Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding a
Signficant Modification to a
Part 70 Operating Permit

for Dana Light Axle Products, LLC in Allen County

Significant Permit Modification No.: 003-37389-00003

The Indiana Department of Environmental Management (IDEM) has received an application from Dana Light Axle Products, LLC (Dana), located at 2100 West State Blvd., Fort Wayne, IN 46808, for a significant modification of its Part 70 Operating Permit, issued on May 29, 2013. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Dana to make certain changes at its existing source. On November 19, 2015, Dana applied to add one (1) natural gas-fired Generac emergency generator, five (5) dry milling machines, two (2) dry cut gear machines, 45 wet machining units, and a new coolant in the wet milling operation. Additionally, on July 6, 2016, Dana requested approval to construct 51 additional new wet machining units.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

A copy of the permit application and IDEM's preliminary findings are available at:

Allen County Public Library
200 East Berry
Fort Wayne, IN 46803

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SPM 003-37389-00003 in all correspondence.

Comments should be sent to:

Hannah L. Desrosiers
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 3-9327
Or dial directly: (317) 233-9327
Fax: (317)-232-6749 attn: Hannah Desrosiers
E-mail: hdesrosi@idem.in.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

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.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Ms. Hannah L. Desrosiers of my staff at the above address.

Nathan C. Bell, Section Chief
Permits Branch
Office of Air Quality

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Michael R. Pence
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Commissioner

DRAFT

Mr. Bob Cole
Dana Light Axle Products, LLC
2100 West State Blvd
Fort Wayne, IN 46808

Re: 003-37389-00003
Significant Permit Modification to
Part 70 Renewal No.: T003-32393-00003

Dear Mr. Cole:

Dana Light Axle Products, LLC was issued Part 70 Operating Permit Renewal No. T T003-32393-00003 on May 29, 2013, for a stationary axle manufacturing plant, located at 2100 West State Blvd., Fort Wayne, IN 46808. An application requesting changes to this permit was received on November 19, 2015 and July 6, 2016. Pursuant to the provisions of 326 IAC 2-7-12, a Significant Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

Please find attached the entire Part 70 Operating Permit as modified, including the following new attachment:

Attachment E: 40 CFR 60, Subpart JJJJ, NSPS for Stationary Spark Ignition Internal Combustion Engines

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 modification:

Attachment A: 40 CFR 60, Subpart Dc, NSPS for Small Industrial-Commercial-Institutional Steam Generating Units

Attachment B: 40 CFR 63, Subpart ZZZZ, NESHAPs for Stationary Reciprocating Internal Combustion Engines

Attachment C: 40 CFR 63, Subpart CCCCCC, NESHAPs for Source Category: Gasoline Dispensing Facilities

Attachment D: 40 CFR 63, Subpart WWWWWW, NESHAPs for Area Source Standards for Plating and Polishing Operations

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 Ms. Hannah L. Desrosiers, of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251 at 317-233-9327 or 1-800-451-6027, and ask for extension 3-9327.

Sincerely,

Nathan C. Bell, Section Chief
Permits Branch
Office of Air Quality

Attachments: Modified Permit and Technical Support Documents

cc: File - Allen County
Allen County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch

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DRAFT

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Dana Light Axle Products, LLC
2100 West State Blvd.
Fort Wayne, Indiana 46808

(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.: T003-32393-00003	
Issued by: Original Signed Nathan C. Bell, Section Chief Permits Branch Office of Air Quality	Issuance Date: May 29, 2013 Expiration Date: May 29, 2018

Significant Permit Modification No.: 003-37389-00003	
Issued by: Nathan C. Bell, Section Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date: May 29, 2018

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Attachment B: Stationary Reciprocating Internal Combustion Engines NESHAP [40 CFR 63, Subpart ZZZZ]

Attachment C: Gasoline Dispensing Facilities NESHAP [40 CFR 63, Subpart CCCCCC]

Attachment D: Area Source Plating and Polishing NESHAP [40 CFR 63, Subpart WWWWWW]

Attachment E: Stationary Spark Ignition Internal Combustion Engine NSPS [40 CFR 60, Subpart JJJJ]

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 through A.3 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 axle manufacturing plant.

Source Address:	2100 West State Blvd., Fort Wayne, Indiana 46808
General Source Phone Number:	(260) 494-9764
SIC Code:	3714 (Motor Vehicle Parts and Accessories)
County Location:	Allen
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) natural gas-fired boiler, identified as boiler 3, constructed in 1973, using No. 2 fuel oil as back-up fuel, with a maximum heat input capacity of 50.0 MMBtu per hour, exhausting at one (1) stack, identified as stack 1B.

(b) One (1) natural gas-fired boiler, identified as boiler 4, constructed in 1973, using No. 2 fuel oil as back-up fuel, with a maximum heat input capacity of 50.0 MMBtu per hour, exhausting at one (1) stack, identified as stack 2B.

(c) One (1) natural gas-fired boiler, identified as boiler 8, constructed in 1995, using No. 2 fuel oil as back-up fuel, with a maximum heat input capacity of 40.2 MMBtu per hour, exhausting at one (1) stack, identified as stack 6B. Under 40 CFR 60, Subpart Dc, this is considered an existing small industrial-commercial-institutional boiler.

(d) One (1) natural gas-fired boiler, identified as boiler 9, constructed in 1995, using No. 2 fuel oil as back-up fuel, with a maximum heat input capacity of 40.2 MMBtu per hour, exhausting at one (1) stack, identified as stack 7B. Under 40 CFR 60, Subpart Dc, this is considered an existing small industrial-commercial-institutional boiler.

Boilers 3, 4, 8 and 9 will only burn No. 2 fuel oil during periods of natural gas curtailment, periods of natural gas supply emergencies, or periods not to exceed a combined total of 48 hours during any calendar year for period testing of liquid fuel.

(e) Two (2) tanks, identified as 18 and 19, constructed in 1989, storing mineral spirits, each having a height of 18 feet with a diameter of 8 feet, and each with a maximum capacity of 6,800 gallons.

(f) Cleaning process, using mineral spirits, on an as needed basis to clean parts for quality control inspection, stored in a closed container, constructed prior to 1980, with a maximum usage of 3,000 gallons per year.

(g) Two (2) #2 fuel tanks, identified as 38 and 39, constructed in 1989, storing #2 fuel, each with a maximum capacity of 30,000 gallons.

A.3 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, as defined in 326 IAC 2-7-1(21):

(a) Activities associated with emergencies, including the following:

(1) One (1) Detroit diesel Fire Pump engine, identified as DFP-1, constructed in 1969, rated at 85 Horsepower (hp).

(2) One (1) Emergency Generator fired by diesel oil no.2, identified as EG-1, constructed in 1999, with an output of 2,281 Kilo-Volt-Ampere (KVA) (2,442 Hp), and venting to stack #149.

Under NESHAP 40 CFR 63, Subpart ZZZZ, these units are considered existing affected units.

(3) One (1) 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator, identified as EG-2, manufactured and constructed in 2013, and permitted in 2016, uncontrolled and exhausting outside the building.

Under 40 CFR 60, Subpart JJJJ (NSPS for Stationary Spark Ignition Internal Combustion Engines) and 40 CFR 63, Subpart ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)), EG-2 is considered a new affected emergency generator.

(b) For an emission unit or activity with potential uncontrolled emissions of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM10), the exemption level is either five (5) pounds per hour or twenty-five (25) pounds per day.

(1) Two (2) shot peen machines, constructed in 1999, identified as B1 and B2, equipped with a dust collector to control particulates, with a maximum throughput of 5040 lbs/hr of ring gears for B1 and 2400 lbs/hr of pinions for B2, including 140 lbs/hr of steel shot each, and exhausting outside.
[326 IAC 6-3-2]

(2) Eight (8) dry milling machines (constructed in 1965 and 2016, and permitted in 2011 and 2016) and 11 dry cut gear cutters (constructed in 1985), each equipped with dust collector and exhausting inside the building.

(3) Eight (8) dry cut gear cutters (constructed in 1985 and 2016, and permitted in 2011 and 2016), each equipped with an oil mist collector, and exhausting inside the building

(4) Five (5) dry cut gear cutters (constructed in 1985, 2015, and 2016, and permitted in 2011 and 2016), each equipped with a Cyclo Vac dust collector, and exhausting inside the building.

(c) An emission unit or activity whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(e)(1) or the exemption levels specified in the following, whichever is lower: for VOC, the exemption limit is three (3) pounds per hour or fifteen (15) pounds per day.

(1) One (1) paint maintenance booth, constructed in 1970, using 73 gallons of paint per year to paint miscellaneous items: rebuilt machines, chip buggies, and fabricated tables.

(2) One (1) quench oil operation, permitted in 2011, using a maximum of 10,000 gallons of oil per year.

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

(1) Two hundred seventy six (276) wet machining units, constructed between 1960 and 2011, with smog Hogs or mist collector units with a total airflow rate of 97,000 cfm and exhausting inside.

(2) Forty-five (45) wet machining units, constructed in 2015, with smog Hogs or mist collector units for particulate control, having an outlet grain loading of 0.0018 grains per dry standard cubic feet (gr/dscf) and a combined airflow rate of 19,000 cfm and exhausting inside the building.

(3) Fifty-one (51) wet machining units, approved in 2016 for construction, with smog Hogs or mist collector units for particulate control, having an outlet grain loading of 0.0018 grains per dry standard cubic feet (gr/dscf) and a combined total airflow rate of 64,150 cfm and exhausting inside the building.

(e) Fuel dispensing activities, as follows: A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment. A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less.

(1) One (1) gasoline tank, identified as 36, constructed in 1989, storing gasoline, storing gasoline, and with a maximum capacity of 1,000 gallons.

Under NESHAP 40 CFR 63, Subpart CCCCCC, this unit is considered an existing affected unit.

(2) One (1) diesel tank, identified as 37, constructed in 1989, storing diesel, and with a maximum capacity of 550 gallons.

(f) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2].

(1) Two (2) stick welding operations, identified as Line 200 Stop Bolt Welder and Line 300 Puddle Welder, approved for construction in 2011, each with a maximum electrode consumption rate of 5.97 lbs/hr.

(2) One (1) axle welding operation.

(g) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, which include:

(1) One (1) heat treat furnace, identified as HT 5, with a maximum heat input capacity of 6.7 MMBtu/hour, uncontrolled and exhausting to the indoors.

(2) One (1) heat treat furnace, identified as HT 6, with a maximum heat input capacity of 6.0 MMBtu/hour, uncontrolled and exhausting to the indoors.

(3) Two (2) heat treat furnace, identified as Hagen-N and Hagen-S, with a maximum heat input capacity of 4.26 MMBtu/hour each, uncontrolled and exhausting to the indoors.

(4) Three (3) heat treat furnace, identified as HT 1, 2 and 4, with a maximum heat input capacity of 4.0 MMBtu/hour each, uncontrolled and exhausting to the indoors.

(5) One (1) heat treat furnace, identified as RX#9, with a maximum heat input capacity of 3.9 MMBtu/hour, uncontrolled and exhausting to the indoors.

(6) One (1) heat treat furnace, identified as HT 3, with a maximum heat input capacity of 4.0 MMBtu/hour, uncontrolled and exhausting to the indoors.

(7) Two (2) heat treat furnace, identified as DX1 and DX2, each with a maximum heat input capacity of 0.685 MMBtu/hour, uncontrolled and exhausting to the indoors.

(8) Twenty-one (21) space heaters, identified as heaters H1 through H16, and H20 through H24, with a maximum heat input capacity of 0.40 MMBtu/hour each, uncontrolled and exhausting to the indoors.

(9) One (1) space heater, identified as heater H25, with a maximum heat input capacity of 0.2 MMBtu/hour, uncontrolled and exhausting to the indoors.

(10) Three (3) space heaters, identified as heaters H17 through H19, each with a maximum heat input capacity of 0.125 MMBtu/hour each, uncontrolled and exhausting to the indoors.

(11) One (1) washer heater, identified as JRI 94, with a maximum heat input capacity of 0.6 MMBtu/hr, uncontrolled and exhausting to the indoors.

(12) Two (2) washer heater, identified as WCG 93 and 97, with a maximum heat input capacity of 0.5 MMBtu/hr each, uncontrolled and exhausting to the indoors.

(13) One (1) draw type natural gas fired furnace with a maximum heat input of 3 MMBtu/hour, uncontrolled and exhausting to the indoors.

(14) One (1) natural gas fired aging ovens, identified as F1, constructed in 2011, with a maximum capacity of 612 lbs/hr of aluminum tubing and 1 MMBtu/hr, and exhausting indoors.

(15) One (1) natural gas fired Grobe Washer, constructed in 2011, with a maximum heat input of 1.8 MMBtu/hr, uncontrolled and exhausting to the indoors.

(16) Two (2) natural gas-fired Air Rotation Units, constructed in 2011, each with a maximum heat input of 4 MMBtu/hr, uncontrolled and exhausting to the indoors.

(17) Eight (8) natural gas-fired Rooftop Heating Units, constructed in 2011, each with a maximum heat input of 4 MMBtu/hr, uncontrolled and exhausting to the indoors.

(h) Washing process, with non-VOC, non-HAP cleaner, used to clean oil and grease build-up, stored in a closed container, maximum usage is 6,000 gallons per year.

(i) One (1) Lubrize dip tank operation, constructed in 1950, using a maximum of 10,000 gallons of Parco Lubrite 2 per year.

Under NESHAP 40 CFR 63, Subpart WWWWWW, this unit is considered an existing affected unit.

(j) Noncontact cooling tower systems with natural draft not regulated under a NESHAP.

(k) Activities related to routine fabrication, maintenance, and repair of buildings, structures, equipment, or vehicles at the source where air emissions from those activities would not be associated with any commercial production process.

A.4 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);

(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, T003-32393-00003, 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:

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

(2) 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 V
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, 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

(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 T003-32393-00003 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 permit, all previous registrations and permits are superseded by this 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 V
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) and (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 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 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.7 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications 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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications 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).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

C.8 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.9 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.10 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 or of initial start-up, whichever is later, 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 or the date of initial startup, whichever is later, 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).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

(b) 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.

(c) 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.11 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.12 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.13 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.14 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5][326 IAC 2-7-6]

(I) 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:

(a) 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.

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

(1) initial inspection and evaluation;

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

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

(c) 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:

(1) monitoring results;

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

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

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

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

(II)

(a) 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.

(b) 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.

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

(d) 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).

(e) 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.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(c) 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.

(g) 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.

(h) *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 (II)(c) 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.15 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.16 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]

In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 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:

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

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(33) (“Regulated pollutant, which is used only for purposes of Section 19 of this rule”) from the source, for purpose 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.17 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(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:

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the Part 70 permit.

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

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) 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.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11] [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 -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 not 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.

(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.

Stratospheric Ozone Protection

C.19 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 applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS - Source Wide

Source Wide Emission Limitations

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

D.1.1 GHG PSD Minor Limit [326 IAC 2-2]

(a) The source wide natural gas usage shall not exceed 1,350 million cubic feet (MMcf) per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The GHG emission rate from unit shall not exceed:

(1) 120,000 lb of CO2/ MMcf of natural gas
(2) 2.3 lb of CH4/ MMcf of natural gas
(3) 2.2 lb of N2O/ MMcf of natural gas

Compliance with this condition in conjunction with the limits in Condition D.2.1 shall limit the source wide emissions of GHGs (as CO_2e) to less than one hundred thousand (100,000) tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) not applicable.

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

D.1.2 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.1(a), the Permittee shall maintain records of all natural gas usage each month and each compliance period.

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

D.1.3 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.1.1(a) shall be submitted using the reporting form located at the end of this permit, or its equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - 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).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS - Boilers

Facility Description [326 IAC 2-7-5(14)]:

(a) One (1) natural gas-fired boiler, identified as boiler 3, constructed in 1973, using No. 2 fuel oil as back-up fuel, with a maximum heat input capacity of 50.0 MMBtu per hour, exhausting at one (1) stack, identified as stack 1B.

(b) One (1) natural gas-fired boiler, identified as boiler 4, constructed in 1973, using No. 2 fuel oil as back-up fuel, with a maximum heat input capacity of 50.0 MMBtu per hour, exhausting at one (1) stack, identified as stack 2B.

(c) One (1) natural gas-fired boiler, identified as boiler 8, constructed in 1995, using No. 2 fuel oil as back-up fuel, with a maximum heat input capacity of 40.2 MMBtu per hour, exhausting at one (1) stack, identified as stack 6B. Under 40 CFR 60, Subpart Dc, this is considered an existing small industrial-commercial-institutional boiler.

(d) One (1) natural gas-fired boiler, identified as boiler 9, constructed in 1995, using No. 2 fuel oil as back-up fuel, with a maximum heat input capacity of 40.2 MMBtu per hour, exhausting at one (1) stack, identified as stack 7B. Under 40 CFR 60, Subpart Dc, this is considered an existing small industrial-commercial-institutional boiler.

Boilers 3, 4, 8 and 9 will only burn No. 2 fuel oil during periods of natural gas curtailment, periods of natural gas supply emergencies, or periods not to exceed a combined total of 48 hours during any calendar year for period testing of liquid fuel.

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

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

D.2.1 SO2 and GHG Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

(a) The total No. 2 fuel oil usage in boilers 3, 4, 8 and 9 shall not exceed 1,500 kilogallons (kgal) per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The SO2 emission rate from each boiler, identified as 3, 4, 8, and 9, shall not exceed 71 lb/kgal of No. 2 fuel oil.

(c) The GHG emission rate from each boiler, identified as 3, 4, 8, and 9, shall not exceed:

(1) 21,500 lb of CO2/ kgal of No 2 fuel oil
(2) 0.216 lb of CH4/ kgal of No 2 fuel oil
(3) 0.26 lb of N2O/ kgal of No 2 fuel oil

Compliance with this condition shall limit the source wide emissions of SO_2 to less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) not applicable.

Compliance with this condition in conjunction with the limits in Condition D.1.1 shall limit the source wide emissions of GHGs (as CO_2e) to less than one hundred thousand (100,000) tons of per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) not applicable.

D.2.2 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 the particulate matter (PM) from the boilers 3 and 4 shall each be limited to:

(a) boilers identified as 3 and 4 shall be limited to 0.39 pounds per MMBtu when using natural gas.

(b) boilers identified as 3 and 4 shall be limited to 0.39 pounds per MMBtu when using No. 2 fuel oil.

Particulate emissions from indirect heating facilities existing and in operation before September 21, 1983, shall be limited by the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

Where: C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter (μg/m3) for a period not to exceed a sixty (60) minute time period.

Pt = Pounds of particulate matter emitted per million Btu heat input (lb/MMBtu).

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used. (In 1973, Q was equal to 113.4 MMBtu/hr)

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.

h = Stack height in feet. If a number of stacks of different heights exist, the average stack height to represent "N" stacks shall be calculated by weighing each stack height with its particulate matter emission rate as follows:

$$h = \frac{\sum_{i=1}^{N} H_i \times pa_i \times Q}{\sum_{i=1}^{N} pa_i \times Q}$$

Where: pa = the actual controlled emission rate in lb/MMBtu using the emission factor from AP-42 or stack test data. Stacks constructed after January 1, 1971, shall be credited with GEP stack height only. GEP stack height shall be calculated as specified in 326 IAC 1-7.

