Chromium	Manganese	Nickel	**Total HAPs (Organics+Metals)**
Emission Factor in lb/MMCF			5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Emissions Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emissions (tons/yr)					
Tunnel Furnace (heating zone)	92	790.118	2.0E-04	4.3E-04	5.5E-04	1.5E-04	8.3E-04	3.4E-02
Tunnel Furnace (holding zone)	25.9	222.435	5.6E-05	1.2E-04	1.6E-04	4.2E-05	2.3E-04	9.7E-03
Tunnel Furnace	92	790.118	2.0E-04	4.3E-04	5.5E-04	1.5E-04	8.3E-04	3.4E-02
Ladle Preheaters (5)	50	429.412	1.1E-04	2.4E-04	3.0E-04	8.2E-05	4.5E-04	1.9E-02
Ladle Dryout (2)	20	171.765	4.3E-05	9.4E-05	1.2E-04	3.3E-05	1.8E-04	7.5E-03
Tundish Dryers (3)	4.5	38.647	9.7E-06	2.1E-05	2.7E-05	7.3E-06	4.1E-05	1.7E-03
Tundish Preheaters (2)	18.8	161.459	4.0E-05	8.9E-05	1.1E-04	3.1E-05	1.7E-04	7.0E-03
Hot Band Galvanizing Line (Galv 1)	85.7	736.012	1.8E-04	4.0E-04	5.2E-04	1.4E-04	7.7E-04	3.2E-02
Cold Rolled Galvanizing Line (Galv 2)	77.3	663.871	1.7E-04	3.7E-04	4.6E-04	1.3E-04	7.0E-04	2.9E-02
Annealing Furnaces (16)	64	549.647	1.4E-04	3.0E-04	3.8E-04	1.0E-04	5.8E-04	2.4E-02
Pickle Line Boiler No. 1	20.4	175.200	4.4E-05	9.6E-05	1.2E-04	3.3E-05	1.8E-04	7.6E-03
Pickle Line Boiler No. 2	20.4	175.200	4.4E-05	9.6E-05	1.2E-04	3.3E-05	1.8E-04	7.6E-03
Pickle Line Boiler No. 3	20.4	175.200	4.4E-05	9.6E-05	1.2E-04	3.3E-05	1.8E-04	7.6E-03
Total Unlimited			1.3E-03	2.8E-03	3.6E-03	9.7E-04	5.3E-03	2.2E-01
Total Limited			1.2E-03	2.7E-03	3.4E-03	9.3E-04	5.1E-03	2.1E-01

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
*Lead is regulated under 326 IAC 2-2 and is not included in the total for HAPs.
Note: A review of EPA's SPECIATE 4.3 database for HAPs associated with natural gas combustion reveals that n-hexane (the HAP form of hexane) is not emitted as part of natural gas combustion. Therefore, the AP-42 emission factor for hexane does not include any n-hexane and was not included when calculating HAPs from natural gas combustion.

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Heating Value of Natural Gas is assumed to be 1020 MMBtu/MMCF
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) * 8,760 hrs/yr * 1 MMCF/1,020 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (Supplement D 3/98)
Potential Emission (tons/yr) = Throughput (MMCF/yr) * Emission Factor (lb/MMCF) * (1 ton/2,000 lb)