D.2.3 Particulate emission limitations for sources of indirect heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating: Emission limitations for facilities specified in 326 IAC 6-2-1(d)), the PM emissions from boilers 8

and 9 shall each not exceed 0.28 pounds PM per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used. (In 1995, Q was equal to 193.8 MMBtu/hr)

D.2.4 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1]

Pursuant to 326 IAC 7-1.1-1 (SO_2 Emissions Limitations), the SO_2 emissions from boilers 3, 4, 8, and 9 shall not exceed 0.5 pounds of SO_2 per MMBtu heat input when burning No. 2 fuel oil. Based on a heating value of 140,000 Btu per gallon of oil, the fuel sulfur content of the No. 2 fuel oil used for fuel shall be limited to 0.5 percent (%) when burning No. 2 fuel oil.

D.2.5 Fuel Oil Combustion Limitation [40 CFR 63, Subpart JJJJJJ]

In order to render the requirements of 40 CFR 63, Subpart JJJJJJ (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources) not applicable, the source shall only burn liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

For the purposes of this condition and pursuant to 40 CFR 63.11237, a period of natural gas curtailment or supply interruption means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.

Compliance with this condition shall render the requirements of 40 CFR 63, Subpart JJJJJJ (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources) not applicable.

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

A Preventive Maintenance Plan is required for these facilities. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.2.7 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 7-1.1-2][326 IAC 7-2]

Compliance with Condition D.2.4 shall be determined as follows:

(a) Pursuant to 326 IAC 7-2-1(c)(3), the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the equivalent of 0.5 pounds per MMBtu when firing distillate oil, using a calendar month average.

(b) Pursuant to 326 IAC 7-2-1(e) and 326 IAC 3-7-4, fuel sampling and analysis data shall be collected as follows:

(1) The Permittee may rely upon vendor analysis of fuel delivered, if accompanied by a vendor certification or,

(2) The Permittee shall perform sampling and analysis of fuel oil samples in accordance with 326 IAC 3-7-4(a).

(A) Oil samples shall be collected from the tanker truck load prior to transferring fuel to the storage tank; or

(B) Oil samples shall be collected from the storage tank immediately after each addition of fuel to the tank.

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

D.2.8 Visible Emissions Notations

(a) Visible emission notations of the boiler stacks (1B, 2B, 6B, and/or 7B) exhaust shall be performed once per day during normal daylight operations when any of the boilers (3, 4, 8, and 9) are combusting No. 2 fuel oil. 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, 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 the past 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 reasonable response steps. Section C- 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 in accordance shall be considered a deviation from this permit.

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

D.2.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.1 and D.2.4, the Permittee shall maintain records in accordance with (1) through (6) below.

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

(2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;

(3) A certification, signed by the owner or operator, that the records of the fuel supplier certification represent all of the fuel combusted during the period; and

If the certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

(4) Fuel supplier certifications;

(5) The name of the fuel supplier; and

(6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

(b) The document the compliance status with Condition D.2.8, the Permittee shall maintain records of daily visible emission notations of the boiler stack exhausts. 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).

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

D.2.10 Reporting Requirements

(a) A summary of the information to document the compliance status with Condition D.2.2(b) and D.2.3 shall be submitted upon request. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition.

(b) A quarterly summary of the information to document the compliance status with Condition D.2.1(a) shall be submitted using the reporting form located at the end of this permit, or its equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - 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).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS - Tanks

Facility Description [326 IAC 2-7-5(14)]:

Insignificant Activities

(e) Fuel dispensing activities, as follows: A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment. A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less.

(1) One (1) gasoline tank, identified as 36, constructed in 1989, storing gasoline, storing gasoline, and with a maximum capacity of 1,000 gallons.

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

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

D.3.1 Gasoline Dispensing Facilities [326 IAC 8-4-6]

In order to render the requirements of 326 IAC 8-4-6 (Gasoline Dispensing Facilities) not applicable, the monthly gasoline throughput from the gasoline storage tank identified as unit 36 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.3.2 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.1, the Permittee shall maintain records of the monthly throughput of gasoline for storage tank 36.

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

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS - Shot Peen Machines

Facility Description [326 IAC 2-7-5(14)]: Insignificant Activities

(b) For an emission unit or activity with potential uncontrolled emissions of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM10), the exemption level is either five (5) pounds per hour or twenty-five (25) pounds per day.

(1) Two (2) shot peen machines, constructed in 1999, identified as B1 and B2, equipped with a dust collector to control particulates, with a maximum throughput of 5040 lbs/hr of ring gears for B1 and 2400 lbs/hr of pinions for B2, including 140 lbs/hr of steel shot each, and exhausting outside.
[326 IAC 6-3-2]

(The information describing the process contained in this emissions unit 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 Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the shot peen machines (B1 and B2) shall not exceed the allowable emission rates listed in the following table:

Summary of Process Weight Rate Limits		
Process / Emission Unit	P (ton/hr)	E (lb/hr)
B1	2.52	7.62
B2	1.2	4.63

These pounds per hour limitations were 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

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS - Indirect Heating Units

Facility Description [326 IAC 2-7-5(14)]: Insignificant Activities

(g) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, which include:

(11) One (1) washer heater, identified as JRI 94, with a maximum heat input capacity of 0.6 MMBtu/hr, uncontrolled and exhausting to the indoors.

(12) Two (2) washer heater, identified as WCG 93 and 97, with a maximum heat input capacity of 0.5 MMBtu/hr each, uncontrolled and exhausting to the indoors.

(15) One (1) natural gas fired Grobe Washer, constructed in 2011, with a maximum heat input of 1.8 MMBtu/hr, uncontrolled and exhausting to the indoors.

(The information describing the process contained in this emissions unit 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 emission limitations for sources of indirect heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating: Emission limitations for facilities specified in 326 IAC 6-2-1(d)), the PM emissions from the washer heaters and Grobe Washer shall each not exceed 0.68 pounds PM per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used. (In 2011, Q was equal to 6.1 MMBtu/hr)

SECTION E.1 NSPS REQUIREMENTS

Emission Unit Description [326 IAC 2-7-5(14)]:

Insignificant Activities

(c) One (1) natural gas-fired boiler, identified as boiler 8, constructed in 1995, using No. 2 fuel oil as back-up fuel, with a maximum heat input capacity of 40.2 MMBtu per hour, exhausting at one (1) stack, identified as stack 6B. Under 40 CFR 60, Subpart Dc, this is considered an existing small industrial-commercial-institutional boiler.

(d) One (1) natural gas-fired boiler, identified as boiler 9, constructed in 1995, using No. 2 fuel oil as back-up fuel, with a maximum heat input capacity of 40.2 MMBtu per hour, exhausting at one (1) stack, identified as stack 7B. Under 40 CFR 60, Subpart Dc, this is considered an existing small industrial-commercial-institutional boiler.

Boilers 3, 4, 8 and 9 will only burn No. 2 fuel oil during periods of natural gas curtailment, periods of natural gas supply emergencies, or periods not to exceed a combined total of 48 hours during any calendar year for period testing of liquid fuel.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, for Boilers 8 and 9 except as otherwise specified in 40 CFR 60, Subpart Dc.

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.1.2 NSPS for Small Industrial-Commercial-Institutional Steam Generating Units Requirements [40 CFR 60, Subpart Dc][326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR 60, Subpart Dc (included as attachment A to the operating permit), which are incorporated by reference as 326 IAC 12, for Boilers 8 and 9:

(1)	40 CFR 60.40c (a) through (d)	(5)	40 CFR 60.44c (a), (g), (h)
(2)	40 CFR 60.41c	(6)	40 CFR 60.45c (a)(8)
(3)	40 CFR 60.42c (d), (g), (h), (i)	(7)	40 CFR 60.46c (e)
(4)	40 CFR 60.43c (c) and (d)	(8)	40 CFR 60.48c (a), (c) through (f)

SECTION E.2 NESHAPS REQUIREMENTS

Emission Unit Description [326 IAC 2-7-5(14)]:

Insignificant Activities

(a) Activities associated with emergencies, including the following:

(1) One (1) Detroit diesel Fire Pump engine, identified as DFP-1, constructed in 1969, rated at 85 Horsepower (hp).

(2) One (1) Emergency Generator fired by diesel oil no.2, identified as EG-1, constructed in 1999, with an output of 2,281 Kilo-Volt-Ampere (KVA) (2,442 Hp), and venting to stack #149.

Under NESHAP 40 CFR 63, Subpart ZZZZ, these units are considered existing affected units.

(3) One (1) 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator, identified as EG-2, manufactured and constructed in 2013, and permitted in 2016, uncontrolled and exhausting outside the building.

Under 40 CFR 60, Subpart JJJJ (NSPS for Stationary Spark Ignition Internal Combustion Engines) and 40 CFR 63, Subpart ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)), EG-2 is considered a new affected emergency generator.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.2.1 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 63.1, 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, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

(b) Pursuant to 40 CFR 63.10, 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 Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.2.2 Stationary Reciprocating Internal Combustion Engines NESHAP [326 IAC 20-82][40 CFR Part 63, Subpart ZZZZ]

The Permittee shall comply with the following provisions of the 40 CFR 63, Subpart ZZZZ (included as attachment B to the operating permit), which are incorporated by reference as 326 IAC 20-82, for the:

(a) diesel fire pump engine (DFP-1) and the emergency generator (EG-1):

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585
(3) 40 CFR 63.6590(a)(1)(iii)
(4) 40 CFR 63.6595(a)(1), (b), and (c)
(5) 40 CFR 63.6603
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625(e)(3), (f), (h), and (i)
(8) 40 CFR 63.6635
(9) 40 CFR 63.6640
(10) 40 CFR 63.6645(a)(5)
(11) 40 CFR 63.6650
(12) 40 CFR 63.6655
(13) 40 CFR 63.6660
(14) 40 CFR 63.6665
(15) 40 CFR 63.6670
(16) 40 CFR 63.6675
(17) Table 2d (item 4)
(18) Table 6 (item 9)
(19) Table 8

(b) Generac emergency generator (EG-2):

(1) 40 CFR 60.4230(a)(4)(iv), (a)(6), & (c);
(2) 40 CFR 60.4233(e);
(3) 40 CFR 60.4234;
(4) 40 CFR 60.4236(c);
(5) 40 CFR 60.4237(c);
(6) 40 CFR 60.4243(a)(2)(ii), (b), (d), (e), (f), (g);
(7) 40 CFR 60.4244;
(8) 40 CFR 60.4245(a), (b), (d), (e);
(9) 40 CFR 60.4246;
(10) 40 CFR 60.4248; and
(11) Tables 1, 2, & 3.

SECTION E.3 NESHAPS REQUIREMENTS

Emission Unit Description [326 IAC 2-7-5(14)]:

Insignificant Activities

(e) Fuel dispensing activities, as follows: A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment. A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to ten thousand five hundred (10,500) gallons, and dispensing three thousand five hundred (3,500) gallons per day or less.

(1) One (1) gasoline tank, identified as 36, constructed in 1989, storing gasoline, storing gasoline, and with a maximum capacity of 1,000 gallons. Under NESHAP 40 CFR 63, Subpart CCCCCC, this unit is considered an existing affected unit.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.3.1 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]

Pursuant to 40 CFR 63.1, 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, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart CCCCCC.

(b) Pursuant to 40 CFR 63.10, 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 Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.3.2 Gasoline Dispensing Facilities NESHAP [40 CFR Part 63, Subpart CCCCCC]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart CCCCCC (included as Attachment C to the operating permit), for the emission unit(s) listed above:

(1) 40 CFR 63.11110
(2) 40 CFR 63.11111 (a), (b), (e), (h), (i), (j)
(3) 40 CFR 63.11112 (d)
(4) 40 CFR 63.11116
(5) 40 CFR 63.11130
(6) 40 CFR 63.11131
(7) 40 CFR 63.11132
(8) Table 3

SECTION E.4 NESHAPS REQUIREMENTS

Emission Unit Description [326 IAC 2-7-5(14)]:

Insignificant Activities

(i) One (1) Lubrize dip tank operation, constructed in 1950, using a maximum of 10,000 gallons of Parco Lubrite 2 per year. Under NESHAP 40 CFR 63, Subpart WWWWWW, this unit is considered an existing affected unit.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.4.1 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 63.11510, 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, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart WWWWWW.

(b) Pursuant to 40 CFR 63.10, 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 Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

E.4.2 Area Source Plating and Polishing NESHAP [40 CFR Part 63, Subpart WWWWWW]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart WWWWWW (included as Attachment D to the operating permit), for the emission unit(s) listed above:

(1) 40 CFR 63.11504 (a)(1)(iii)
(2) 40 CFR 63.11505 (a)(1), (b)
(3) 40 CFR 63.11506 (a)
(4) 40 CFR 63.11507 (g)
(5) 40 CFR 63.11508 (d)(8)
(6) 40 CFR 63.11509 (a), (c), (d), (e)
(7) 40 CFR 63.11510
(8) 40 CFR 63.11511
(9) Table 1

Section E.5 NSPS REQUIREMENTS

Emission Unit Description [326 IAC 2-7-5(14)]:

Insignificant Activities

(a) Activities associated with emergencies, including the following:

(3) One (1) 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator, identified as EG-2, manufactured and constructed in 2013, and permitted in 2016, uncontrolled and exhausting outside the building.

Under 40 CFR 60, Subpart JJJJ (NSPS for Stationary Spark Ignition Internal Combustion Engines) and 40 CFR 63, Subpart ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)), EG-2 is considered a new affected emergency generator.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.5.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR 60, Subpart A]

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

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.5.2 Stationary Spark Ignition Internal Combustion Engines NSPS [40 CFR Part 60, Subpart JJJJ] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart JJJJ (included as Attachment E to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

(1) 40 CFR 60.4230(a)(4)(iv), (a)(6), & (c);
(2) 40 CFR 60.4233(e);
(3) 40 CFR 60.4234;
(4) 40 CFR 60.4236(c);
(5) 40 CFR 60.4237(c);
(6) 40 CFR 60.4243(a)(1), (a)(2)(ii), (b), (d), (e), (f), (g);
(7) 40 CFR 60.4244;
(8) 40 CFR 60.4245(a), (b), (d), (e);
(9) 40 CFR 60.4246;
(10) 40 CFR 60.4248; and
(11) Tables 1, 2, & 3.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, Indiana 46808
Part 70 Permit No.: T003-32393-00003

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: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, Indiana 46808
Part 70 Permit No.: T003-32393-00003

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 Quarterly Report

Source Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Boulevard, Fort Wayne, Indiana 46808
Part 70 Permit No.: T003-32393-00003
Facility: Boilers 3, 4, 8 and 9
Parameter: Total No. 2 Fuel Oil Usage in kgal per twelve (12) consecutive month period.
Limit: The total No. 2 fuel oil usage in boilers 3, 4, 8 and 9 shall not exceed 1,500 kilogallons (kgal) per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER:_____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ 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: Dana Light Axle Products, LLC
Source Address: 2100 West State Boulevard, Fort Wayne, Indiana 46808
Part 70 Permit No.: T003-32393-00003
Facility: Source Wide
Parameter: Total Natural Gas Usage in MMcf/yr per twelve (12) consecutive month period.
Limit: The source wide natural gas usage shall not exceed 1,350 million cubic feet (MMcf) per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER:_____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ 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 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, Indiana 46808
Part 70 Permit No.: T003-32393-00003

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: _____

Attachment E

Part 70 Operating Permit Renewal No: T003-32393-00003

[Downloaded from the eCFR on August 25, 2014]

Electronic Code of Federal Regulations

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

SOURCE: 73 FR 3591, Jan. 18, 2008, unless otherwise noted.

What This Subpart Covers

§60.4230 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary SI ICE with a maximum engine power less than or equal to 19 kilowatt (KW) (25 horsepower (HP)) that are manufactured on or after July 1, 2008.

(2) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline fueled or that are rich burn engines fueled by liquefied petroleum gas (LPG), where the date of manufacture is:

(i) On or after July 1, 2008; or

(ii) On or after January 1, 2009, for emergency engines.

(3) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are not gasoline fueled and are not rich burn engines fueled by LPG, where the manufacturer participates in the voluntary manufacturer certification program described in this subpart and where the date of manufacture is:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

(iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

(iv) On or after January 1, 2009, for emergency engines.

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

(iii) on or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

(iv) on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

(5) Owners and operators of stationary SI ICE that are modified or reconstructed after June 12, 2006, and any person that modifies or reconstructs any stationary SI ICE after June 12, 2006.

(6) The provisions of §60.4236 of this subpart are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.

(b) The provisions of this subpart are not applicable to stationary SI ICE being tested at an engine test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(d) For the purposes of this subpart, stationary SI ICE using alcohol-based fuels are considered gasoline engines.

(e) Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(f) Owners and operators of facilities with internal combustion engines that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37972, June 28, 2011]

Emission Standards for Manufacturers

§60.4231 What emission standards must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing such engines?

(a) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008 to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as follows:

If engine displacement is * * *	and manufacturing dates are * * *	the engine must meet emission standards and related requirements for nonhandheld engines under * * *
(1) below 225 cc	July 1, 2008 to December 31, 2011	40 CFR part 90.
(2) below 225 cc	January 1, 2012 or later	40 CFR part 1054.
(3) at or above 225 cc	July 1, 2008 to December 31, 2010	40 CFR part 90.
(4) at or above 225 cc	January 1, 2011 or later	40 CFR part 1054.

(b) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that use gasoline and that are manufactured on or after the applicable date in

§60.4230(a)(2), or manufactured on or after the applicable date in §60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE with a maximum engine power greater than 25 HP and less than 130 HP that use gasoline and that are manufactured on or after the applicable date in §60.4230(a)(4) to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cubic centimeters (cc) that use gasoline to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate.

(c) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that are rich burn engines that use LPG and that are manufactured on or after the applicable date in §60.4230(a)(2), or manufactured on or after the applicable date in §60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP that are rich burn engines that use LPG and that are manufactured on or after the applicable date in §60.4230(a)(4) to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc that are rich burn engines that use LPG to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate.

(d) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) under the voluntary manufacturer certification program described in this subpart must certify those engines to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers who choose to certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP (except gasoline and rich burn engines that use LPG), must certify those engines to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc (except gasoline and rich burn engines that use LPG) to the certification emission standards for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate. For stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) manufactured prior to January 1, 2011, manufacturers may choose to certify these engines to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP.

(e) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) under the voluntary manufacturer certification program described in this subpart must certify those engines to the emission standards in Table 1 to this subpart. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) that are lean burn engines that use LPG to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. For stationary SI ICE with a maximum engine power greater than or equal to 100 HP (75 KW) and less than 500 HP (373 KW) manufactured prior to January 1, 2011, and for stationary SI ICE with a maximum engine power greater than or equal to 500 HP (373 KW) manufactured prior to July 1, 2010, manufacturers may choose to certify these engines to the certification emission standards for new nonroad SI engines in 40 CFR part 1048 applicable to engines that are not severe duty engines.

(f) Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, to the extent they apply to equipment manufacturers.

(g) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary SI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this

section that are applicable to the model year, maximum engine power and displacement of the reconstructed stationary SI ICE.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59175, Oct. 8, 2008; 76 FR 37973, June 28, 2011; 78 FR 6697, Jan. 30, 2013]

§60.4232 How long must my engines meet the emission standards if I am a manufacturer of stationary SI internal combustion engines?

Engines manufactured by stationary SI internal combustion engine manufacturers must meet the emission standards as required in §60.4231 during the certified emissions life of the engines.

Emission Standards for Owners and Operators

§60.4233 What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?

(a) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008, must comply with the emission standards in §60.4231(a) for their stationary SI ICE.

(b) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in §60.4230(a)(4) that use gasoline must comply with the emission standards in §60.4231(b) for their stationary SI ICE.

(c) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in §60.4230(a)(4) that are rich burn engines that use LPG must comply with the emission standards in §60.4231(c) for their stationary SI ICE.

(d) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 CFR 1048.101(c) for their non-emergency stationary SI ICE and with the emission standards in Table 1 to this subpart for their emergency stationary SI ICE. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) manufactured prior to January 1, 2011, that were certified to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP, may optionally choose to meet those standards.

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

(f) Owners and operators of any modified or reconstructed stationary SI ICE subject to this subpart must meet the requirements as specified in paragraphs (f)(1) through (5) of this section.

(1) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with emission standards in §60.4231(a) for their stationary SI ICE. Engines with a date of manufacture prior to July 1, 2008 must comply with the emission standards specified in §60.4231(a) applicable to engines manufactured on July 1, 2008.

(2) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline engines and are modified or reconstructed after June 12, 2006, must comply with the emission standards in §60.4231(b) for their stationary SI ICE. Engines with a date of manufacture prior to July 1, 2008 (or January 1, 2009

for emergency engines) must comply with the emission standards specified in §60.4231(b) applicable to engines manufactured on July 1, 2008 (or January 1, 2009 for emergency engines).

(3) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are rich burn engines that use LPG, that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in §60.4231(c). Engines with a date of manufacture prior to July 1, 2008 (or January 1, 2009 for emergency engines) must comply with the emission standards specified in §60.4231(c) applicable to engines manufactured on July 1, 2008 (or January 1, 2009 for emergency engines).

(4) Owners and operators of stationary SI natural gas and lean burn LPG engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (d) or (e) of this section, except that such owners and operators of non-emergency engines and emergency engines greater than or equal to 130 HP must meet a nitrogen oxides (NO_X) emission standard of 3.0 grams per HP-hour (g/HP-hr), a CO emission standard of 4.0 g/HP-hr (5.0 g/HP-hr for non-emergency engines less than 100 HP), and a volatile organic compounds (VOC) emission standard of 1.0 g/HP-hr, or a NO_X emission standard of 250 ppmvd at 15 percent oxygen (O_2), a CO emission standard 540 ppmvd at 15 percent O_2 (675 ppmvd at 15 percent O_2 for non-emergency engines less than 100 HP), and a VOC emission standard of 86 ppmvd at 15 percent O_2, where the date of manufacture of the engine is:

(i) Prior to July 1, 2007, for non-emergency engines with a maximum engine power greater than or equal to 500 HP (except lean burn natural gas engines and LPG engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) Prior to July 1, 2008, for non-emergency engines with a maximum engine power less than 500 HP;

(iii) Prior to January 1, 2009, for emergency engines;

(iv) Prior to January 1, 2008, for non-emergency lean burn natural gas engines and LPG engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP.

(5) Owners and operators of stationary SI landfill/digester gas ICE engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (e) of this section for stationary landfill/digester gas engines. Engines with maximum engine power less than 500 HP and a date of manufacture prior to July 1, 2008 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE with a maximum engine power less than 500 HP manufactured on July 1, 2008. Engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines greater than or equal to 500 HP and less than 1,350 HP) and a date of manufacture prior to July 1, 2007 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE with a maximum engine power greater than or equal to 500 HP (except lean burn engines greater than or equal to 500 HP and less than 1,350 HP) manufactured on July 1, 2007. Lean burn engines greater than or equal to 500 HP and less than 1,350 HP with a date of manufacture prior to January 1, 2008 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE that are lean burn engines greater than or equal to 500 HP and less than 1,350 HP and manufactured on January 1, 2008.

(g) Owners and operators of stationary SI wellhead gas ICE engines may petition the Administrator for approval on a case-by-case basis to meet emission standards no less stringent than the emission standards that apply to stationary emergency SI engines greater than 25 HP and less than 130 HP due to the presence of high sulfur levels in the fuel, as specified in Table 1 to this subpart. The request must, at a minimum, demonstrate that the fuel has high sulfur levels that prevent the use of aftertreatment controls and also that the owner has reasonably made all attempts possible to obtain an engine that will meet the standards without the use of aftertreatment controls. The petition must request the most stringent standards reasonably applicable to the engine using the fuel.

(h) Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of this section.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37973, June 28, 2011]

§60.4234 How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.

Other Requirements for Owners and Operators

§60.4235 What fuel requirements must I meet if I am an owner or operator of a stationary SI gasoline fired internal combustion engine subject to this subpart?

Owners and operators of stationary SI ICE subject to this subpart that use gasoline must use gasoline that meets the per gallon sulfur limit in 40 CFR 80.195.

§60.4236 What is the deadline for importing or installing stationary SI ICE produced in previous model years?

(a) After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in §60.4233.

(b) After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 1, 2010.

(c) For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in §60.4233 after January 1, 2011.

(d) In addition to the requirements specified in §§60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in paragraphs (a), (b), and (c) of this section, after the date specified in paragraph (a), (b), and (c) of this section.

(e) The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location.

§60.4237 What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?

(a) Starting on July 1, 2010, if the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

(b) Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

(c) If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.

Compliance Requirements for Manufacturers

§60.4238 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines ≤19 KW (25 HP) or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in §60.4231(a) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

[73 FR 59176, Oct. 8, 2008]

§60.4239 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that use gasoline or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in §60.4231(b) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must test their engines as specified in that part. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 40 CFR part 1054, and manufacturers of stationary SI emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

[73 FR 59176, Oct. 8, 2008]

§60.4240 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that are rich burn engines that use LPG or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in §60.4231(c) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must test their engines as specified in that part. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 40 CFR part 1054, and manufacturers of stationary SI emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

[73 FR 59176, Oct. 8, 2008]

§60.4241 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines participating in the voluntary certification program or a manufacturer of equipment containing such engines?

(a) Manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich burn engines that use LPG can choose to certify their engines to the emission standards in §60.4231(d) or (e), as applicable, under the voluntary certification program described in this

subpart. Manufacturers who certify their engines under the voluntary certification program must meet the requirements as specified in paragraphs (b) through (g) of this section. In addition, manufacturers of stationary SI internal combustion engines who choose to certify their engines under the voluntary certification program, must also meet the requirements as specified in §60.4247.

(b) Manufacturers of engines other than those certified to standards in 40 CFR part 90 or 40 CFR part 1054 must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must follow the same test procedures that apply to large SI nonroad engines under 40 CFR part 1048, but must use the D-1 cycle of International Organization of Standardization 8178-4: 1996(E) (incorporated by reference, see 40 CFR 60.17) or the test cycle requirements specified in Table 3 to 40 CFR 1048.505, except that Table 3 of 40 CFR 1048.505 applies to high load engines only. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 40 CFR part 1054, and manufacturers of emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

(c) Certification of stationary SI ICE to the emission standards specified in §60.4231(d) or (e), as applicable, is voluntary, but manufacturers who decide to certify are subject to all of the requirements indicated in this subpart with regard to the engines included in their certification. Manufacturers must clearly label their stationary SI engines as certified or non-certified engines.

(d) Manufacturers of natural gas fired stationary SI ICE who conduct voluntary certification of stationary SI ICE to the emission standards specified in §60.4231(d) or (e), as applicable, must certify their engines for operation using fuel that meets the definition of pipeline-quality natural gas. The fuel used for certifying stationary SI natural gas engines must meet the definition of pipeline-quality natural gas as described in §60.4248. In addition, the manufacturer must provide information to the owner and operator of the certified stationary SI engine including the specifications of the pipeline-quality natural gas to which the engine is certified and what adjustments the owner or operator must make to the engine when installed in the field to ensure compliance with the emission standards.

(e) Manufacturers of stationary SI ICE that are lean burn engines fueled by LPG who conduct voluntary certification of stationary SI ICE to the emission standards specified in §60.4231(d) or (e), as applicable, must certify their engines for operation using fuel that meets the specifications in 40 CFR 1065.720.

(f) Manufacturers may certify their engines for operation using gaseous fuels in addition to pipeline-quality natural gas; however, the manufacturer must specify the properties of that fuel and provide testing information showing that the engine will meet the emission standards specified in §60.4231(d) or (e), as applicable, when operating on that fuel. The manufacturer must also provide instructions for configuring the stationary engine to meet the emission standards on fuels that do not meet the pipeline-quality natural gas definition. The manufacturer must also provide information to the owner and operator of the certified stationary SI engine regarding the configuration that is most conducive to reduced emissions where the engine will be operated on gaseous fuels with different quality than the fuel that it was certified to.

(g) A stationary SI engine manufacturer may certify an engine family solely to the standards applicable to landfill/digester gas engines as specified in §60.4231(d) or (e), as applicable, but must certify their engines for operation using landfill/digester gas and must add a permanent label stating that the engine is for use only in landfill/digester gas applications. The label must be added according to the labeling requirements specified in 40 CFR 1048.135(b).

(h) For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

(i) For engines being certified to the voluntary certification standards in Table 1 of this subpart, the VOC measurement shall be made by following the procedures in 40 CFR 1065.260 and 1065.265 in order to determine the total NMHC emissions by using a flame-ionization detector and non-methane cutter. As an alternative to the

nonmethane cutter, manufacturers may use a gas chromatograph as allowed under 40 CFR 1065.267 and may measure ethane, as well as methane, for excluding such levels from the total VOC measurement.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59176, Oct. 8, 2008; 76 FR 37974, June 28, 2011]

§60.4242 What other requirements must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing stationary SI internal combustion engines or a manufacturer of equipment containing such engines?

(a) Stationary SI internal combustion engine manufacturers must meet the provisions of 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054, as applicable, as well as 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1048 or 1054, except that engines certified pursuant to the voluntary certification procedures in §60.4241 are subject only to the provisions indicated in §60.4247 and are permitted to provide instructions to owners and operators allowing for deviations from certified configurations, if such deviations are consistent with the provisions of paragraphs §60.4241(c) through (f). Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, as applicable. Labels on engines certified to 40 CFR part 1048 must refer to stationary engines, rather than or in addition to nonroad engines, as appropriate.

(b) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054 for that model year may certify any such family that contains both nonroad and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts. This provision also applies to equipment or component manufacturers certifying to standards under 40 CFR part 1060.

(c) Manufacturers of engine families certified to 40 CFR part 1048 may meet the labeling requirements referred to in paragraph (a) of this section for stationary SI ICE by either adding a separate label containing the information required in paragraph (a) of this section or by adding the words “and stationary” after the word “nonroad” to the label.

(d) For all engines manufactured on or after January 1, 2011, and for all engines with a maximum engine power greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, a stationary SI engine manufacturer that certifies an engine family solely to the standards applicable to emergency engines must add a permanent label stating that the engines in that family are for emergency use only. The label must be added according to the labeling requirements specified in 40 CFR 1048.135(b).

(e) All stationary SI engines subject to mandatory certification that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230. Stationary SI engines subject to standards in 40 CFR part 90 may use the provisions in 40 CFR 90.909. Manufacturers of stationary engines with a maximum engine power greater than 25 HP that are not certified to standards and other requirements under 40 CFR part 1048 are subject to the labeling provisions of 40 CFR 1048.20 pertaining to excluded stationary engines.

(f) For manufacturers of gaseous-fueled stationary engines required to meet the warranty provisions in 40 CFR 90.1103 or 1054.120, we may establish an hour-based warranty period equal to at least the certified emissions life of the engines (in engine operating hours) if we determine that these engines are likely to operate for a number of hours greater than the applicable useful life within 24 months. We will not approve an alternate warranty under this paragraph (f) for nonroad engines. An alternate warranty period approved under this paragraph (f) will be the specified number of engine operating hours or two years, whichever comes first. The engine manufacturer shall request this alternate warranty period in its application for certification or in an earlier submission. We may approve an alternate warranty period for an engine family subject to the following conditions:

(1) The engines must be equipped with non-resettable hour meters.

(2) The engines must be designed to operate for a number of hours substantially greater than the applicable certified emissions life.

(3) The emission-related warranty for the engines may not be shorter than any published warranty offered by the manufacturer without charge for the engines. Similarly, the emission-related warranty for any component shall not be shorter than any published warranty offered by the manufacturer without charge for that component.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008]

Compliance Requirements for Owners and Operators

§60.4243 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

(a) If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in §60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

(2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.

(i) If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

(iii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

(i) If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent

practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(c) If you are an owner or operator of a stationary SI internal combustion engine that must comply with the emission standards specified in §60.4233(f), you must demonstrate compliance according paragraph (b)(2)(i) or (ii) of this section, except that if you comply according to paragraph (b)(2)(i) of this section, you demonstrate that your non-certified engine complies with the emission standards specified in §60.4233(f).

(d) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (d)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (d)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (d)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (d)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (d)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of this section. Except as provided in paragraph (d)(3)(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

(e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233.

(f) If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(g) It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

(h) If you are an owner/operator of an stationary SI internal combustion engine with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and must comply with the emission standards specified in sections 60.4233(b) or (c), you must comply by one of the methods specified in paragraphs (h)(1) through (h)(4) of this section.

(1) Purchasing an engine certified according to 40 CFR part 1048. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(i) If you are an owner or operator of a modified or reconstructed stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(f), you must demonstrate compliance according to one of the methods specified in paragraphs (i)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in §60.4233(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in §60.4244. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37974, June 28, 2011; 78 FR 6697, Jan. 30, 2013]

Testing Requirements for Owners and Operators

§60.4244 What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

(d) To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \qquad (Eq. 1)$$

Where:

ER = Emission rate of NO_X in g/HP-hr.

C_d = Measured NO_X concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NO_X to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

(e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \qquad (Eq. 2)$$

Where:

ER = Emission rate of CO in g/HP-hr.

C_d = Measured CO concentration in ppmv.

1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 3)}$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C_d = VOC concentration measured as propane in ppmv.

1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{Mi}}{C_{Ai}} \qquad \text{(Eq. 4)}$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

C_{Mi} = Measured concentration of compound i in ppmv as carbon.

C_{Ai} = True concentration of compound i in ppmv as carbon.

$$C_{ime} = RF_i \times C_{imes} \qquad \text{(Eq. 5)}$$

Where:

C_{icorr} = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C_{imeas} = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{imeas} \quad \text{(Eq. 6)}$$

Where:

C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

Notification, Reports, and Records for Owners and Operators

§60.4245 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(2) Maintenance conducted on the engine.

(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

(b) For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.

(1) Name and address of the owner or operator;

(2) The address of the affected source;

(3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(4) Emission control equipment; and

(5) Fuel used.

(d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed.

(e) If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4243(d)(2)(ii) and (iii) or that operates for the purposes specified in §60.4243(d)(3)(i), you must submit an annual report according to the requirements in paragraphs (e)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §60.4243(d)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4243(d)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4243(d)(2)(ii) and (iii).

(vii) Hours spent for operation for the purposes specified in §60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 78 FR 6697, Jan. 30, 2013]

General Provisions

§60.4246 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

Mobile Source Provisions

§60.4247 What parts of the mobile source provisions apply to me if I am a manufacturer of stationary SI internal combustion engines or a manufacturer of equipment containing such engines?

(a) Manufacturers certifying to emission standards in 40 CFR part 90, including manufacturers certifying emergency engines below 130 HP, must meet the provisions of 40 CFR part 90. Manufacturers certifying to emission standards in 40 CFR part 1054 must meet the provisions of 40 CFR part 1054. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060 to the extent they apply to equipment manufacturers.

(b) Manufacturers required to certify to emission standards in 40 CFR part 1048 must meet the provisions of 40 CFR part 1048. Manufacturers certifying to emission standards in 40 CFR part 1048 pursuant to the voluntary certification program must meet the requirements in Table 4 to this subpart as well as the standards in 40 CFR 1048.101.

(c) For manufacturers of stationary SI internal combustion engines participating in the voluntary certification program and certifying engines to Table 1 to this subpart, Table 4 to this subpart shows which parts of the mobile source provisions in 40 CFR parts 1048, 1065, and 1068 apply to you. Compliance with the deterioration factor provisions under 40 CFR 1048.205(n) and 1048.240 will be required for engines built new on and after January 1, 2010. Prior to January 1, 2010, manufacturers of stationary internal combustion engines participating in the voluntary certification program have the option to develop their own deterioration factors based on an engineering analysis.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008]

Definitions

§60.4248 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) are given in 40 CFR 90.105, 40 CFR 1054.107, and 40 CFR 1060.101, as appropriate. The values for certified emissions life for stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) certified to 40 CFR part 1048 are given in 40 CFR 1048.101(g). The certified emissions life for stationary SI ICE with a maximum engine power greater than 75 KW (100 HP) certified under the voluntary manufacturer certification program of this subpart is 5,000 hours or 7 years, whichever comes first. You may request in your application for certification that we approve a shorter certified emissions life for an engine family. We may approve a shorter certified emissions life, in hours of engine operation but not in years, if we determine that these engines will rarely operate longer than the shorter certified emissions life. If engines identical to those in the engine family have already been produced and are in use, your demonstration must include documentation from such in-use engines. In other cases, your demonstration must include an engineering analysis of information equivalent to such in-use data, such as data from research engines or similar engine models that are already in production. Your demonstration must also include any overhaul interval that you recommend, any mechanical warranty that you offer for the engine or its components, and any relevant customer design specifications. Your demonstration may include any other relevant information. The certified emissions life value may not be shorter than any of the following:

(i) 1,000 hours of operation.

(ii) Your recommended overhaul interval.

(iii) Your mechanical warranty for the engine.

Certified stationary internal combustion engine means an engine that belongs to an engine family that has a certificate of conformity that complies with the emission standards and requirements in this part, or of 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054, as appropriate.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and carbon dioxide (CO_2).

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in §60.4243(d) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in §60.4243(d), then it is not considered to be an emergency stationary ICE under this subpart.

(1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.

(2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §60.4243(d).

(3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §60.4243(d)(2)(ii) or (iii) and §60.4243(d)(3)(i).

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining or natural gas production.

Manufacturer has the meaning given in section 216(1) of the Clean Air Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1048.801.

Model year means the calendar year in which an engine is manufactured (see “date of manufacture”), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see “date of manufacture”), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see “date of manufacture”).

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Pipeline-quality natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipeline-quality natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units per standard cubic foot.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to June 12, 2006, with passive emission control technology for NO_X (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to either: a gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically

natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Stationary internal combustion engine test cell/stand means an engine test cell/stand, as defined in 40 CFR part 63, subpart PPPPP, that tests stationary ICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Subpart means 40 CFR part 60, subpart JJJJ.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

Volatile organic compounds means volatile organic compounds as defined in 40 CFR 51.100(s).

Voluntary certification program means an optional engine certification program that manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich burn engines that use LPG can choose to participate in to certify their engines to the emission standards in §60.4231(d) or (e), as applicable.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 76 FR 37974, June 28, 2011; 78 FR 6698, Jan. 30, 2013]

Table 1 to Subpart JJJJ of Part 60—NOX, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP

Engine type and fuel	Maximum engine power	Manufacture date	Emission standards[a]					
			g/HP-hr			ppmvd at 15% O_2		
			NO_X	CO	VOC[d]	NO_X	CO	VOC[d]
Non-Emergency SI Natural Gas[b] and Non-Emergency SI Lean Burn LPG[b]	100≤HP<500	7/1/2008	2.0	4.0	1.0	160	540	86
		1/1/2011	1.0	2.0	0.7	82	270	60
Non-Emergency SI Lean Burn Natural Gas and LPG	500≤HP<1,350	1/1/2008	2.0	4.0	1.0	160	540	86
		7/1/2010	1.0	2.0	0.7	82	270	60
Non-Emergency SI Natural Gas and Non-Emergency SI Lean Burn LPG (except lean burn 500≤HP<1,350)	HP≥500	7/1/2007	2.0	4.0	1.0	160	540	86
	HP≥500	7/1/2010	1.0	2.0	0.7	82	270	60
Landfill/Digester Gas (except lean burn 500≤HP<1,350)	HP<500	7/1/2008	3.0	5.0	1.0	220	610	80
		1/1/2011	2.0	5.0	1.0	150	610	80
	HP≥500	7/1/2007	3.0	5.0	1.0	220	610	80
		7/1/2010	2.0	5.0	1.0	150	610	80

Engine type and fuel	Maximum engine power	Manufacture date	Emission standards[a]					
			g/HP-hr			ppmvd at 15% O_2		
			NO_X	CO	VOC[d]	NO_X	CO	VOC[d]
Landfill/Digester Gas Lean Burn	500≤HP<1,350	1/1/2008	3.0	5.0	1.0	220	610	80
		7/1/2010	2.0	5.0	1.0	150	610	80
Emergency	25<HP<130	1/1/2009	[c]10	387	N/A	N/A	N/A	N/A
	HP≥130		2.0	4.0	1.0	160	540	86

[a]Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.