Steel Dynamics, Inc. - Flat Roll Division
Butler, IN

Natural Gas Combustion (Less than 100 MMBtu/hr) Continued

T033-30061-00043

			Greenhouse Gas				
			CO2	CH4	N2O	GHG	CO2e
Emission Factor in lb/MMcf			120000	2.3	2.2		
Emissions Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)	Potential Emission (tons/yr)			Summed PTE (tons/yr)	Total (tons/yr)
Tunnel Furnace (heating zone)	92	790.118	47,407.06	0.91	0.87	47,409	47,689
Tunnel Furnace (holding zone)	25.9	222.435	13,346.12	0.26	0.24	13,347	13,425
Tunnel Furnace	92	790.118	47,407.06	0.91	0.87	47,409	47,689
Ladle Preheaters (5)	50	429.412	25,764.71	0.49	0.47	25,766	25,918
Ladle Dryout (2)	20	171.765	10,305.88	0.20	0.19	10,306	10,367
Tundish Dryers (3)	4.5	38.647	2,318.82	0.04	0.04	2,319	2,333
Tundish Preheaters (2)	18.8	161.459	9,687.53	0.19	0.18	9,688	9,745
Hot Band Galvanizing Line (Galv 1)	85.7	736.012	44,160.71	0.85	0.81	44,162	44,423
Cold Rolled Galvanizing Line (Galv 2)	77.3	663.871	39,832.24	0.76	0.73	39,834	40,069
Annealing Furnaces (16)	64	549.647	32,978.82	0.63	0.60	32,980	33,175
Pickle Line Boiler No. 1	20.4	175.200	10,512.00	0.20	0.19	10,512	10,574
Pickle Line Boiler No. 2	20.4	175.200	10,512.00	0.20	0.19	10,512	10,574
Pickle Line Boiler No. 3	20.4	175.200	10,512.00	0.20	0.19	10,512	10,574
Total Unlimited			304,744.94	5.84	5.59	304,756	306,556
Total Limited			294,232.94	5.64	5.39	294,244	295,981

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low NOx burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

Appendix A: Emission Calculations
Large Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (>600 HP)
Emergency Diesel Generators

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00076
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity (Kw/hr)	4250.00
Heat Input Capacity (MMBtu/hr)	14.5
Maximum Hours Operated per Year	500
Potential Throughput (MMBtu/yr)	7,251
Sulfur Content (S) of Fuel (% by weight)	0.050

750	Kw/hr	CM Watertreat
1500	Kw/hr	Main Watertreat (East)
1500	Kw/hr	Main Watertreat (West)
500	Kw/hr	Melt Shop (Door 26)
4250	Kw/hr	Total

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.10	0.0573	0.0556	0.051 *(1.01S)*	3.2 **see below	0.09	0.85
Potential Emission in tons/yr	0.36	0.21	0.20	0.18	11.60	0.33	3.08

*PM emission factor is from AP-42 Section 3.4, Table 3.4-1. The emission factors for PM10 and PM2.5 are from AP-42 Section 3.4, Table 3.4-2. The PM10 emission factor is the sum of filterable PM10 and condensable particulate. The PM2.5 emission factor is the sum of filterable particulate less than 3 um and condensable particulate.
**NOx emissions: uncontrolled = 3.2 lb/MMBtu, controlled with ignition timing retard = 1.9 lb/MMBtu

Hazardous Air Pollutants (HAPs)

	Pollutant						
	Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/MMBtu	7.76E-04	2.81E-04	1.93E-04	7.89E-05	2.52E-05	7.88E-06	2.12E-04
Potential Emission in tons/yr	2.81E-03	1.02E-03	7.00E-04	2.86E-04	9.14E-05	2.86E-05	7.69E-04

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

Potential Emission of Total HAPs (tons/yr)	**5.71E-03**

Green House Gas Emissions (GHG)

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/MMBtu	1.65E+02	8.10E-03	1.32E-03
Potential Emission in tons/yr	5.98E+02	2.94E-02	4.80E-03

Summed Potential Emissions in tons/yr	**5.98E+02**
CO2e Total in tons/yr	**6.00E+02**

Methodology
1 Kw-hr = 0.003412142 MMBtu/hr
Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1 , 3.4-2, 3.4-3, and 3.4-4.
CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Potential Throughput (MMBtu/yr) = [Heat Input Capacity (MMBtu/hr)] * [Maximum Hours Operated per Year]
Potential Emission (tons/yr) = [Potential Throughput (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2,000 lb/ton]
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