[b]Owners and operators of new or reconstructed non-emergency lean burn SI stationary engines with a site rating of greater than or equal to 250 brake HP located at a major source that are meeting the requirements of 40 CFR part 63, subpart ZZZZ, Table 2a do not have to comply with the CO emission standards of Table 1 of this subpart.

[c]The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO_X + HC.

[d]For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[76 FR 37975, June 28, 2011]

Table 2 to Subpart JJJJ of Part 60—Requirements for Performance Tests

As stated in §60.4244, you must comply with the following requirements for performance tests within 10 percent of 100 percent peak (or the highest achievable) load:

Table 2 to Subpart JJJJ of Part 60—Requirements for Performance Tests

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary SI internal combustion engine demonstrating compliance according to §60.4244.	a. limit the concentration of NO_X in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate.	(a) Alternatively, for NO_X, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[ae].	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_X concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7.	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e].	(c) Measurements to determine moisture must be made at the same time as the measurement for NO_X concentration.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		v. Measure NO_X at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device.	(5) Method 7E of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (Reapproved 2005)[ae], Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e].	(d) Results of this test consist of the average of the three 1-hour or longer runs.
	b. limit the concentration of CO in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate.	(a) Alternatively, for CO, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[ae].	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for CO concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7.	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e].	(c) Measurements to determine moisture must be made at the same time as the measurement for CO concentration.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		v. Measure CO at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device.	(5) Method 10 of 40 CFR part 60, appendix A4, ASTM Method D6522-00 (Reapproved 2005)[ae], Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e].	(d) Results of this test consist of the average of the three 1-hour or longer runs.
	c. limit the concentration of VOC in the stationary SI internal combustion engine exhaust	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate.	(a) Alternatively, for VOC, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[ae].	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for VOC concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7.	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e].	(c) Measurements to determine moisture must be made at the same time as the measurement for VOC concentration.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		v. Measure VOC at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device.	(5) Methods 25A and 18 of 40 CFR part 60, appendices A-6 and A-7, Method 25A with the use of a methane cutter as described in 40 CFR 1065.265, Method 18 of 40 CFR part 60, appendix A-6[cd], Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e].	(d) Results of this test consist of the average of the three 1-hour or longer runs.

[a]Also, you may petition the Administrator for approval to use alternative methods for portable analyzer.

[b]You may use ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses, for measuring the O_2 content of the exhaust gas as an alternative to EPA Method 3B. AMSE PTC 19.10-1981 incorporated by reference, see 40 CFR 60.17

[c]You may use EPA Method 18 of 40 CFR part 60, appendix A-6, provided that you conduct an adequate pre-survey test prior to the emissions test, such as the one described in OTM 11 on EPA's Web site (*http://www.epa.gov/ttn/emc/prelim/otm11.pdf*).

[d]You may use ASTM D6420-99 (2004), Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography/Mass Spectrometry as an alternative to EPA Method 18 for measuring total nonmethane organic. ASTM D6420-99(2004) incorporated by reference; see 40 CFR 60.17.

[e]Incorporated by reference; see 40 CFR 60.17.

[79 FR 11251, Feb. 27, 2014]

Table 3 to Subpart JJJJ of Part 60—Applicability of General Provisions to Subpart JJJJ

[As stated in §60.4246, you must comply with the following applicable General Provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4248.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4245.
§60.8	Performance tests	Yes	Except that §60.8 only applies to owners and operators who are subject to performance testing in subpart JJJJ.
§60.9	Availability of information	Yes	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	Yes	Requirements are specified in subpart JJJJ.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	No	
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

Table 4 to Subpart JJJJ of Part 60—Applicability of Mobile Source Provisions for Manufacturers Participating in the Voluntary Certification Program and Certifying Stationary SI ICE to Emission Standards in Table 1 of Subpart JJJJ

[As stated in §60.4247, you must comply with the following applicable mobile source provisions if you are a manufacturer participating in the voluntary certification program and certifying stationary SI ICE to emission standards in Table 1 of subpart JJJJ]

Mobile source provisions citation	Subject of citation	Applies to subpart	Explanation
1048 subpart A	Overview and Applicability	Yes	
1048 subpart B	Emission Standards and Related Requirements	Yes	Except for the specific sections below.
1048.101	Exhaust Emission Standards	No	
1048.105	Evaporative Emission Standards	No	
1048.110	Diagnosing Malfunctions	No	
1048.140	Certifying Blue Sky Series Engines	No	
1048.145	Interim Provisions	No	
1048 subpart C	Certifying Engine Families	Yes	Except for the specific sections below.
1048.205(b)	AECD reporting	Yes	
1048.205(c)	OBD Requirements	No	
1048.205(n)	Deterioration Factors	Yes	Except as indicated in 60.4247(c).
1048.205(p)(1)	Deterioration Factor Discussion	Yes	
1048.205(p)(2)	Liquid Fuels as they require	No	
1048.240(b)(c)(d)	Deterioration Factors	Yes	
1048 subpart D	Testing Production-Line Engines	Yes	
1048 subpart E	Testing In-Use Engines	No	
1048 subpart F	Test Procedures	Yes	
1065.5(a)(4)	Raw sampling (refers reader back to the specific emissions regulation for guidance)	Yes	
1048 subpart G	Compliance Provisions	Yes	

Mobile source provisions citation	Subject of citation	Applies to subpart	Explanation
1048 subpart H	Reserved		
1048 subpart I	Definitions and Other Reference Information	Yes	
1048 appendix I and II	Yes		
1065 (all subparts)	Engine Testing Procedures	Yes	Except for the specific section below.
1065.715	Test Fuel Specifications for Natural Gas	No	
1068 (all subparts)	General Compliance Provisions for Nonroad Programs	Yes	Except for the specific sections below.
1068.245	Hardship Provisions for Unusual Circumstances	No	
1068.250	Hardship Provisions for Small-Volume Manufacturers	No	
1068.255	Hardship Provisions for Equipment Manufacturers and Secondary Engine Manufacturers	No	

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification (MSM) and a Part 70 Significant Permit Modification (SPM)

Source Description and Location

Source Name:	Dana Light Axle Products, LLC
Source Location:	2100 West State Blvd., Fort Wayne, IN 46808
County:	Allen
SIC Code:	3714 (Motor Vehicle Parts and Accessories)
Operation Permit No.:	T003-32393-00003
Operation Permit Issuance Date:	May 29, 2013
Minor Source Modification No.:	003-37378-00003
Significant Permit Modification No.:	003-37389-00003
Permit Reviewer:	Hannah L. Desrosiers

On November 19, 2015 and July 6, 2016, the Office of Air Quality (OAQ) received applications from Dana Light Axle Products, LLC related to a modification to an existing stationary axle manufacturing plant. The two (2) applications have been combined, and a single approval will be issued.

Existing Approvals

The source was issued Part 70 Operating Permit Renewal on May 29, 2013. There have been no subsequent approvals issued.

County Attainment Status

The source is located in Allen County. The following attainment status designations are applicable to Allen 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.

(Air Pollution Control Division; 326 IAC 1-4-3; filed Dec 26, 2007, 1:43 p.m.: 20080123-IR-326070308FRA; filed Jan 30, 2013, 12:34 p.m.: 20130227-IR-326110774FRA; filed Oct 25, 2013, 2:41 p.m.:20131120-IR-326130164FRA)

(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. Allen 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) PM2.5
Allen 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
Allen 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 type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not 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	25.64
PM_{10}	28.78
$PM_{2.5}$	28.59
SO_2	55.86
NO_X	107.43
VOC	46.82
CO	62.60
GHGs as CO2e	98,477
Total HAPs	2.04
Worst Single HAP	1.22 (hexane)

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 not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant, excluding GHGs, is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(d) 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) The emissions in the table above were taken directly from the "Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)" table in the TSD for Part 70 Operating Permit Renewal No. T003-32393-00003, page 7 of 21.

Description of the Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Dana Light Axle Products, LLC (Dana) on November 19, 2015, relating to the addition of one (1) natural gas-fired Generac emergency generator, five (5) dry milling machines, two (2) dry cut gear machines, 45 wet machining units, and a new coolant in the wet milling operation. Additionally, on July 6, 2016, Dana requested approval to construct 51 additional new wet machining units.

The following is a list of the proposed emission units and pollution control device(s):

(a) One (1) 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator, identified as EG-2, manufactured and constructed in 2013, and permitted in 2016, uncontrolled and exhausting outside the building.

Under 40 CFR 60, Subpart JJJJ (NSPS for Stationary Spark Ignition Internal Combustion Engines) and 40 CFR 63, Subpart ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)), EG-2 is considered an affected facility.

(b) For an emission unit or activity with potential uncontrolled emissions of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM10), the exemption level is either five (5) pounds per hour or twenty-five (25) pounds per day.

(1) Five (5) dry milling machines (constructed in 1965, and permitted in 2016), each equipped with a dust collector and exhausting inside the building

(2) One (1) dry cut gear cutter (constructed in 2015, and permitted in 2016), equipped with a Cyclo Vac dust collector, and exhausting inside the building; and

(3) One (1) dry cut gear cutter (approved in 2016 for construction), equipped with an oil mist collector, and exhausting inside the building.

(d) Machining where an aqueous cutting coolant continuously floods the machining interface, including the following:

(1) Forty-five (45) wet machining units, constructed in 2015, with smog Hogs or mist collector units for particulate control, having an outlet grain loading of 0.0018 grains per dry standard cubic feet (gr/dscf) and a combined airflow rate of 19,000 cfm and exhausting inside the building.

(2) Fifty-one (51) wet machining units, approved in 2016 for construction, with smog Hogs or mist collector units for particulate control, having an outlet grain loading of 0.0018 grains per dry standard cubic feet (gr/dscf) and a combined total airflow rate of 64,150 cfm and exhausting inside the building.

Enforcement Issues

(a) IDEM is aware that the 107.0 hp Generac emergency generator (EG-2), which is subject to the requirements of NSPS Subpart JJJJ and NESHAP Subpart ZZZZ, was operated prior to receipt of

the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the operating permit rules.

(b) For the five (5) dry milling machines, two (2) dry cut gear cutting machines, and forty-five (45) wet machining units that were constructed and operated, and the change in operation made (addition of a new coolant), IDEM has determined that the PTE of the modification would have been less than the thresholds under 326 IAC 2-1.1-3 and 326 IAC 2-7-1(21) and Dana Light Axle Products, LLC would have not needed prior approval to construct and any of the units, or make the operational change.

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	
Pollutant	**Potential To Emit** (ton/yr)
PM	31.70
PM_{10}	31.71
$PM_{2.5}$	31.71
SO_2	$1.18E^{-04}$
NO_X	0.82
VOC	7.35
CO	0.32
Single HAPs	0.014 (xylenes)
Total HAPs	0.029

Appendix A.2 of this TSD reflects the unrestricted potential emissions of the modification.

This source modification is subject to 326 IAC 2-7-10.5(e)(1)(A), since the PTE of PM, PM10, and PM2.5, is less than twenty-five (25) tons per year and equal to or greater than five (5) tons per year, each. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d) (1), since the modification does not qualify as minor permit modification or as administrative amendment, and because the modification incorporates applicable portions of the Stationary Spark Ignition Internal Combustion Engines NSPS [40 CFR Part 60, Subpart JJJJ] for the Generac emergency generator (EG-2).

Permit Level Determination – PSD or Emission Offset or Nonattainment NSR

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 source and permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process / Emission Unit	Project Emissions (ton/yr)							
	PM	**PM_{10}**	**$PM_{2.5}$***	**SO_2**	**NO_X**	**VOC**	**CO**	**GHGs as CO2e**
Generac emergency generator (EG-2)	$1.55E^{-05}$	$2.00E^{-03}$	$2.00E^{-03}$	$1.18E^{-04}$	0.82	0.02	0.32	28.47
Dry machining	3.61	3.61	3.61	---	---	---	---	---
Wet machining	28.10	28.10	28.10	---	---	7.33	---	---
Total for Modification	**31.70**	**31.71**	**31.71**	**$1.18E^{-04}$**	**0.82**	**7.35**	**0.32**	**28.47**
PSD Major Source Thresholds	250	250	250	250	250	250	250	---
*$PM_{2.5}$ 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.

Federal Rule Applicability Determination

Due to this modification, federal rule applicability has been reviewed as follows:

Compliance Assurance Monitoring (CAM)

(a) 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 following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis							
Emission Unit	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
Generac emergency generator (EG-2)	None	Y	<100	<100	100	N	N
Dry machining	Oil Mist	N	<100	<100	100	N	N
Wet machining	Oil Mist Coolant	N	<100	<100	100	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new units as part of this modification.

New Source Performance Standards (NSPS)

(b) 40 CFR 60, Subpart Dc - Standards for Small Industrial-Commercial-Institutional Steam Generating Units

The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc (326 IAC 12), are not included in the permit for the 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2), because it is an internal combustion engine (ICE) and not a steam generating unit, as defined in 40 CFR 60.41c.

(c) 40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

The requirements of the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart IIII (326 IAC 12), are not included in the permit, since the 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2) is a spark ignition (SI) internal combustion engine and not a compression ignition (CI) internal combustion engine.

(d) 40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

The 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2) is subject to the requirements of the New Source Performance Standard for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ (326 IAC 12), because it was constructed (ordered) after June 12, 2006, manufactured after January 1, 2009, it is an emergency, stationary, spark ignition (SI) internal combustion engine (ICE), with a maximum engine power rating greater than 19 KW (25 HP) and less than 500 HP (373 KW), and has never been modified (as defined under §60.14) or reconstructed (as defined under §60.15). *For the purposes of this rule, the date that construction commences is the date the engine is ordered by the original owner or operator.* Construction of the emergency generator commenced in 2013.

The 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2) is subject to the following applicable portions of the NSPS for emergency SI ICE:

(1) 40 CFR 60.4230(a)(4)(iv), (a)(6), & (c);
(2) 40 CFR 60.4233(e);
(3) 40 CFR 60.4234;
(4) 40 CFR 60.4236(c);
(5) 40 CFR 60.4237(c);
(6) 40 CFR 60.4243(a)(1), (a)(2)(ii), (b), (d), (e), (f), (g);
(7) 40 CFR 60.4244;
(8) 40 CFR 60.4245(a), (b), (d), (e);
(9) 40 CFR 60.4246;
(10) 40 CFR 60.4248; and
(11) Tables 1, 2, & 3.

Notes: Pursuant to 40 CFR 60.4243(f), testing is only required if the engine is non-certified or the engine, and any associated control device, is not operated and maintained according to the manufacturer's written emission-related instructions, or if the emission-related settings are changed in a way that is not permitted by the manufacturer.

On May 4, 2016, the U.S. Court of Appeals for the D.C. Circuit issued a mandate vacating paragraphs 40 CFR 60.4243(d)(2)(ii) - (iii) of NSPS Subpart JJJJ. Therefore, these paragraphs no longer have any legal effect and any engine that is operated for purposes specified in these paragraphs becomes a non-emergency engine and must comply with all applicable requirements for a non-emergency engine.

For additional information, please refer to the USEPA's Guidance Memo: https://www3.epa.gov/airtoxics/icengines/docs/RICEVacaturGuidance041516.pdf

Since the federal rule has not been updated to remove these vacated requirements, the text below shows the vacated language as ~~strikethrough~~ text. At this time, IDEM is not making any changes to the permit's attachment due to this vacatur. However, the permit will not reference the vacated requirements, as applicable.

40 CFR 60.4243(d)(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraph~~s~~ (d)(2)(i) ~~through (iii)~~ of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (d)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

~~(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.~~

~~(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.~~

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1, apply to the 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2) except as otherwise specified in 40 CFR 63, Subpart JJJJ.

(e) There are no New Source Performance Standards (NSPS) (40 CFR Part 60) included for this proposed modification.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(f) 40 CFR 63, Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines
The 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2) is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ (326 IAC 20-82), because it is considered a new *(construction commenced on or after June 12, 2006)* stationary reciprocating internal combustion engine (RICE) at an area source of hazardous air pollutant (HAP) emissions. *For the purposes of this rule, the date that construction commenced is the date on-site fabrication, erection, or installation ("physical" construction) of the affected source (engine) started when the unit was brand new. A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.* Construction of the 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2) commenced in 2013. The unit has never been modified (as defined under §60.14) or reconstructed (as defined under §60.15).

The 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2) is subject to the following applicable portions of the NESHAP for new stationary RICE at an area source of HAP:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585
(3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)
(4) 40 CFR 63.6595(a)(7)
(5) 40 CFR 63.6665
(6) 40 CFR 63.6670
(7) 40 CFR 63.6675

Notes: Pursuant to 40 CFR 63.6590(c)(1), a new or reconstructed stationary RICE located at an area source must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

On May 4, 2016, the U.S. Court of Appeals for the D.C. Circuit issued a mandate vacating paragraphs 40 CFR 63.6640(f)(2)(ii) - (iii) of NESHAP Subpart ZZZZ. Therefore, these paragraphs no longer have any legal effect and any engine that is operated for purposes specified in these paragraphs becomes a non-emergency engine and must comply with all applicable requirements for a non-emergency engine.

For additional information, please refer to the USEPA's Guidance Memo: https://www3.epa.gov/airtoxics/icengines/docs/RICEVacaturGuidance041516.pdf

Since the federal rule has not been updated to remove these vacated requirements, the text below shows the vacated language as ~~strikethrough~~ text. At this time, IDEM is not making any changes to the permit's attachment due to this vacatur. However, the permit will not reference the vacated requirements, as applicable.

40 CFR 63.6640(f)(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraph~~s~~ (f)(2)(i) ~~through (iii)~~ of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the

owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

~~(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.~~

~~(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.~~

Pursuant to 40 CFR 63.6665, the natural gas-fired emergency generator EG-1 does not have to meet the requirements of 40 CFR 63, Subpart A (General Provisions), since it is considered a new stationary RICE located at an area source of HAP emissions.

(g) 40 CFR 63, Subpart JJJJJJ - NESHAPs for Industrial, Commercial, and Institutional Boilers Area Sources

The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources (40 CFR 63, Subpart JJJJJJ) are not included in the permit for the 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2), since the unit is a direct-fired heater and not a boiler.

(h) 40 CFR 63, Subpart XXXXXX - NESHAPs for Nine Metal Fabrication and Finishing Source Categories

The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXXX (6X), are not included in the permit, since although this source meets the definition of an area source, as defined in 40 CFR 63.2, this source is not primarily engaged in the operations listed in one of the nine metal fabrication and finishing source categories, as defined in §63.11514 and §63.11522.