Appendix A: Emission Calculations
Coll Mill Operations - Pickling Line

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00076
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

$$Q_{std} = \frac{Q_a P_s (17.64)(1-B_{wo})}{T_s + 460}$$

Where:
Q_{std} = volumetric flow rate at dry, standard conditions
Q_a = Absolute stack gas pressure (29.12 in Hg)
P_s = Stack gas moisture, % (12)
B_{wo} = Average absolute stack gas temperature (120°F)
17.64 = conversion factor (530°R / 30.04 in Hg)

$$Q_{std} = \frac{(17{,}630\ ft^3/min)(29.12)(17.64)(1-0.09)}{(113 + 460)} = 14{,}382.32 \text{ dscfm}$$

Unit	Flow Rate	PM/PM10/PM2.5 outlet Grain loading	Control Efficiency	Controlled PM/PM10/PM2.5	Uncontrolled PM/PM10/PM2.5
	(dscfm)	(gr/dscf)	(%)	(ton/yr)	(ton/yr)
Pickling Line	14,382	0.01	99%	5.40	539.95
Pickling Line Scale Breaker	10,600	0.003	99%	1.19	119.39
Total				**6.59**	**659.34**

HCL: From vendor, the emission rate is 0.04 g/sec. This is equivalent to 0.32 lb/hr and 1.4 tpy. Stack tests have shown compliance with these guarantees.

Methodology:

Outlet grain loading based on BACT limit.

PM_{10} and $PM_{2.5}$ assumed to be the equal to PM.

Control efficiency from application Form Q-1 for CP 003-2625-00043.

Controlled Emissions (ton/yr) = Flow rate (dscfm) x Grain Loading (gr/dscf) x 1 lb/7000 grains x 60 minutes/hr x 8760 hr/yr x 1 ton/2000 lb

Uncontrolled Emissions (ton/yr) = Controlled Emissions (ton/yr) / (1 - Control Efficiency (%))

Appendix A: Emission Calculations
Reversing Mill

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00076
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

Unit	Flow Rate	PM/PM10/PM2.5 outlet Grain loading	Control Efficiency	Controlled PM/PM10/PM2.5	Uncontrolled PM/PM10/PM2.5	Limited PM/PM10
	(dscfm)	(gr/dscf)	(%)	(ton/yr)	(ton/yr)	(ton/yr)
Reversing Mill	84,000	0.01	99%	31.54	3,153.60	31.54
			Total	**31.54**	**3,153.60**	**31.54**

Methodology:

Outlet grain loading based on BACT limit.

PM_{10} and $PM_{2.5}$ assumed to be the equal to PM.

Control efficiency from application Form Q-1 for CP 003-2625-00043.

Controlled Emissions (ton/yr) = Flow rate (dscfm) x Grain Loading (gr/dscf) x 1 lb/7000 grains x 60 minutes/hr x 8760 hr/yr x 1 ton/2000 lb

Uncontrolled Emissions (ton/yr) = Controlled Emissions (ton/yr) / (1 - Control Efficiency (%))

Limited Emissions (ton/yr) = Permit limit (lb/hr) * 8760 (hr/yr) / 2000 (lb/ton)

Appendix A: Emissions Calculations
VOC
From Surface Coating Operations

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00076
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

2-side, 2-coat coil coating line
Potential to Emit before Control

Material	Gallons per year	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Primer	637523	3.71	270.00	6480.03	1182.61
Poly-White	739922	3.55	299.85	7196.50	1313.36
Poly-Color	369961	3.63	153.31	3679.34	671.48
SMP-White	221977	3.89	98.57	2365.73	431.75
SMP-Color	73992	3.82	32.27	774.38	141.32
Kynar-White	44395	3.99	20.22	485.30	88.57
Kynar-Color	29597	4.39	14.83	355.97	64.97

Potential to Emit VOC emissions before control **3894.05 tons per year**

Control efficiency of the thermal oxidizer = 99%
Potential to Emit after Control

Material	Gallons per year	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Primer	637523	3.71	2.70	64.80	11.83
Poly-White	739922	3.55	3.00	71.97	13.13
Poly-Color	369961	3.63	1.53	36.79	6.71
SMP-White	221977	3.89	0.99	23.66	4.32
SMP-Color	73992	3.82	0.32	7.74	1.41
Kynar-White	44395	3.99	0.20	4.85	0.89
Kynar-Color	29597	4.39	0.15	3.56	0.65

Potential to Emit VOC emissions after control **38.94 tons per year**

Pounds of VOC per gallon of Solids = Pounds of VOC per Gallon coating (lb/gal)/[1-(Pounds of VOC per Gallon coating (lb/gal)/7.36 (density of VOC)]
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Appendix A: Emissions Calculations
HAPs
From Surface Coating Operations

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address City IN Zip: 4500 County Road 59, Butler, IN 46721
Part 70 Operating Permit Renewal No.: T033-30061-00043
Reviewer: Julie Alexander

Material		Density (Lb/Gal)	Gallons of Material (gal/year)	Weight % Xylene	Weight % 2,4-Trimethylbenz	Weight % Ethylbenzene	Weight % Naphthalene	Weight % Isophorone	Weight % Glycol Ethers	Weight % Formaldehyde	Xylene Emissions (ton/yr)	1,2,4-Trimethylbenzene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Naphthalene Emissions (ton/yr)	Isophorone Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	
Primer	45Y54	11.44	637,523	4.20%	3.40%	1.00%	1.20%	0.00%	5.70%	0.00%	153.16	123.99	36.47	43.76	0.00	207.86	0.00	
Finishing	Poly-White	11.51	739,922	0.00%	6.29%	0.00%	0.00%	0.00%	5.44%	0.00%	0.00	267.84	0.00	0.00	0.00	231.65	0.00	
Finishing	Poly-Color	9.35	369,961	0.00%	0.00%	0.30%	2.20%	0.00%	0.00%	0.00%	0.00	0.00	5.19	38.05	0.00	0.00	0.00	
Finishing	SMP-White	10.42	221,977	1.03%	4.74%	0.14%	0.00%	0.00%	13.51%	0.00%	11.91	54.82	1.62	0.00	0.00	156.24	0.00	
Finishing	SMP-Color	9.48	73,992	1.10%	2.60%	0.30%	2.00%	0.00%	1.90%	0.00%	3.86	9.12	1.05	7.01	0.00	6.66	0.00	
Finishing	Kynar-White	11.51	44,395	6.44%	0.00%	1.51%	0.00%	19.00%	4.50%	0.00%	16.45	0.00	3.86	0.00	48.54	11.50	0.00	
Finishing	Kynar-Color	9.35	29,597	1.60%	0.00%	0.00%	2.20%	0.00%	15.90%	0.40%	2.21	0.00	0.00	3.04	0.00	22.00	0.55	
																		Total HAPs
										Total Potential Emissions	**187.60**	**455.77**	**48.18**	**91.87**	**48.54**	**635.91**	**0.55**	**1468.42**
										Controlled Emissions	**1.88**	**4.56**	**0.48**	**0.92**	**0.49**	**6.36**	**0.01**	**14.68**
										Limited Emissions								**0.00**

METHODOLOGY
Control Efficiency = 99% per SSM No. 033-15836-00043
HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Two curing ovens with a combined 16 MMBtu/hr and one 60 MMBtu/hr Thermal Oxidizer
Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address City IN Zip: 4500 County Road 59, Butler, IN 46721
Part 70 Operating Permit Renewal No.: T033-30061-00043
Reviewer: Julie Alexander

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
76.0	652.7

Pollutant	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.6	2.5	2.5	0.2	32.6	1.8	27.4
Controlled Emission in tons/yr	0.6	2.5	2.5	0.2	32.6	0.02	0.27
(Control Efficiency)						(99%)	(99%)

*PM emission factor is filterable PM only. PM10 and PM2.5 emission factor is filterable and condensable PM10 combined.