State Rule Applicability Determination

Due to the modification, state rule applicability has been reviewed as follows:

(a) 326 IAC 2-1.1-5 and 2-3 (Nonattainment New Source Review and Emission Offset)

Allen County has been classified as attainment or unclassifiable in Indiana for all criteria pollutants. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment New Source Review requirements do not apply, and are not included for this proposed modification.

(b) 326 IAC 2-2 (PSD)

PSD applicability is discussed under the Permit Level Determination – PSD section above.

(c) 326 IAC 2-3 (Emission Offset)

Allen County has been classified as attainment or unclassifiable in Indiana for all criteria pollutants. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply, and are not included for this proposed modification.

(d) 326 IAC 2-7-6(5) (Annual Compliance Cerification)

The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual

compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certification that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

State Rule Applicability - Individual Facilities

Generac Emergency Generator

(a) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of the 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2) 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 and is not included for the proposed modification.

(b) 326 IAC 4-2-2 (Incinerators)
This source is not subject to 326 IAC 4 2 2, because the 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2), is not an incinerator, as defined by 326 IAC 1-2-34, since it does not burn waste substances. Therefore, the requirements of 326 IAC 4-2-2 are not included for this proposed modification.

(c) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2), is not subject to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating), because, pursuant to 326 IAC 1-2-19, this emission unit does not meet the definition of an indirect heating unit. Therefore, the requirements of 326 IAC 6-2 are not included for this proposed modification.

(d) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
The 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2), is not a "manufacturing process" as defined under 326 IAC 6-3-1.5. Additionally, the unit is exempt from the requirements of 326 IAC 6-3, because, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight. Therefore, the requirements of 326 IAC 6-3 are not included for this proposed modification.

(e) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
This source is not subject to 326 IAC 7-1.1, because the potential to emit sulfur dioxide from the 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2), is less than twenty-five (25) tons per year and ten (10) pounds per hour. Therefore, the requirements of 326 IAC 7-1.1 are not included for this proposed modification.

See TSD Appendix A.2 for the detailed calculations.

(f) 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
The 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2), is not subject to 326 IAC 8-1-6, because the unit has the potential to emit VOC of less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not included for this proposed modification.

See TSD Appendix A.2 for the detailed calculations.

(g) 326 IAC 9-1-1 (Carbon Monoxide Emission Limits)
The 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2), is not subject to 326 IAC 9-1-1 (Carbon Monoxide Emission Limits) because there are no applicable emission limits for the source under 326 IAC 9-1-2. Therefore, the requirements of 326 IAC 9-1-1 are not included for this proposed modification.

(h) 326 IAC 10-1-1 (Nitrogen Oxides Control)
The 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2), is not subject to 326 IAC 10-1-1 (Nitrogen Oxides Control) because the source is not located in Clark or Floyd counties. Therefore, the requirements of 326 IAC 10-1-1 are not included for this proposed modification.

(i) 326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)
The 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2) is not subject to the requirements of 326 IAC 10-3, because the generator is a reciprocating internal combustion engine and not a Portland cement kiln or a blast furnace gas fired boiler, and is not specifically listed under 326 IAC 10-3-1(a)(2). Therefore, the requirements of 326 IAC 10-3 are not included for this proposed modification.

(j) 326 IAC 10-5 (Nitrogen Oxide Reduction Program for Internal Combustion Engines (ICE))
The 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator (EG-2) does not meet the definition of an affected engine, as defined in 326 IAC 10-5-2(1), because although the generator is an internal combustion engine, it is not specifically listed in the NOx SIP Call engine inventory. Therefore, the requirements of 326 IAC 10-5 do not apply to emergency generator (EG-2), and are not included for this proposed modification.

Dry Machining - milling machines and gear cutters

(k) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The potential particulate emissions for the dry milling machines and dry cut gear cutters are less than 0.551 lbs/hr, each. Therefore, pursuant to 326 IAC 6-3-1(b)(14) each of the dry milling machines and dry cut gear cutters is exempt from the requirements of 326 IAC 6-3. Therefore, the requirements are not included for this proposed modification.

See TSD Appendix A.2 for the detailed calculations.

Wet Machining

(l) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of the new wet machines 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, combined. Therefore, 326 IAC 2-4.1 does not apply and is not included for the proposed modification.

(m) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
The potential to emit particulate from the new wet machines, where an aqueous cutting coolant continuously floods the machining interface, is less than five hundred fifty-one thousandths (0.551) pound per hour, combined. Therefore, pursuant to 326 IAC 6-3-1(b)(14) the wet machining operations are exempt from 326 IAC 6-3, and the requirements are not included for this proposed modification.

(n) 326 IAC 8-1-6 (New Facilities: General Reduction Requirements)
The new wet machines are each not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each wet machining unit is less than twenty-five (25) tons per year.

See TSD Appendix A.2 for the detailed calculations.

(o) 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations)
The requirements of 326 IAC 8-2-9 are not included for this proposed modification for the coolant usage in the new wet machines, because although each machine was constructed after July 1, 1990, and the coolant is used to coat metal parts under Standard Industrial Classification (SIC) Code major group #37, the actual before control emissions from each machine are less than fifteen (15) pounds per day.

(p) 326 IAC 8-3 (Organic Solvent Degreasing Operations)
The requirements of 326 IAC 8-3 are not included for this proposed modification for the coolant usage in the new wet machines, because each new wet machine does not meet the definition of a cold cleaner degreaser under 326 IAC 1-2-18.5, as each is not of a type as described in subdivisions 326 IAC 8-3-1(b)(1)(A) through 326 IAC 8-3-1(b)(1)(C). Additionally, the oils and coolants used in the wet machining process are lubricants and not dissolvers, viscosity reducers, or cleaning agents.

(q) There are no 326 IAC 8 Rules that are applicable to the new wet machines.

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.

(a) The compliance determination requirement applicability determination for this modification is as follows:

(1) In order to assure compliance with 40 CFR 60, Subpart JJJJ and 40 CFR 63, Subpart ZZZZ, the Permittee shall comply with all applicable requirements of 60.4243 - Compliance Requirements for Owners and Operators, for the Generac emergency generator (EG-2).

Note: Pursuant to 40 CFR 60.4243(f), testing of the Generac emergency generator (EG-2) is only required if the engine is non-certified or the engine, and any associated control device, is not operated and maintained according to the manufacturer's written emission-related instructions, or if the emission-related settings are changed in a way that is not permitted by the manufacturer.

(2) There are no specific compliance determination requirements, or testing requirements, for the dry milling machines, dry cut gear cutters, and wet machining units.

(b) The compliance monitoring requirement applicability determination for this modification is as follows:

(1) In order to assure compliance with 40 CFR 60, Subpart JJJJ and 40 CFR 63, Subpart ZZZZ, the Permittee shall comply with all applicable requirements of 60.4237 - monitoring requirements for emergency stationary SI internal combustion engines, for the Generac emergency generator (EG-2).

(2) There are no specific compliance monitoring requirements for the dry milling machines, dry cut gear cutters, and wet machining units.

Proposed Changes

The following changes listed below are due to the proposed modification:

1. Existing Sections A.3 - Insignificant Activities and E.2 - NESHAPS requirements, have been revised to include emission unit descriptions for the new Generac emergency generator, dry milling machines, dry cut gear cutters, and wet machining units, as appropriate.

2. Existing Section E.2 - NESHAPS Requirements, has been revised to incorporate by reference the requirements of 40 CFR Part 63, Subpart ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines) for the Generac emergency generator; and

3. A new Section E.5 - NSPS Requirements has been added to permit to incorporate by reference the requirements of 40 CFR 60, Subpart JJJJ (NSPS for Stationary Spark Ignition Internal Combustion Engines) for the Generac emergency generator. A copy of the rule is attached to the permit as Attachment E.

Additionally, IDEM, OAQ has made the following revisions to the permit in order to update the language to match the most current version of the applicable rule, to eliminate redundancy within the permit, and to provide clarification regarding the requirements of these conditions.

1. **Sections A.3 - Insignificant Activities & E.2 - NESHAPS requirements**
IDEM, OAQ has revised sections A.3 and E.2 to include emission unit IDs for the existing Detroit diesel fire pump and the 2,442 hp emergency generator for clarity.

2. **Section C - Compliance Monitoring**
IDEM has revised the Section C Compliance Monitoring Condition to more clearly describe when new monitoring for new and existing units must begin.

3. **Section C - Instrument Specifications**
IDEM clarified this condition to indicate that the analog instrument must be capable of measuring the parameters outside the normal range.

4. **Section C - Response to Excursions or Exceedances**
IDEM, OAQ revised the CAM portion of the Section C.14 - Response to Excursions or Exceedances to provide clarity.

   A. In paragraph (II)(c), the acronym QIP is being spelled out as Quality Improvement Plan (QIP) because this is the first time it is mentioned in the condition.

   B. In paragraphs (II)(f) and (II)(h)(1), the reference to paragraph (II)(a)(2) is being changed to paragraph (II)(c). Referencing paragraph (II)(a)(2) is correct, however IDEM, OAQ believes that referencing paragraph (II)(c) provides clarity.

5. **Section C - Emission Statement**
326 IAC 2-7-1 was updated on August 1, 2014. This rule update changed the rule cite for the definition of “Regulated Pollutant” used only for purposes of “Emission Reporting”. Therefore, Section C Emission Statement has been updated accordingly.

6. **Section C - General Record Keeping Requirements**
IDEM added "where applicable" to the lists in Section C - General Record Keeping Requirements to more closely match the underlying rule.

7 **Sections D - Compliance Determination Requirements**

After discussions with EPA, OAQ decided to add the rule citation 326 IAC 2 7 5(1) to the Compliance Determination Requirements subsection title in Section D.2 to clarify the authority of these conditions. The addition of this rule cite is to satisfy EPA's concerns.

8 **Sections E - Federal Rule Applicability**

(1) IDEM revised Sections E.1 through E.4 for clarity. The existing Sections E - New Source Performance Standards (NSPS) Requirements and National Emissions Standards for Hazardous Air Pollutants (NESHAP) Requirements language, has been replaced with standardized versions of the E Section language.

(2) IDEM added the rule citation 326 IAC 2 7 5(1) to the New Source Performance Standards (NSPS) Requirements subsection title in Section E.1 to clarify the authority of this condition.

(3) IDEM added the rule citation 326 IAC 2 7 5(1) to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements subsection title in Sections E.2 through E.4 to clarify the authority of these conditions; and

(4) IDEM, OAQ, has clarified that a copy of the Federal Rule would be attached 'to the operating permit' rather than 'to this permit'.

Unaffected permit conditions have been re-numbered and the Table of Contents updated, as applicable. The Permit has been revised as follows, with deleted language shown as ~~strikeouts~~ and new language **bolded**.

A.3 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, as defined in 326 IAC 2-7-1(21):

(a) Activities associated with emergencies, including the following:

(1) One (1) Detroit diesel Fire Pump engine, **identified as DFP-1,** constructed in 1969, rated at 85 Horsepower (hp).

(2) One (1) Emergency Generator fired by diesel oil no.2, **identified as EG-1,** constructed in 1999, with an output of 2,281 Kilo-Volt-Ampere (KVA) (2,442 Hp), and venting to stack #149.

Under NESHAP 40 CFR 63, Subpart ZZZZ, these units are considered existing affected units.

(3) One (1) 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator, identified as EG-2, manufactured and constructed in 2013, and permitted in 2016, uncontrolled and exhausting outside the building.

Under 40 CFR 60, Subpart JJJJ (NSPS for Stationary Spark Ignition Internal Combustion Engines) and 40 CFR 63, Subpart ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)), EG-2 is considered a new affected emergency generator.

(b) For an emission unit or activity with potential uncontrolled emissions of particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM10), the exemption level is either five (5) pounds per hour or twenty-five (25) pounds per day.

*** * * * * ***

(2) **Eight**~~Three~~ (**8**~~3~~) dry mill**ing** machines (constructed in 1965 **and 2016, and permitted in 2011 and 2016**) and 11 dry cut gear cutters (constructed in 1985), each equipped with dust collector ~~or oil mist collector,~~ and exhausting inside the building.

(3) Eight (8) dry cut gear cutters (constructed in 1985 and 2016, and permitted in 2011 and 2016), each equipped with an oil mist collector, and exhausting inside the building

(4) Five (5) dry cut gear cutters (constructed in 1985, 2015, and 2016, and permitted in 2011 and 2016), each equipped with a Cyclo Vac dust collector, and exhausting inside the building.

*** * * * * ***

(d) Machining where an aqueous cutting coolant continuously floods the machining interface, including the following:

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(2) Forty-five (45) wet machining units, constructed in 2015, with smog Hogs or mist collector units for particulate control, having an outlet grain loading of 0.0018 grains per dry standard cubic feet (gr/dscf) and a combined airflow rate of 19,000 cfm and exhausting inside the building.

(3) Fifty-one (51) wet machining units, approved in 2016 for construction, with smog Hogs or mist collector units for particulate control, having an outlet grain loading of 0.0018 grains per dry standard cubic feet (gr/dscf) and a combined total airflow rate of 64,150 cfm and exhausting inside the building.

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C.10 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 or of initial start-up, whichever is later, 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 or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

*** * * * * ***

C.11 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.**

*** * * * * ***

C.14 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5][326 IAC 2-7-6]

* * * * * *

(II)

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

* * * * * *

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)**(c)**~~(a)(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:

* * * * * *

(h) *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 (II)**(c)**~~(a)(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.

* * * * * *

* * * * * *

C.16 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]

In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 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:

* * * * * *

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1**(33)**~~(32)~~ ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

* * * * * *

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(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**:

* * * * * *

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

* * * * * *

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS - Boilers

* * * * * *

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

* * * * * *

SECTION E.1**NSPS** REQUIREMENTS~~NEW SOURCE PERFORMANCE STANDARDS FOR SMALL INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS (40 CFR 60, Subpart Dc)~~

Emission Unit~~Facility~~ Description [326 IAC 2-7-5(14)]:

*** * * * * ***

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to **New Source Performance Standards**~~the NSPS for Small Industrial-Commercial-Institutional Steam Generating Units~~ [326 IAC 12-1][40 CFR 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, for Boilers 8 and 9 **except** as **otherwise** specified in 40 CFR 60, Subpart Dc.

*** * * * * ***

E.1.2 NSPS for Small Industrial-Commercial-Institutional Steam Generating Units Requirements [40 CFR 60, Subpart Dc][326 IAC 12]

~~Pursuant to 40 CFR 60, Subpart Dc, t~~**T**he Permittee shall comply with the following provisions of **40 CFR 60, Subpart Dc**~~the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units~~ (included as attachment A **to the operating permit**~~of this permit~~), which are incorporated by reference as 326 IAC 12, for Boilers 8 and 9:

*** * * * * ***

*** * * * * ***

SECTION E.2**NESHAPS REQUIREMENTS**~~NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES (40 CFR 63, Subpart ZZZZ)~~

Emission Unit~~Facility~~ Description [326 IAC 2-7-5(14)]:

Insignificant Activities

(a) Activities associated with emergencies, including the following:

(1) One (1) Detroit diesel Fire Pump engine, **identified as DFP-1,** constructed in 1969, rated at 85 Horsepower (hp).

(2) One (1) Emergency Generator fired by diesel oil no.2, **identified as EG-1,** constructed in 1999, with an output of 2,281 Kilo-Volt-Ampere (KVA) (2,442 Hp), and venting to stack #149.

Under NESHAP 40 CFR 63, Subpart ZZZZ, these units are considered existing affected units.

(3) One (1) 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator, identified as EG-2, manufactured and constructed in 2013, and permitted in 2016, uncontrolled and exhausting outside the building.

Under 40 CFR 60, Subpart JJJJ (NSPS for Stationary Spark Ignition Internal Combustion Engines) and 40 CFR 63, Subpart ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)), EG-2 is considered a new affected emergency generator.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to **National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63**~~NESHAP ZZZZ~~ [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1~~6~~6665, 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, **for the emission unit(s) listed above, except** as **otherwise** specified in 40 CFR Part 63, Subpart ZZZZ ~~in accordance with schedule in 40 CFR 63 Subpart ZZZZ~~.

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

*** * * * * ***

~~and~~

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

E.2.2 Stationary Reciprocating Internal Combustion Engines NESHAP [326 IAC 20-82][40 CFR Part 63, Subpart ZZZZ]

The Permittee shall comply with the following provisions of the 40 CFR 63, Subpart ZZZZ (included as attachment B **to the operating permit**~~of this permit~~), which are incorporated by reference as 326 IAC 20-82, for the**:**

(a) diesel fire pump engine **(DFP-1)** and the emergency generator **(EG-1)**:

*** * * * * ***

(b) Generac emergency generator (EG-2):

(1) 40 CFR 60.4230(a)(4)(iv), (a)(6), & (c);
(2) 40 CFR 60.4233(e);
(3) 40 CFR 60.4234;
(4) 40 CFR 60.4236(c);
(5) 40 CFR 60.4237(c);
(6) 40 CFR 60.4243(a)(2)(ii), (b), (d), (e), (f), (g);
(7) 40 CFR 60.4244;
(8) 40 CFR 60.4245(a), (b), (d), (e);
(9) 40 CFR 60.4246;
(10) 40 CFR 60.4248; and
(11) Tables 1, 2, & 3.

*** * * * * ***

SECTION E.3NESHAPS REQUIREMENTS~~NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES (40 CFR 63, Subpart CCCCCC)~~

Emission Unit~~Facility~~ Description [326 IAC 2-7-5(14)]:

*** * * * * ***

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.3.1 General Provisions Relating to **National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63**~~NESHAP CCCCCC~~ [326 IAC 20-1][40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.1~~1~~1130, 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, **for the**

emission unit(s) listed above, except as **otherwise** specified in 40 CFR Part 63, Subpart CCCCCC ~~in accordance with schedule in 40 CFR 63 Subpart CCCCCC~~.

(b) Pursuant to 40 CFR 63.10, 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 Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.3.2 Gasoline Dispensing Facilities NESHAP [40 CFR Part 63, Subpart CCCCCC]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart CCCCCC (included as Attachment C **to the operating permit**~~of this permit~~), for the **emission unit(s) listed above**~~gasoline dispensing activities~~:

*** * * * * ***

* * * * * *

SECTION E.4NESHAPS REQUIREMENTS~~NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: AREA SOURCE STANDARDS FOR PLATING AND POLISHING OPERATIONS (40 CFR 63, Subpart WWWWWW)~~

Emission Unit~~Facility~~ Description [326 IAC 2-7-5(14)]:

*** * * * * ***

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.4.1 General Provisions Relating to **National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63**~~NESHAP WWWWWW~~ [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.11510, 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, **for the emission unit(s) listed above, except** as **otherwise** specified in 40 CFR Part 63, Subpart WWWWWW ~~in accordance with schedule in 40 CFR 63 Subpart WWWWWW~~.

*** * * * * ***

E.4.2 Area Source Plating and Polishing NESHAP [40 CFR Part 63, Subpart WWWWWW]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart WWWWWW (included as Attachment D **to the operating**~~of this~~ permit), for **the emission unit(s) listed above**~~plating and polishing activities~~:

*** * * * * ***

* * * * * *

Section E.5 NSPS REQUIREMENTS

Emission Unit Description [326 IAC 2-7-5(14)]:

Insignificant Activities

(a) Activities associated with emergencies, including the following:

(3) One (1) 107.0 hp (60kW), natural gas-fired, spark ignition, 4-stroke lean burn, Generac emergency generator, identified as EG-2, manufactured and constructed in 2013, and permitted in 2016, uncontrolled and exhausting outside the building.