Curing ovens and thermal oxidizer are controlled for VOC and CO.

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

	HAPs - Organics				
	Benzene	Dichlorobenz	Formaldehyde	Naphthalene	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	6.1E-04	3.4E-03
Potential Emission in tons/yr	6.853E-04	3.916E-04	2.448E-02	1.991E-04	1.110E-03

	HAPs - Metals				
	Lead*	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.632E-04	3.590E-04	4.569E-04	1.240E-04	6.853E-04

Total **0.03**

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
*Lead is regulated under 326 IAC 2-2 and is not included in the total for HAPs.
Note: A review of EPA's SPECIATE 4.3 database for HAPs associated with natural gas combustion reveals that n-hexane (the HAP form of hexane) is not emitted as part of natural gas combustion. Therefore, the AP-42 emission factor for hexane does not include any n-hexane and was not included when calculating HAPs from natural gas combustion.

Steel Dynamics, Inc. - Flat Roll Division
Butler, IN

Surface Coating Combustion Continued

T033-30061-00043

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120000	2.3	2.2
Potential Emission in tons/yr	39,162	0.75	0.72
Summed Potential Emissions in tons/yr	39,164		
CO2e Total in tons/yr	39,395		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low NOx burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

Summary	Pollutant							
Uncontrolled	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO	CO2e
Potential Emission in tons/yr	0.62	2.48	2.48	0.20	32.64	3895.84	27.41	39,395

*PM emission factor is filterable PM only. PM10 and PM2.5 emission factor is filterable and condensable PM10 combined.

Summary	Pollutant							
Limited	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO	CO2e
Potential Emission in tons/yr	0.62	2.48	2.48	0.20	32.64	38.96	0.27	39,395

*PM emission factor is filterable PM only. PM10 and PM2.5 emission factor is filterable and condensable PM10 combined.

HAPs	Uncontrolled	Controlled	Limited
	tpy	tpy	tpy
1,2,4-Trimethylbenzene	455.77	4.56	4.56
ethylbenzene	48.18	0.48	0.48
Xylene	187.60	1.88	1.88
Naphthalene	91.87	0.92	0.92
Glycol Ethers	635.91	6.36	6.36
Formaldehyde	0.58	0.03	0.03
Isophorone	48.54	0.49	0.49
Benzene	6.853E-04	6.85E-04	6.85E-04
Dichlorobenzene	3.916E-04	3.92E-04	3.92E-04
Toluene	1.110E-03	1.11E-03	1.11E-03
Lead	1.632E-04	1.63E-04	1.63E-04
Cadmium	3.590E-04	3.59E-04	3.59E-04
Chromium	4.569E-04	4.57E-04	4.57E-04
Manganese	1.240E-04	1.24E-04	1.24E-04
Nickel	6.853E-04	6.85E-04	6.85E-04
Total	**1468.45**	**14.71**	**14.60**

Appendix A: Emission Calculations
Storage Silos

Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00076
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

Unit	Flow Rate	PM/PM10/PM2.5 outlet Grain loading	Control Efficiency	Controlled PM/PM10/PM2.5	Uncontrolled PM/PM10/PM2.5
	(dscfm)	(gr/dscf)	(%)	(ton/yr)	(ton/yr)
EAF Dust Silo 5c	1,200	0.01	99%	0.45	45.05
			Total	**0.45**	**45.05**

Methodology:

Outlet grain loading based on BACT limit.

PM_{10} and $PM_{2.5}$ assumed to be the equal to PM.