Under 40 CFR 60, Subpart JJJJ (NSPS for Stationary Spark Ignition Internal Combustion Engines) and 40 CFR 63, Subpart ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)), EG-2 is considered a new affected emergency generator.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.5.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR 60, Subpart A]

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

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

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

E.5.2 Stationary Spark Ignition Internal Combustion Engines NSPS [40 CFR Part 60, Subpart JJJJ] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart JJJJ (included as Attachment E to the operating permit), which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above:

(1) 40 CFR 60.4230(a)(4)(iv), (a)(6), & (c);
(2) 40 CFR 60.4233(e);
(3) 40 CFR 60.4234;
(4) 40 CFR 60.4236(c);
(5) 40 CFR 60.4237(c);
(6) 40 CFR 60.4243(a)(2)(ii), (b), (d), (e), (f), (g);
(7) 40 CFR 60.4244;
(8) 40 CFR 60.4245(a), (b), (d), (e);
(9) 40 CFR 60.4246;
(10) 40 CFR 60.4248; and
(11) Tables 1, 2, & 3.

* * * * * *

No other changes were made to the permit as a result of this modification.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on November 19, 2015 and July 6, 2016. Additional information was received January 5, 2016 through August 10, 2016.

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No.: 003-37378-00003, and operation shall be subject to the conditions of the attached Significant Permit Modification No.: 003-37389-00003. The staff recommends to the Commissioner that the Part 70 Minor Source Modification and Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Ms. Hannah Desrosiers 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) 233-9327 or toll free at 1-800-451-6027 extension 3-9327.

(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.1: Emission Calculations
Emissions Summary

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Uncontrolled Emissions Source Wide

Emission Units	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	VOC	CO	GHGs as CO2e	Total HAPs	Highest Single HAP	
Boilers (natural gas)*	1.50	6.01	6.01	0.47	79.02	4.35	66.37	95,395	1.49	1.42	(Hexane)
Boilers (No. 2 backup fuel)*	11.29	13.43	12.02	400.72	112.88	1.92	28.22	121,825	2.42	0.74	(Selenium)
Boilers (Worst Case Fuel)*	**11.29**	**13.43**	**12.02**	**400.72**	**112.88**	**4.35**	**66.37**	**121,825**	**2.42**	**1.42**	**(Hexane)**
Natural Gas Fired Units	0.82	3.29	3.29	0.26	43.30	2.38	36.37	52,280	0.82	0.78	(Hexane)
Emergency Generators	0.56	0.25	0.25	2.16	25.09	0.75	2.07	736	0.021	0.014	(Benzene)
Firepump	0.05	0.05	0.05	0.04	0.66	0.05	0.14	25	0.001	0.0002	(Formaldehyde)
Shot Blasters	4.91	4.22	4.22	-	-	-	-	-	-	-	-
Surface Coating	0.05	0.05	0.05	-	-	0.12	-	-	0.003	0.003	(Xylene)
Welding	0.79	0.79	0.79	-	-	-	-	33	0.05	0.05	(Manganese)
Wet Machining	60.87	60.87	60.87	-	-	14.07	-	-	-	-	-
Dry Machining	10.66	10.66	10.66	-	-	-	-	-	-	-	-
Cleaning Process	-	-	-	-	-	10.35	-	-	-	-	-
Quench Oil	0.35	0.35	0.35	-	-	0.35	-	-	-	-	-
Lubrize Operation	-	-	-	-	-	-	-	-	-	-	-
Storage Tanks**	-	-	-	-	-	1.00	-	-	negl.	negl.	-
Gasoline Dispensing Operation	-	-	-	-	-	1.47	-	-	0.38	0.13	(Xylene)
Total	**90.33**	**93.95**	**92.54**	**403.18**	**181.93**	**34.89**	**104.96**	**174,899**	**3.70**	**2.20**	**(Hexane)**

Limited Emissions Source Wide

Emission Units	PM	PM_{10}	PM2.5	SO_2	NO_x	VOC	CO	GHGs as CO2e	Total HAPs	Highest Single HAP	
Source-Wide Natural Gas Combustion***	1.28	5.13	5.13	0.41	67.50	3.71	56.70	81,493	1.27	1.22	(Hexane)
Boilers (No. 2 backup fuel)***	1.50	1.79	1.60	53.25	15.00	0.26	3.75	16,189	0.32	0.10	(Selenium)
Emergency Generator	0.56	0.25	0.25	2.16	25.09	0.75	2.07	736.07	0.021	0.014	(Benzene)
Firepump	0.05	0.05	0.05	0.04	0.66	0.05	0.14	24.52	0.001	0.0002	(Formaldehyde)
Shot Blasters	4.91	4.22	4.22	-	-	-	-	-	-	-	-
Surface Coating	0.05	0.05	0.05	-	-	0.12	-	-	0.003	0.003	(Xylene)
Welding	0.79	0.79	0.79	-	-	-	-	33.27	0.05	0.05	(Manganese)
Wet Machining	12.17	12.17	12.17	-	-	14.07	-	-	-	-	-
Dry Machining	10.66	10.66	10.66	-	-	-	-	-	-	-	-
Cleaning Process	-	-	-	-	-	10.35	-	-	-	-	-
Quench Oil	0.35	0.35	0.35	-	-	0.35	-	-	-	-	-
Lubrize Operation	-	-	-	-	-	-	-	-	-	-	-
Storage Tanks**	-	-	-	-	-	1.00	-	-	negl.	negl.	-
Gasoline Dispensing Operation	-	-	-	-	-	1.47	-	-	0.38	0.13	(Xylene)
Total	**32.31**	**35.45**	**35.26**	**55.86**	**108.25**	**32.13**	**62.66**	**98,476**	**2.05**	**1.22**	**(Hexane)**

Notes:
*Boiler combustion emissions are based on the fuel with the highest emissions for each specific pollutant (i.e. the worst case fuel
**VOC emissions from the tanks conservatively estimated at 1.0 ton/year. HAP emissions assumed to be negligible
***Limited PTE based upon fuel usage limits to render 326 IAC 2-2 (PSD) not applicable

Appendix A.1: Emissions Calculations
Natural Gas Combustion Only - Boilers and Space heaters
MM BTU/HR <100

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Emission Unit
6.70	58.7	One (1) heat treat furnace @ 6.7 MMBtu/hr (ID: HT5)
6.00	52.6	One (1) heat treat furnace @ 6.0 MMBtu/hr (ID: HT6)
8.52	74.6	Two (2) heat treat furnaces @ 4.26 MMBtu/hr each (ID: Hagen-N, Hagen-S)
12.00	105.1	Three (3) heat treat furnaces @ 4.0 MMBtu/hr each (ID: HT1, HT2, HT4)
3.90	34.2	One (1) heat treat furnace @ 3.9 MMBtu/hr (ID: RX#9)
4.00	35.0	One (1) heat treat furnace @ 2.2 MMBtu/hr (ID: HT3)
1.37	12.0	Two (2) heat treat furnaces @ 0.685 MMBtu/hr each (ID: DX1,DX2)
8.40	73.6	Twenty-one (21) space heaters @ 0.40 MMBtu/hr each (ID: H1 - H16, H20 - H24)
0.20	1.8	One (1) space heaters @ 0.2 MMBtu/hr each (ID: H25)
0.375	3.3	Three (3) space heaters @ 0.125 MMBtu/hr each (ID: H17 - H19)
0.60	5.3	One (1) washer heater @ 0.6 MMBtu/hr (ID: JRI94)
1.00	8.8	Two (2) washer heaters @ 0.5 MMBtu/hr each (ID: WCG93, WCG97)
3.00	26.3	One (1) draw-type furnace @ 3.0 MMBtu/hr
1.00	8.8	One (1) aging oven @ 1 MMBtu/hr (ID: F1)
1.80	15.8	One (1) Grobe Washer @ 1.8 MMBtu/hr
8.00	70.1	Two (2) Air Rotation Units@ 4 MMBtu/hr each
32.00	280.3	Eight (8) Rooftop Heating Units @ 4 MMBtu/hr each
98.87	866.1	

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.82	3.29	3.29	0.26	43.30	2.38	36.37

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
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 1-03-00
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A.1: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Natural Gas Combustion Only -Boilers and Space heaters
HAPs and Greenhouse Gas Emissions

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	9.1E-04	5.2E-04	3.2E-02	0.78	1.5E-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	2.2E-04	4.8E-04	6.1E-04	1.6E-04	9.1E-04
				TOTAL	**0.82**

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	51,963	1.00	0.95
Summed Potential Emissions in tons/yr	51,965		
CO2e Total in tons/yr	52,280		

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 (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A.1: Emissions Calculations
Natural Gas Combustion Only - Boilers
MM BTU/HR <100
Boilers 3, 4, 8, and 9

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Emission Units
100.0	876.0	Two (2) boilers @ 50.0 MMBtu/hr each (ID: Boiler 3, Boiler 4)
80.4	704.3	Two (2) boilers @ 40.2 MMBtu/hr each (ID: Boiler 8, Boiler 9)
180.4	1,580	

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	1.50	6.01	6.01	0.47	79.02	4.35	66.37

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
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
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A.1: Emissions Calculations
Natural Gas Combustion Only - Boilers
MM BTU/HR <100
Boilers 3, 4, 8, and 9
HAPs Emissions

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

	HAPs - Organics				
	Benzene	Dichlorobenzen	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.7E-03	9.5E-04	5.9E-02	1.42	2.7E-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	4.0E-04	8.7E-04	1.1E-03	3.0E-04	1.7E-03
				TOTAL	**1.49**

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A.1: Emissions Calculations
Natural Gas Combustion Only - Boilers
MM BTU/HR <100
Boilers 3, 4, 8, and 9
Greenhouse Gas Emissions

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	94,818	1.8	1.7
Summed Potential Emissions in tons/yr	94,822		
CO2e Total in tons/yr	95,395		

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 (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A.1: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Limited Source-Wide Natural Gas Usage

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Limited Source-Wide Natural Gas Usage (MMCF/yr) = 1,350

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	1.28	5.13	5.13	0.41	67.50	3.71	56.70

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
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
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A.1: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Limited Source-Wide Natural Gas Usage
HAPs Emissions

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.4E-03	8.1E-04	5.1E-02	1.2	2.3E-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	3.4E-04	7.4E-04	9.5E-04	2.6E-04	1.4E-03
				TOTAL	**1.3**

Methodology is the same as page 8.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.

Appendix A.1: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Limited Source-Wide Natural Gas Usage
Greenhouse Gas Emissions

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	81,000	1.6	1.5
Summed Potential Emissions in tons/yr	81,003		
CO2e Total in tons/yr	81,493		

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 (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A.1: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
Potential #2 Fuel Oil Usage
Boilers 3, 4, 8, and 9

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

S = Weight % Sulfur: 0.5

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	Emission Units
100.0	6,257	Two (2) boilers @ 50.0 MMBtu/hr each (ID: Boiler 3, Boiler 4)
80.4	5,031	Two (2) boilers @ 40.2 MMBtu/hr each (ID: Boiler 8, Boiler 9)
180.4	11,288	

	Pollutant						
	PM*	PM10	direct PM2.5	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.0	2.4	2.1	71 *(142.0S)*	20.0	0.34	5.0
Potential Emission in tons/yr	11.3	13.4	12.0	400.7	112.9	1.9	28.2

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Appendix A.1: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil
Boilers 3, 4, 8, and 9
HAPs Emissions

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

	HAPs - Metals				
	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/mmBtu	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	0.20	0.15	0.15	0.15	0.44

	HAPs - Metals (continued)			
	Mercury	Manganese	Nickel	Selenium
Emission Factor in lb/mmBtu	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emission in tons/yr	0.15	0.30	0.15	0.74

Methodology **Total HAPs** **2.42**

No data was available in AP-42 for organic HAPs.
Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A.1: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil
Boilers 3, 4, 8, and 9
Greenhouse Gas Emissions

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/kgal	21,500	0.216	0.26
Potential Emission in tons/yr	121,345	1.2	1.5
Summed Potential Emissions in tons/yr	121,347		
CO2e Total in tons/yr	121,825		

Methodology

The CO2 Emission Factor for #1 Fuel Oil is 21500. The CO2 Emission Factor for #2 Fuel Oil is 22300.

Emission Factors are from AP 42, Tables 1.3-3, 1.3-8, and 1.3-12 (SCC 1-03-005-01/02/03) Supplement E 9/99 (see erata file)

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A.1: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
Limited #2 Fuel Oil Usage
Boilers 3, 4, 8, and 9

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Limited Usage kgals/year	S = Weight % Sulfur
1,500	0.5

	Pollutant						
	PM*	PM10	direct PM2.5	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.0	2.4	2.1	71 *(142.0S)*	20.0	0.34	5.0
Potential Emission in tons/yr	1.50	1.79	1.60	53.3	15.0	0.26	3.75

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Appendix A.1: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
Limited #2 Fuel Oil Usage
Boilers 3, 4, 8, and 9
HAPs Emissions

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

	HAPs - Metals				
	Arsenic	Beryllium	Cadmium	Chromium	Lead
Emission Factor in lb/mmBtu	4.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	2.63E-02	1.97E-02	1.97E-02	1.97E-02	5.91E-02

	HAPs - Metals (continued)			
	Mercury	Manganese	Nickel	Selenium
Emission Factor in lb/mmBtu	3.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emission in tons/yr	1.97E-02	3.94E-02	1.97E-02	0.10

Methodology

Total HAPs 0.32

No data was available in AP-42 for organic HAPs.
Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A.1: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
Limited #2 Fuel Oil Usage
Boilers 3, 4, 8, and 9
Greenhouse Gas Emissions

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/kgal	21,500	0.216	0.26
Potential Emission in tons/yr	16,125	0.16	0.20
Summed Potential Emissions in tons/yr	16,125		
CO2e Total in tons/yr	16,189		

Methodology

The CO2 Emission Factor for #1 Fuel Oil is 21500. The CO2 Emission Factor for #2 Fuel Oil is 22300.

Emission Factors are from AP 42, Tables 1.3-3, 1.3-8, and 1.3-12 (SCC 1-03-005-01/02/03) Supplement E 9/99 (see erata file)

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A.1: Emission Calculations
Large Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (>600 HP)
Emergency Generator

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity (MMBtu/hr)	17.1
Maximum Hours Operated per Year	500
Potential Throughput (MMBtu/yr)	8,547
Sulfur Content (S) of Fuel (% by weight)	0.500

	Pollutant						
	PM**	PM10*	direct PM2.5*	SO2	NOx**	VOC**	CO**
Emission Factor in lb/MMBtu	0.13	0.0573	0.0573	0.505 *(1.01S)*	5.7	0.17	0.47
Potential Emission in tons/yr	0.56	0.24	0.24	2.16	24.27	0.73	2.01

*No information was given regarding which method was used to determine the PM emission factor or whether condensable PM is included. The PM10 emission factor is filterable and condensable PM10 combined. The PM2.5 emissions were assumed to be equal to PM10.
**Based on manufacturer's emission factors and verified by one-time stack test on February 22, 2000.

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	3.3E-03	1.2E-03	8.2E-04	3.4E-04	1.1E-04	3.4E-05	9.1E-04

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

Potential Emission of Total HAPs (tons/yr)	**6.7E-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	705.1	3.5E-02	5.7E-03

Summed Potential Emissions in tons/yr	**705.2**
CO2e Total in tons/yr	**707.6**

Methodology
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.
Greenhouse 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 (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A.1: Emission Calculations
Reciprocating Internal Combustion Engines - Natural Gas
4-Stroke Lean-Burn (4SLB) Engines

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Maximum Output Horsepower Rating (hp)	107
Brake Specific Fuel Consumption (BSFC) (Btu/hp-hr)	7500
Maximum Hours Operated per Year (hr/yr)	500
Potential Fuel Usage (MMBtu/yr)	401
High Heat Value (MMBtu/MMscf)	1020
Potential Fuel Usage (MMcf/yr)	0.39

	Pollutant						
Criteria Pollutants	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor (lb/MMBtu)	7.71E-05	9.99E-03	9.99E-03	5.88E-04	4.08E+00	1.18E-01	3.17E-01
Potential Emissions (tons/yr)	1.55E-05	2.00E-03	2.00E-03	1.18E-04	0.82	0.02	0.06

*PM emission factor is for filterable PM-10. PM10 emission factor is filterable PM10 + condensable PM
PM2.5 emission factor is filterable PM2.5 + condensable PM

Hazardous Air Pollutants (HAPs)

Pollutant	Emission Factor (lb/MMBtu)	Potential Emissions (tons/yr)
Acetaldehyde	8.36E-03	1.68E-03
Acrolein	5.14E-03	1.03E-03
Benzene	4.40E-04	8.83E-05
Biphenyl	2.12E-04	4.25E-05
1,3-Butadiene	2.67E-04	5.36E-05
Formaldehyde	5.28E-02	0.011
Methanol	2.50E-03	5.02E-04
Hexane	1.10E-03	2.21E-04
Toluene	4.08E-04	8.19E-05
2,2,4-Trimethylpentane	2.50E-04	5.02E-05
Xylene	1.84E-04	3.69E-05
	Total	**0.014**

HAP pollutants consist of the eleven highest HAPs included in AP-42 Table 3.2-2

Methodology
Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-2
Potential Fuel Usage (MMBtu/yr) = [Maximum Output Horsepower Rating (hp)] * [Brake Specific Fuel Consumption (Btu/hp-hr)] [Maximum Hours Operated per Year (hr/yr)] / [1000000 Btu/MMBtu
Potential Emissions (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2000 lb/to

	Greenhouse Gas (GHG)		
Greenhouse Gases (GHGs)	CO2	CH4	N2O
Emission Factor in lb/MMBtu*	110	1.25	
Emission Factor in lb/MMcf**			2.2
Potential Emission in tons/yr	22.07	0.25	0.00
Summed Potential Emissions in tons/yr	22.32		
CO2e Total in tons/yr	28.47		

Methodology
*The CO2 and CH4 emission factors are from Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-
**The N2O emission factor is from AP 42, Table 1.4-2. The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.6
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A
For CO2 and CH4: Emission (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2,000 lb/to
For N2O: Emission (tons/yr) = [Potential Fuel Usage (MMCF/yr)] * [Emission Factor (lb/MMCF)] / [2,000 lb/to
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).