Controlled Emissions (ton/yr) = Flow rate (dscfm) x Grain Loading (gr/dscf) x 1 lb/7000 grains x 60 minutes/hr x 8760 hr/yr x 1 ton/2000 lb

Uncontrolled Emissions (ton/yr) = Controlled Emissions (ton/yr) / (1 - Control Efficiency (%))

HAP Emissions (tpy)				
Pollutant	**EF (HAP Fraction of Total PM)**	**EF (lb/ton)**	**Uncontrolled**	**Controlled**
Lead*	--	0.323	0.01	7.28E-05
Arsenic	6.08E-04	--	0.03	2.74E-04
Beryllium	2.75E-05	--	1.24E-03	1.24E-05
Cadmium	4.90E-04	--	0.02	2.21E-04
Chromium	3.43E-04	--	0.02	1.55E-04
Manganese	2.94E-02	--	1.33	1.33E-02
Mercury*	5.60E-03	--	0.25	2.52E-03
Nickel	5.39E-04	--	0.02	2.43E-04
			1.42	**0.01**

NA = not avaliable

Methodology

Uncontrolled Emissions (tpy) = EF (%) x PTE of PM/PM10/PM2.5 Before Control (tpy) or EF (lb/ton) x PTE of PM/PM10/PM2.5 Before Control (tpy)

Controlled Emissions (tpy) = EF (%) x PTE of PM/PM10/PM2.5 After Control (tpy) or EF (lb/ton) x PTE of PM/PM10/PM2.5 After Control (tpy)

EF (% of Total PM) = HAP Emission (tpy) / PM Emissions (tpy)

*Lead and Mercury are regulated under 326 IAC 2-2 and are not included in the total for HAPs.

Appendix A: Emissions Calculations
Fuel Dispensing Operations
Company Name: Steel Dynamics, Inc. - Flat Roll Division
Address: 4500 County Road 59, Butler, IN 46721
Part 70 Renewal No.: T033-30061-00076
Administrative Amendment No.: 033-34896-00043
Reviewer: Julie Alexander
Date: September 22, 2014

1.0 Fuel Dispensing Operations PTE

> This worksheet documents potential VOC and HAP emissions from storage tanks and vehicle refueling associated with the gasoline dispensing operation at the Butler Facility.

1.1 Storage Tanks Uncontrolled PTE

> Potential VOC and HAP emissions are quantified using EPA's TANKS v4.0.9d program for calculating loading and standing losses from storage tanks.

EUID	Emission Unit Description	Volume (gal)	Max Annual Throughput (gal/yr)	TANKS v4.0.9d VOC Emissions (lb/yr)	TANKS v4.0.9d VOC Emissions (tpy)	TANKS v4.0.9d HAP Emissions (lb/yr)	TANKS v4.0.9d HAP Emissions (tpy)
T2	Gasoline Storage Tank #2	2,000	50,000	986.50	0.49	12.04	0.01
T1	Diesel Storage Tank #1	2,000	33,333	0.74	3.70E-04	0.06	3.00E-05
T3	Gasoline Storage Tank #3	5,000	33,333	1,361.52	6.81E-01	0.10	5.00E-05
T4	Diesel Storage Tank #4	5,000	33,333	1.13	5.65E-04	0.10	5.00E-05

1.2 Vehicle Refueling Uncontrolled PTE

> Potential VOC emissions from vehicle refueling with gasoline are based on AP-42, Table 5.2-7 emission factors for evaporative emissions from gasoline service station operations.

> Potential VOC emissions from vehicle refueling with diesel are based on the AP-42, Table 5.2-1 saturation factor for calculating petroleum liquid loading losses (splash loading assumed) and the following equation from AP-42, Section 5.2:
Loading Loss (lb/Mgal) = 12.46 * Saturation Factor * True Vapor Pressure at 60°F (psia) * Vapor Molecular Weight (lb/lb-mole) / Bulk Liquid Temperature (°R)

> Diesel true vapor pressure at 60°F and vapor molecular weight per AP-42, Table 7.1-2.