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
SO2 = Sulfur Dioxide
NOx = Nitrous Oxides
VOC - Volatile Organic Compounds
CO = Carbon Monoxide
CO2 = Cabon Dioxide
CH4 = Methane
N2O = Nitrous Oxide
CO2e = CO2 equivalent emissions

Appendix A.1: Emission Calculations
Reciprocating Internal Combustion Engines - Diesel Fuel
Turbine (<600 HP)
Fire Pump

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Emissions calculated based on output rating (hp)

Output Horsepower Rating (hp)	85.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	42,500

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	0.05	0.05	0.05	0.04	0.66	0.05	0.14

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Hazardous Air Pollutants (HAPs)

	Pollutant							
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	1.4E-04	6.1E-05	4.2E-05	5.8E-06	1.8E-04	1.1E-04	1.4E-05	2.5E-05

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter
****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

Potential Emission of Total HAPs (tons/yr)	**5.8E-04**

Green House Gas Emissions (GHG)

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/hp-hr	1.15E+00	4.63E-05	9.26E-06
Potential Emission in tons/yr	24.4	9.8E-04	2.0E-04

Summed Potential Emissions in tons/yr	**24.4**
CO2e Total in tons/yr	**24.5**

Methodology
Emission Factors are from AP42 (Supplement B 10/96), Tables 3.3-1 and 3.3-2
CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year
Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A.1: Emission Calculations
Abrasive Blasting - Confined
Ring Gear Shot Blaster (B1)

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Table 1 - Emission Factors for Abrasives

	Emission Factor (EF)	
Abrasive	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

Potential to Emit Before Control

FR = Flow rate of actual abrasive (lb/hr) =	35.0	lb/hr (per nozzle)
w = fraction of time of wet blasting =	0	%
N = number of nozzles =	4	
EF = PM emission factor for actual abrasive from Table 1 =	0.004	lb PM/ lb abrasive
PM10 emission factor ratio for actual abrasive from Table 1 =	0.86	lb PM10 / lb PM

	PM	PM10	
Potential to Emit (before control) =	**0.560**	**0.482**	**lb/hr**
=	**13.4**	**11.6**	**lb/day**
=	**2.45**	**2.11**	**ton/yr**

Potential to Emit After Control	PM	PM10	
Emission Control Device Efficiency =	**99.0%**	**99.0%**	
Potential to Emit (after control) =	**5.6E-03**	**4.8E-03**	**lb/hr**
=	**1.3E-01**	**1.2E-01**	**lb/day**
=	**2.5E-02**	**2.1E-02**	**ton/yr**

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)
Potential to Emit (before control) = EF x FR x (1 - w/200) x N (where w should be entered in as a whole number (if w is 50%, enter 50))
Potential to Emit (after control) = [Potential to Emit (before control)] * [1 - control efficiency]
Potential to Emit (tons/year) = [Potential to Emit (lbs/hour)] x [8760 hours/year] x [ton/2000 lbs]
Assume PM10 = PM2.5

Appendix A.1: Emission Calculations
Abrasive Blasting - Confined
Pinion Shot Blaster (B2)

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Table 1 - Emission Factors for Abrasives

	Emission Factor (EF)	
Abrasive	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

Potential to Emit Before Control

FR = Flow rate of actual abrasive (lb/hr) =	35.0	lb/hr (per nozzle)
w = fraction of time of wet blasting =	0	%
N = number of nozzles =	4	
EF = PM emission factor for actual abrasive from Table 1 =	0.004	lb PM/ lb abrasive
PM10 emission factor ratio for actual abrasive from Table 1 =	0.86	lb PM10 / lb PM

	PM	PM10	
Potential to Emit (before control) =	**0.560**	**0.482**	**lb/hr**
=	**13.4**	**11.6**	**lb/day**
=	**2.45**	**2.11**	**ton/yr**

Potential to Emit After Control	**PM**	**PM10**	
Emission Control Device Efficiency =	**99.0%**	**99.0%**	
Potential to Emit (after control) =	**5.6E-03**	**4.8E-03**	**lb/hr**
=	**1.3E-01**	**1.2E-01**	**lb/day**
=	**2.5E-02**	**2.1E-02**	**ton/yr**

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)
Potential to Emit (before control) = EF x FR x (1 - w/200) x N (where w should be entered in as a whole number (if w is 50%, enter 50))
Potential to Emit (after control) = [Potential to Emit (before control)] * [1 - control efficiency]
Potential to Emit (tons/year) = [Potential to Emit (lbs/hour)] x [8760 hours/year] x [ton/2000 lbs]
Assume PM10 = PM2.5

Appendix A.1: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/yr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Porter Guard FD Alkyd En-Safe Yell - Mainteneance Booth	8.43	39.89%	0.0%	39.9%	0.0%	60.11%	73.0	3.36	3.36	0.03	0.67	0.12	0.05	5.59	75%
									Potential to Emit:	**0.03**	**0.67**	**0.12**	**0.05**		

Note:
Transfer efficiencies are estimated based on manufacturer's guidance.

Methodology:
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/year) * 1 yr/ 8760 hr
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/year) / (365 day/year)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/year) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (gal/year) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Material	Density (lbs/gal)	Gallons of Material (gal/yr)	Weight % Xylene	Potential to Emit Xylene (tons/yr)
Porter Guard FD Alkyd En-Safe Yell - Mainteneance Booth	8.43	73.00	1.00%	3.08E-03
		Total HAPs		**3.08E-03**

Methodology:
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.1: Emissions Calculations
Welding and Thermal Cutting

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	Max. electrode consumption per station (lbs/day)	EMISSION FACTORS (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
WELDING				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Line 200 Stop Bolt Welder												
Stick (E70T & E70S electrode)	1	5.97	143.28	0.0151	0.000891	0.000005	0.000004	0.090	0.005	0.00003	0.00002388	0.005
Line 300 Puddle Welder												
Stick (E70T, E70S, & E71T electrode)	1	5.97	143.28	0.0151	0.000891	0.000005	0.000004	0.090	0.005	0.00003	0.00002388	0.005
EMISSION TOTALS												
Potential Emissions lbs/hr								0.18	0.01	0.0001	0.00005	0.01
Potential Emissions lbs/day								4.33	0.26	0.0014	0.0011	0.26
Potential Emissions tons/year								0.79	0.05	0.0003	0.0002	0.05

Methodology:
Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)
Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day
Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.
Emission Factors From AP-42 Table 12.19-1 and Table 12.19-2

Appendix A.1: Emissions Calculations
Welding and Thermal Cutting

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808

Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Type of Weld Gas Used	Max No. Welds Per Axle	Time per Weld (sec)	Max Flow Rate of Gas (CFH)	Max Gas Used per Axle (CF/unit)
CO2	8	5	50	0.56

Methodology:
Max Gas Used per Axle (CF/unit) = Max No. Welds per Axle * Time per Weld (sec) * (Max Flow Rate of Gas (CFH) / 3600 (sec/hr))

Max Gas Used per Axle (CF/unit)	Max No. Units (units/yr)	CO2 Emissions (CF/yr)	Conversion Factor (lb/CF)	CO2 Emissions (ton/yr)
0.56	970,600	539,222	0.12341	33.27

Methodology:
Conversion Factor for CO2 from http://www.uigi.com/carbondioxide.html
CO2 Emissions (CF/yr) = Max Gas Used per Axle (CF/unit) * Max No. Units (units/yr)
CO2 Emissions (ton/yr) = CO2 Emissions (CF/yr) * Conversion Factor (lb/CF) * 1 ton/ 2000 lb

Appendix A.1: Emission Calculations
Wet Machining Operations

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

POTENTIAL PARTICULATE EMISSIONS FROM WET MACHINING OPERATIONS (COOLANT SYSTEMS)

Number of Wet Machines :	321

PM/PM10/PM2.5

Control Device	Outlet Grain Loading	flow rate	Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5	
(Control Efficiency)	(gr/dscf)*	**(acfm)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Oil Mist/Smog Hog (80%)	0.0018	116,000	8.95	39.19	1.79	7.84
		Total:	**8.95**	**39.19**	**1.79**	**7.84**

Notes

*Grain Loading based on manufacturer specifications (OENA-1-D-3.5)
**Flow rate provided by source, based on manufacter specifications (SSM003-30709-00003).

Methodology
Potential Emissions (lbs/hr) = Controlled Emissions (lbs/hr) / (1-Control Efficiency)
Potential Emissions (tons/yr) = Controlled Emissions (tons/yr) / (1- Control Efficiency)
Controlled Emissions (lbs/hr) = Grain Outlet Loading (gr/dscf) * Flow Rate (acfm) * 60 minutes / 1 hr * 1lb / 7000 gr
Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr) * 8760 hrs / 2000 lbs

POTENTIAL VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM WET MACHINING OPERATIONS (COOLANT SYSTEMS)

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/year)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Tech Cool 35100	8.53	60.61%	54.90%	5.71%	56.20%	39.39%	32,994	1.11	0.49	1.83	44.04	8.04
Tech Cool 35048	8.09	25.00%	24.68%	0.32%	23.90%	75.32%	33,766	0.03	0.03	0.10	2.39	0.44
Tech Cool 35075	8.03	17.49%	16.10%	1.39%	15.50%	82.51%	7,975	0.13	0.11	0.10	2.44	0.45
							Totals	1.28	0.62	2.04	48.87	**8.92**

Note
Based on the MSDS submitted by the source, the coolants used in this operation does not contain any hazardous air pollutants.

Methodology
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
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.1: Emission Calculations
Wet Machining Operations, Cont'd

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

POTENTIAL PARTICULATE EMISSIONS FROM WET MACHINING OPERATIONS (COOLANT SYSTEMS

Number of Additional NEW Wet Machines :	51

PM/PM10/PM2.5

Control Device	Outlet Grain Loading	Total Flow Rate for NEW Mist Collectors	Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5	
(Control Efficiency)	(gr/dscf)*	**(acfm)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Oil Mist/Smog Hog (80%)	0.0018	64,150	4.95	21.68	0.99	4.34
		Total:	4.95	**21.68**	0.99	**4.34**

Notes
Based on the MSDS submitted by the source, the coolant used in this operation does not contain any hazardous air pollutants. Additionally, the vapor pressure of the lubricating oils are such that VOC emissions have been determined negligible.
*Grain Loading based on manufacturer specifications (OENA-1-D-3.5)
**Flow rate provided by source, based on manufacter specifications.

Methodology
Potential Emissions (lbs/hr) = Controlled Emissions (lbs/hr) / (1-Control Efficiency)
Potential Emissions (tons/yr) = Controlled Emissions (tons/yr) / (1- Control Efficiency)
Controlled Emissions (lbs/hr) = Grain Outlet Loading (gr/dscf) * Flow Rate (acfm) * 60 minutes / 1 hr * 1lb / 7000 gr
Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr) * 8760 hrs / 2000 lbs

POTENTIAL VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM WET MACHINING OPERATIONS (COOLANT SYSTEMS

Volatile Organic Compounds (VOCs)

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/year)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Tech Cool 35100NB	8.53	60.61%	54.90%	5.71%	56.2%	39.39%	21,138	1.11	0.49	1.18	28.21	5.15
Tech Cool 35048CF	8.09	24.68%	24.68%	0.00%	23.9%	75.32%	21,138	0.00	0.00	0.00	0.00	0.00
						Total for worst case coolant		1.11	0.49	1.18	28.21	**5.15**

Air Flow and Coolant Maximum Usage Chart - Machining Centers will use either Tech Cool 35100 or 35048 (35100 is worst case for VOC)

Machine Type	Number of Machines	Maximum Clean-out Freq.	Max Number Clean-outs/yr	Sump Size (Gal.)	Maximum Coolant Conc.	Max Coolant Use (Gal/yr.)	Oil Mist Coll Air Flow (ACFM)	Max Coolant Max Air Flow
Mazak	25	Weekly	52	75	10%	9,750	850	21,250
Makino A-81	19	Monthly	12	400	10%	9,120	2,000	38,000
Makino A-61	7	Monthly	12	270	10%	2,268	700	4,900
					Totals	21,138		64,150

Note
Based on the MSDS submitted by the source, the coolants used in this operation does not contain any hazardous air pollutants.

Methodology
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
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.1: Emission Calculations
Dry Machining Operations

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

POTENTIAL PARTICULATE EMISSIONS FROM DRY MACHINING OPERATIONS

Number of Dry Cut Gear Cutters with Mist Collectors for Control: 8

PM/PM10/PM2.5

Control Device	Outlet Grain Loading	Total Flow Rate for all Mist Collectors	Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5	
(Control Efficiency)	(gr/dscf)*	**(acfm)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Oil Mist (80%)	0.0018	9,100	0.70	3.07	0.14	0.61
		Total:	**0.70**	**3.07**	**0.14**	**0.61**

Note:
*Grain Loading based on manufacturer specifications (OENA-1-D-3.5)
**Flow rate provided by source, based on manufacter specifications. Includes 7 mist collectors at 1,100 acfm each + 1 mist collector at 700 acfm.

Methodology:
Potential Emissions (lbs/hr) = Controlled Emissions (lbs/hr) / (1-Control Efficiency)
Potential Emissions (tons/yr) = Controlled Emissions (tons/yr) / (1- Control Efficiency)
Controlled Emissions (lbs/hr) = Grain Outlet Loading (gr/dscf) * Flow Rate (acfm) * 60 minutes / 1 hr * 1lb / 7000 gr
Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr) * 8760 hrs / 2000 lbs

Number of Dry Mill Machines: 8
Number of Dry Cut Gear Cutters with Cyclo Vacs for Control: 5
Total: **13**

PM/PM10/PM2.5

Type of Unit Cut	Control Device	Percent*	Weight Removed**	Emission Rate***	Maximum	Each Unit				Total			
						Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5		Uncontrolled PM/PM10/PM2.5		Controlled PM/PM10/PM2.5	
	(Control Efficiency)	Particulate	(lbs/unit)	(lbs/unit)	(units/hr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Carriers****	Dust Collector (99%)	-	-	0.0036	30.00	0.11	0.47	1.08E-03	4.73E-03	0.86	3.78	0.01	0.04
Ring Gears*****	Cyclo Vac (95%)	0.2%	3.55	-	116.44	0.01	0.03	3.73E-04	1.63E-03	0.87	3.80	0.04	0.19
					Total:	**0.12**	**0.51**	**0.001**	**0.006**	**1.73**	**7.59**	**0.05**	**0.23**

Note:
*Percent particulate is calculated by dividing the pounds collected in filter by pounds removed per unit, during mass balance
**Weight Removed is based on mass balance study done by source, and measures total amount of steel removed per unit.
*** Emission Factor (lbs/unit) is a source specific emission rate established during a mass balance study done by the source (SSM003-30709-00003).
****Maximum (units/hr) for the carriers is provided by the source as the maximum worst-case capacity of the highest producing machine.
*****Maximum (units/hr) for the ring gears was historically (prior to this modification) the maximum worst-case number produced per year, of 750,000 units/yr. This equated to 80.62 ring gears per hour, combined, for the four (4) existing dry cut gear cutting machines (i.e., 750,000/8760 = 80.62 gears/hr). This modification adds one (1) new dry cut gear cutting machine capable of producing 30.82 ring gears per hour, for a new combined total of 116.44 ring gears per hour for the five (5) dry cut gear cutting machines.

Methodology:
Carriers
Uncontrolled Emissions (lbs/hr) each machine = [Emission Rate (lbs/unit) * Maximum (unit/hr)]
Uncontrolled Emissions (ton/yr) each machine = [Uncontrolled Emissions (lbs/hr) each machine * 8760 hrs / 2000 lbs]
Controlled Emissions (lb/hr) each machine = [Uncontrolled Emissions (lbs/hr) each machine * (1 - Control Efficiency)]
Controlled Emissions (ton/yr) each machine = [Controlled Emissions (lb/hr) each machine * 8760 hrs / 2000 lbs]
Uncontrolled Emissions (lb/hr) total = [Uncontrolled Emissions (lb/hr) each machine * number of machines]
Uncontrolled Emissions (ton/yr) total = [Uncontrolled Emissions (ton/yr) each machine * number of machines]
Controlled Emissions (lb/hr) total = [Controlled Emissions (lb/hr) each machine * number of machines]
Controlled Emissions (ton/yr) total = [Controlled Emissions (ton/yr) each machine * number of machines]
Ring Gears
Uncontrolled Emissions (lbs/hr) each machine = [Uncontrolled Emissions (lb/hr) total / Maximum (unit/hr)]
Uncontrolled Emissions (ton/yr) each machine = [Uncontrolled Emissions (lbs/hr) each machine * 8760 hrs / 2000 lbs]
Controlled Emissions (lb/hr) each machine = [Controlled Emissions (lb/hr) total / Maximum (unit/hr)]
Controlled Emissions (ton/yr) each machine = [Controlled Emissions (lb/hr) each machine * 8760 hrs / 2000 lbs]
Uncontrolled Emissions (lb/hr) total = [(Percent Particulate * Weight Removed (lbs/unit) * Maximum (unit/hr)) + ((Percent Particulate * Weight Removed (lbs/unit) * Maximum (unit/hr) / (1 - Control Efficiency))]
Uncontrolled Emissions (ton/yr) total = [Uncontrolled Emissions (lb/hr) total * 8760 hrs / 2000 lbs]
Controlled Emissions (lb/hr) total = [Uncontrolled Emissions (lb/hr) total * (1 - Control Efficiency)]
Controlled Emissions (ton/yr) total = [Controlled Emissions (lb/hr) total * 8760 hrs / 2000 lbs]

Appendix A.1: Emission Calculations
VOC Emissions
Cleaning Process

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Cold Cleaning Degreasing Operations

Material	Process	Density (lb/gal)	Annual Usage (gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non Volatiles (Solids)	Gal of Mat (gal/day)	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (tons/yr)
Safety Kleen	Degreasers	6.90	3000	100.00%	0.00%	100.00%	0.00%	0.00%	8.22	2.36	56.71	10.35

Notes:
Density based on MSDS for Safety-Kleen Premium Gold Solvent provided by source.

Methodology:
Gallons of Material (gal/day) = Annual emissions / 365
Potential VOC (lb/hr) = Annual Emissions x Density / 8760 hrs/yr
Potential VOC (lb/day) = Potential VOC (lb/hr) * 24
Potential VOC (tons/yr) = Annual Emissions * Density / 2000lbs

Appendix A.1: Emission Calculations
Heat Treat-Quench Operations

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

PM and VOC emissions from Quench oil

Pollutant	Maximum Rate (gal/hr)	Maximum Rate (lb/hr)	PM/VOC Emission Factor (%)	Potential PM Emissions (lb/hr)	Potential PM emissions (TPY)	Potential VOC Emissions (lb/hr)	Potential VOC emissions (TPY)
PM/PM10/PM2.5	1.14	7.95	1	0.08	0.35	0.08	0.35

Note:
Particulate/VOC emissions are oil mist from the quench oil and are assumed to be equal
Oil Density = 6.96 lb/gal based on MSDS provided by source.
Emission Factor of 1 % is an engineering estimate based on operations at similar sources

Methodology:
Maximum Rate per unit (lb/hr) = Max. Rate per unit (gal/hr) x Density of oil (lb/gal)
Potential Emissions (lbs/hr) = Max. Rate (lb/hr) x Emissions Factor (%)
Potential Emissions (tons/yr) =Potential Emissions (lb/hr) x 8,760 hrs/day x 1 ton/2,000 lbs.

Appendix A.1: Emissions Calculations
VOC and Particulate
From Lubrize Operation

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water and exempt solvents	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/year)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Parco Lubrite 2	11.4	100.00%	100.0%	0.0%	89.0%	11.00%	10,000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%

*Parco Lubrite 2 is applied by dip coating and has no particulate emissions. Parco Lubrite 2 does not contain VOC

METHODOLOGY
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
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
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Weight % Manganese Nitrate	Weight % Nickel Nitrate	Manganese Nitrate Emissions (ton/yr)	Nickel Nitrate Emissions (ton/yr)	Transfer Efficiency
Parco Lubrite 2	11.4	10,000	10.00%	1.00%	0.00E+00	0.00E+00	100%

Total HAP Emissions 0.00

METHODOLOGY
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 * (1 - Transfer Efficiency
Since these are metallic HAPs and a not volatile, the transfer efficency must be considered

Appendix A.1: Emissions Summary
Gasoline Fuel Transfer and Dispensing Operation
Volatile Organic Compounds and Hazardous Air Pollutants (HAPs)

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Minor Source Modification No.: 003-37378-00003
Significant Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

To calculate evaporative emissions from the gasoline dispensing fuel transfer and dispensing operation emission factors from AP-42 Chapter 5.2 Transportation And Marketing Of Petroleum Liquids were used. The total potential emission of VOC is as follows:

Gasoline Throughput =	333.3	gallons/day
Gasoline Throughput =	121.67	kgal/yr

Volatile Organic Compounds

Emission Source	Emission Factor (lb/kgal of throughput)*	PTE of VOC (tons/yr)
Filling storage tank (splash filling)	11.50	0.6996
Tank breathing and emptying	1.00	0.0608
Vehicle refueling (displaced losses - uncontrolled	11.00	0.6692
Spillage	0.70	0.0426
	Total	**1.472**

The potential to emit (PTE) Hazardous Air Pollutants (HAPs) were estimated using published gasoline data and assuming that the HAP % composition of the gasoline vapor is similar to the HAP % composition in liquid gasoline.