> Bulk liquid temperature of diesel assumed. Temperature in °R calculated based on the following equation:
Bulk Liquid Temperature (°R) = Bulk Liquid Temperature (°F) + 460

> Annual HAP emissions for vehicle gasoline and diesel refueling estimated based on ratio of HAP to VOC emissions for Gasoline Tank #1 and Diesel Tank #1, respectively.

EUID	Emission Unit Description	Max Annual Throughput (Mgal/yr)	VOC Displacement Losses (lb/Mgal)	VOC Spillage Losses (lb/Mgal)	Annual VOC Emissions (tpy)	Annual HAP Emissions (tpy)	Basis
F2, F3	Gasoline Dispensing	83	11.00	0.70	0.49	5.95E-03	AP-42, Table 5.2-7, Vehicle Refueling Operations (Stage II)

EUID	Emission Unit Description	Max Annual Throughput (Mgal/yr)	Saturation Factor	True Vapor Pressure at 60°F (psia)	Vapor Molecular Weight (lb/lb-mole)	Bulk Liquid Temperature (°F)	Bulk Liquid Temperature (°R)	Loading Loss (lb/Mgal)	Annual VOC Emissions (tpy)	Annual HAP Emissions (tpy)
F1, F4	Diesel Dispensing	67	1.45	0.0065	130	60	520	0.03	9.79E-04	7.93E-05

1.3 Project PTE Summary

> Total VOC and HAP emissions from the project are summarized below.

EUID	Emission Unit Description	Annual VOC Emissions (tpy)	Annual HAP Emissions (tpy)
T2	Gasoline Storage Tank #2	0.49	0.01
T1	Diesel Storage Tank #1	3.70E-04	3.00E-05
T3	Diesel Storage Tank #3	6.81E-01	5.00E-05
T4	Diesel Storage Tank #4	5.65E-04	5.00E-05
F2, F3	Gasoline Dispensing	0.49	5.95E-03
F1, F4	Diesel Dispensing	9.79E-04	7.93E-05
	Total PTE (tpy):	1.66	0.01

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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TO: Barry Smith
Steel Dynamics, Inc. – Flat Roll Division
4500 County Road 59
Butler, IN 46721

DATE: December 30, 2014

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Title V Administrative Amendment
033-34896-00043

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Jordan Breiner, Ops Mgr
Tony Schroeder, Trinity Consultants
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Mail Code 61-53

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2		Jordan Breiner Ops Mgr SDI- Steel Dynamics, Inc 4500 CR 59 Butler IN 46721 *(RO CAATS)*									
3		Mr. Steve Christman NISWMD 2320 W 800 S, P.O. Box 370 Ashley IN 46705 *(Affected Party)*									
4		DeKalb County Commissioners 100 South Main Street Auburn IN 46706 *(Local Official)*									
5		Ms. Diane Leroy 303 N. Jackson St. Auburn IN 46706 *(Affected Party)*									
6		Mr. Barry Fordanish R#3 1480 CR 66 Auburn IN 46706 *(Affected Party)*									
7		Dekalb County Health Department 220 E 7th St #110 Auburn IN 46706 *(Health Department)*									
8		Daniel & Sandy Trimmer 15021 Yellow River Road Columbia City IN 46725 *(Affected Party)*									
9		Brown & Sons Fuel Co. P.O. Box 665 Kendallville IN 46755 *(Affected Party)*									
10		Mr. Marty K. McCurdy 2550 County Road 27 Waterloo IN 46793 *(Affected Party)*									
11		Butler City Council and Mayors Office 215 S. Broadway St. Butler IN 46721 *(Local Official)*									
12		Ms. Camille Sears 502 W Lomita Ave Ojai CA 93023 *(Affected Party)*									
13		Tony Schroeder Trinity Consultants 7330 Woodland Drive, Suite 225 Indianapolis IN 46278 (Consultant)									
14		Tom Keller 4461 C.R. 59 Butler IN 46721 *(Affected Party)*									
15		DeKalb County Building Department 301 S Union St Auburn IN 46706 *(Local Official)*									

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