Hazardous Air Pollutants (HAPs)

Volatile Organic HAP	CAS#	HAP Content for Gasoline (% by weight)**	PTE of HAP (tons/yr)
1,3-Butadiene	106-99-0	3.70E-5%	5.4E-05
2,2,4-Trimethylpentane	540-84-1	2.40%	3.5E-02
Benzene	71-43-2	1.90%	2.8E-02
Ethylbenzene	100-41-4	1.70%	2.5E-02
Methyl-tert-butylether	1634-04-4	0.33%	4.9E-03
Naphthalene	91-20-3	0.25%	3.7E-03
n-Hexane	110-54-3	2.40%	3.5E-02
Toluene	108-88-3	8.10%	1.2E-01
Total Xylenes	1330-20-7	9.00%	1.3E-01
	Total PTE of HAPs (tons/yr)		**0.38**
	PTE of Worst Single HAP (tons/yr)		**0.13** **(xylenes)**

Methodology

*Emission Factors from AP-42 Chapter 5.2 Transportation And Marketing Of Petroleum Liquids (dated 6/08), Table 5.2-7

**Source: Petroleum Liquids. Potter, T.L. and K.E. Simmons. 1998. Total Petroleum Hydrocarbon Criteria Working Group Series, Volume 2. Composition of Petroleum Mixtures. The Association for Environmental Health and Science. Available on the Internet at: http://www.aehsfoundation.org/Publications.aspx
The gasoline throughput was provided by the source.

Gasoline Throughput (kgal/yr) = [Gasoline Throughput (gallons/day)] * [365 days/yr] * [kgal/1000 gal]
PTE of VOC (tons/yr) = [Gasoline Throughput (kgal/yr)] * [Emission Factor (lb/kgal)] * [ton/2000 lb]
PTE of HAP (tons/yr) = [HAP Content of Gasoline (% by weight)] * [PTE of VOC (tons/yr)]

Abbreviations

VOC = Volatile Organic Compounds
HAP = Hazardous Air Pollutant
PTE = Potential to Emit

Appendix A.2: Emissions Calculations
PTE of the Modification
Emission Summary

Company Name: Dana Light Axle Products, LLC
Address City IN Zip: 2100 West State Blvd., Fort Wayne, IN 46808
Source Modification No.: 003-37378-00003
Permit Modification No.: 003-37389-00003
Operating Permit Number: T003-32393-00003
Reviewer: Hannah L. Desrosiers

		Uncontrolled Potential Emissions (tons/year)			
		Emissions Generating Activity			
Category	Pollutant	Generac Emergency Generator	Dry Machining	Wet Machining	**TOTAL**
Criteria Pollutants	PM	1.55E-05	3.61	28.10	31.70
	PM10	2.00E-03	3.61	28.10	31.71
	PM2.5	2.00E-03	3.61	28.10	31.71
	SO2	1.18E-04	0	0	1.18E-04
	NOx	0.82	0	0	0.82
	VOC	0.02	negl.	7.33	7.35
	CO	0.32	0	0	0.32
	GHGs as CO2e	28.47	0	0	28.47
Hazardous Air Pollutants	Acetaldehyde	1.68E-03	0	0	1.68E-03
	Acrolein	1.03E-03	0	0	1.03E-03
	Benzene	8.83E-05	0	0	8.83E-05
	Biphenyl	4.25E-05	0	0	4.25E-05
	1,3-Butadiene	5.36E-05	0	0	5.36E-05
	Dichlorobenzene	0.011	0	0	0.011
	Formaldehyde	5.02E-04	0	0	5.02E-04
	Hexane	2.21E-04	0	0	2.21E-04
	Methanol	8.19E-05	0	0	8.19E-05
	Toluene	5.02E-05	0	0	5.02E-05
	2,2,4-Trimethylpentane	3.69E-05	0	0	3.69E-05
	Xylenes	0.014	0	0	0.014
	Cadmium	0	0	0	0
	Chromium	0	0	0	0
	Lead	0	0	0	0
	Manganese	0	0	0	0
	Nickel	0	0	0	0
	Totals	**0.029**	**0**	**0**	**0.029**
				Worse Case HAP	**0.014**

Total emissions based on rated capacity at 8,760 hours/year.
negl. = negligible

Appendix A.2: Emission Calculations
PTE of the Modification
Reciprocating Internal Combustion Engines - Natural Gas
4-Stroke Lean-Burn (4SLB) Engines

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Source Modification No.: 003-37378-00003
Permit Modification No.: 003-37389-00003

Reviewer: Hannah L. Desrosiers

Maximum Output Horsepower Rating (hp)	107.0	*(60 kW)*
Brake Specific Fuel Consumption (BSFC) (Btu/hp-hr)	7,500	
Maximum Hours Operated per Year (hr/yr)	500	
Potential Fuel Usage (MMBtu/yr)	401	
High Heat Value (MMBtu/MMscf)	1,020	
Potential Fuel Usage (MMcf/yr)	0.39	

	Pollutant						
Criteria Pollutants	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor (lb/MMBtu)	7.71E-05	9.99E-03	9.99E-03	5.88E-04	4.08E+00	1.18E-01	3.17E-01
Potential Emissions (tons/yr)	1.55E-05	2.00E-03	2.00E-03	1.18E-04	0.82	0.02	0.06

*PM emission factor is for filterable PM-10. PM10 emission factor is filterable PM10 + condensable PM.
PM2.5 emission factor is filterable PM2.5 + condensable PM.

Hazardous Air Pollutants (HAPs)

Pollutant	Emission Factor (lb/MMBtu)	Potential Emissions (tons/yr)
Acetaldehyde	8.36E-03	1.68E-03
Acrolein	5.14E-03	1.03E-03
Benzene	4.40E-04	8.83E-05
Biphenyl	2.12E-04	4.25E-05
1,3-Butadiene	2.67E-04	5.36E-05
Formaldehyde	5.28E-02	0.011
Methanol	2.50E-03	5.02E-04
Hexane	1.10E-03	2.21E-04
Toluene	4.08E-04	8.19E-05
2,2,4-Trimethylpentane	2.50E-04	5.02E-05
Xylene	1.84E-04	3.69E-05
	Total	**0.014**

HAP pollutants consist of the eleven highest HAPs included in AP-42 Table 3.2-2.

Methodology
Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-2
Potential Fuel Usage (MMBtu/yr) = [Maximum Output Horsepower Rating (hp)] * [Brake Specific Fuel Consumption (Btu/hp-hr)] * [Maximum Hours Operated per Year (hr/yr)] / [1000000 Btu/MMBtu]
Potential Emissions (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2000 lb/ton]

	Greenhouse Gas (GHG)		
Greenhouse Gases (GHGs)	CO2	CH4	N2O
Emission Factor in lb/MMBtu*	110	1.25	
Emission Factor in lb/MMcf**			2.2
Potential Emission in tons/yr	22.07	0.25	4.33E-04
Summed Potential Emissions in tons/yr	22.32		
CO2e Total in tons/yr	28.47		

Methodology
*The CO2 and CH4 emission factors are from Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-2
**The N2O emission factor is from AP 42, Table 1.4-2. The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
For CO2 and CH4: Emission (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2,000 lb/ton]
For N2O: Emission (tons/yr) = [Potential Fuel Usage (MMCF/yr)] * [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

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
SO2 = Sulfur Dioxide
NOx = Nitrous Oxides
VOC - Volatile Organic Compounds
CO = Carbon Monoxide
CO2 = Cabon Dioxide
CH4 = Methane
N2O = Nitrous Oxide
CO2e = CO2 equivalent emissions

Appendix A.2: Emission Calculations
PTE of the Modification
Dry Machining Operations

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Source Modification No.: 003-37378-00003
Permit Modification No.: 003-37389-00003
Reviewer: Hannah L. Desrosiers

Potential particulate emissions from Dry Machining Operations

Number of NEW Dry Cut Gear Cutters with Mist Collectors for Control:	1

PM/PM10/PM2.5

Control Device	Outlet Grain Loading	Total Flow Rate for NEW Mist Collectors	Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5	
(Control Efficiency)	(gr/dscf)*	**(acfm)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Oil Mist (80%)	0.0018	700	0.05	0.24	0.01	0.05
		Total:	**0.05**	**0.24**	**0.01**	**0.05**

Note:
Based on the MSDS submitted by the source, the coolant used in this operation does not contain any hazardous air pollutants. Additionally, the vapor pressure of the lubricating oils are such that VOC emissions have been determined negligible.
*Grain Loading based on manufacturer specifications (OENA-1-D-3.5)
**Total flow rate provided by source, based on manufacter specifications.

Methodology:
Potential Emissions (lbs/hr) = Controlled Emissions (lbs/hr) / (1-Control Efficiency)
Potential Emissions (tons/yr) = Controlled Emissions (tons/yr) / (1- Control Efficiency)
Controlled Emissions (lbs/hr) = Grain Outlet Loading (gr/dscf) * Flow Rate (acfm) * 60 minutes / 1 hr * 1lb / 7000 gr
Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr) * 8760 hrs / 2000 lbs

Number of NEW Dry Mill Machines:	5
Number of NEW Dry Cut Gear Cutters with Cyclo Vacs for Control:	1
Total:	6

PM/PM10/PM2.5

Type of Unit Cut	Control Device	*Percent	**Weight Removed	Emission Factor	Maximum	Total for Each Machine				Total from all machines			
						Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5		Uncontrolled PM/PM10/PM2.5		Controlled PM/PM10/PM2.5	
	(Control Efficiency)	Particulate	(lbs/unit)	(lbs/unit)	(unit/hr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Carriers	Dust Collector (99%)	-	-	0.0036	30.00	0.11	0.47	1.08E-03	4.73E-03	0.54	2.37	5.40E-03	2.37E-02
Ring Gears	Cyclo Vac (95%)	0.2%	3.55	-	30.82	0.01	0.03	3.73E-04	1.63E-03	0.23	1.01	0.01	0.05
					Total:	**0.12**	**0.51**	**0.001**	**0.006**	**0.77**	**3.37**	**0.02**	**0.07**

Note:
Based on the MSDS submitted by the source, the material being used in this operation does not contain any hazardous air pollutants.
*Percent particulate is calculated by dividing the pounds collected in filter by pounds removed per unit, during mass balance study done by source.
**Weight Removed is based on mass balance study done by source, and measures total amount of steel removed per unit.

Methodology:
Carriers
Uncontrolled Emissions (lbs/hr) each machine = [Controlled PM/PM10/PM2.5 (lbs/hr) each machine / (1 - Control Efficiency)]
Uncontrolled Emissions (ton/yr) each machine = [Controlled Emissions (ton/yr) each machine / (1 - Control Efficiency)]
Controlled Emissions (lb/hr) each machine = [Emission Factor (lbs/unit) * Maximum (unit/hr) * (1 - Control Efficiency)]
Controlled Emissions (ton/yr) each machine = [Controlled Emissions (lb/hr) each machine * 8760 hrs / 2000 lbs]
Uncontrolled Emissions (lb/hr) total = [Uncontrolled Emissions (lb/hr) each machine * number of machines]
Uncontrolled Emissions (ton/yr) total = [Uncontrolled Emissions (ton/yr) each machine * number of machines]
Controlled Emissions (lb/hr) total = [Controlled Emissions (lb/hr) each machine * number of machines]
Controlled Emissions (ton/yr) total = [Controlled Emissions (ton/yr) each machine * number of machines]

Methodology Cont'd:
Ring Gears
Uncontrolled Emissions (lbs/hr) each machine = [Uncontrolled Emissions (lb/hr) total / Maximum (unit/hr)]
Uncontrolled Emissions (ton/yr) each machine = [Uncontrolled Emissions (lbs/hr) each machine * 8760 hrs / 2000 lbs]
Controlled Emissions (lb/hr) each machine = [Controlled Emissions (lb/hr) total / Maximum (unit/hr)]
Controlled Emissions (ton/yr) each machine = [Controlled Emissions (lb/hr) each machine * 8760 hrs / 2000 lbs]
Uncontrolled Emissions (lb/hr) total = [(Percent Particulate * Weight Removed (lbs/unit) * Maximum (unit/hr)) + ((Percent Particulate * Weight Removed (lbs/unit) * Maximum (unit/hr) / (1 - Control Efficiency))]
Uncontrolled Emissions (ton/yr) total = [Uncontrolled Emissions (lb/hr) total * 8760 hrs / 2000 lbs]
Controlled Emissions (lb/hr) total = [Uncontrolled Emissions (lb/hr) total * (1 - Control Efficiency)]
Controlled Emissions (ton/yr) total = [Controlled Emissions (lb/hr) total * 8760 hrs / 2000 lbs]

Appendix A.2: Emission Calculations
PTE of the Modification
Wet Machining Operations

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Source Modification No.: 003-37378-00003
Permit Modification No.: 003-37389-00003
Reviewer: Hannah L. Desrosiers

Potential particulate emissions from Wet Machining Operations (Coolant Systems)

Number of NEW Wet Machines :	45

PM/PM10/PM2.5

Control Device	Outlet Grain Loading	Total Flow Rate for NEW Mist Collectors	Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5	
(Control Efficiency)	(gr/dscf)*	**(acfm)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Oil Mist/Smog Hog (80%)	0.0018	19,000	1.47	6.42	0.29	1.28
		Total:	1.47	**6.42**	0.29	**1.28**

NOTES

Based on the MSDS submitted by the source, the coolant used in this operation does not contain any hazardous air pollutants.
Additionally, the vapor pressure of the lubricating oils are such that VOC emissions have been determined negligible.

*Grain Loading based on manufacturer specifications (OENA-1-D-3.5)
**Total flow rate provided by source, based on manufacter specifications. This value is a combined total.

METHODOLOGY

Potential Emissions (lbs/hr) = Controlled Emissions (lbs/hr) / (1-Control Efficiency)
Potential Emissions (tons/yr) = Controlled Emissions (tons/yr) / (1- Control Efficiency)
Controlled Emissions (lbs/hr) = Grain Outlet Loading (gr/dscf) * Flow Rate (acfm) * 60 minutes / 1 hr * 1lb / 7000 gr
Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr) * 8760 hrs / 2000 lbs

Volatile Organic Compounds (VOCs)

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/year)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Wet Machines (45)												
Tech Cool 35100NB	8.53	60.61%	54.90%	5.71%	56.2%	39.39%	8,711	1.11	0.49	0.48	11.63	2.12
Tech Cool 35048	8.09	24.68%	24.68%	0.00%	23.9%	75.32%	16,269	0.00	0.00	0.00	0.00	0.00
Tech Cool 35052CF	8.03	17.49%	16.10%	1.39%	15.5%	82.51%	975	0.13	0.11	0.01	0.30	0.05
						Total for worst case coolant		1.24	0.60	0.50	11.93	**2.18**

NOTE

Based on the MSDS submitted by the source, the coolants used in this operation does not contain any hazardous air pollutants.

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
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.2: Emission Calculations
PTE of the Modification
Wet Machining Operations

Company Name: Dana Light Axle Products, LLC
Source Address: 2100 West State Blvd., Fort Wayne, IN 46808
Source Modification No.: 003-37378-00003
Permit Modification No.: 003-37389-00003
Reviewer: Hannah L. Desrosiers

Potential particulate emissions from Wet Machining Operations (Coolant Systems)

Number of Additional NEW Wet Machines :	51

PM/PM10/PM2.5

Control Device	Outlet Grain Loading	Total Flow Rate for NEW Mist Collectors	Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5	
(Control Efficiency)	(gr/dscf)*	**(acfm)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Oil Mist/Smog Hog (80%)	0.0018	64,150	4.95	21.68	0.99	4.34
		Total:	4.95	**21.68**	0.99	**4.34**

NOTES

Based on the MSDS submitted by the source, the coolant used in this operation does not contain any hazardous air pollutants. Additionally, the vapor pressure of the lubricating oils are such that VOC emissions have been determined negligible.

*Grain Loading based on manufacturer specifications (OENA-1-D-3.5)
**Flow rate provided by source, based on manufacter specifications.

METHODOLOGY

Potential Emissions (lbs/hr) = Controlled Emissions (lbs/hr) / (1-Control Efficiency)
Potential Emissions (tons/yr) = Controlled Emissions (tons/yr) / (1- Control Efficiency)
Controlled Emissions (lbs/hr) = Grain Outlet Loading (gr/dscf) * Flow Rate (acfm) * 60 minutes / 1 hr * 1lb / 7000 gr
Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr) * 8760 hrs / 2000 lbs

Volatile Organic Compounds (VOCs)

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/year)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year
Additional New Wet Machines (51)												
Tech Cool 35100NB	8.53	60.61%	54.90%	5.71%	56.2%	39.39%	21,138	1.11	0.49	1.18	28.21	5.15
Tech Cool 35048CF	8.09	24.68%	24.68%	0.00%	23.9%	75.32%	21,138	0.00	0.00	0.00	0.00	0.00
							Total for worst case coolant	1.11	0.49	1.18	28.21	**5.15**

Air Flow and Coolant Maximum Usage Chart - Machining Centers will use either Tech Cool 35100 or 35048 (35100 is worst case for VOC)

Machine Type	Number of Machines	Maximum Clean-out Freq.	Max Number Clean-outs/yr	Sump Size (Gal.)	Maximum Coolant Conc.	Max Coolant Use (Gal/yr.)	Oil Mist Coll Air Flow (ACFM)	Max Coolant Max Air Flow
Mazak	25	Weekly	52	75	10%	9,750	850	21,250
Makino A-81	19	Monthly	12	400	10%	9,120	2,000	38,000
Makino A-61	7	Monthly	12	270	10%	2,268	700	4,900
					Totals	21,138		64,150

NOTE

Based on the MSDS submitted by the source, the coolants used in this operation does not contain any hazardous air pollutants.

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
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)

Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

August 25, 2016
Dana Light Axle Products, LLC
003-37389-00003

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover.dot 2/17/2016

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Carol S. Comer
Commissioner

AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

August 25, 2016

A 30-day public comment period has been initiated for:

Permit Number: **003-37389-00003**
Applicant Name: **Dana Light Axle Products, LLC**
Location: **Fort Wayne, Allen County, Indiana**

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at:
http://www.in.gov/ai/appfiles/idem-caats/

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

Indiana Department of Environmental Management
Office of Air Quality, Permits Branch
100 North Senate Avenue
Indianapolis, IN 46204

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at chammack@idem.IN.gov or (317) 233-2414.

Indiana Department of Environmental Management
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Michael R. Pence
Governor

Carol S. Comer
Commissioner

August 25, 2016

Mr. Bob Cole
Dana Light Axle Products, LLC
2100 W State Blvd
Fort Wayne, IN 46808

Re: Public Notice
Dana Light Axle Products, LLC
Permit Level: Significant Permit Modification
Permit Number: 003-37389-00003

Dear Mr. Cole:

Enclosed is a copy of your draft Significant Permit Modification, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Journal Gazette in Fort Wayne, Indiana publish the abbreviated version of the public notice no later than August 27, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Allen County Public Library, 200 East Berry in Fort Wayne, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Hannah Desrosiers, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-9327 or dial (317) 233-9327.

Sincerely,

Greg Hotopp

Greg Hotopp
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 2/17/2016

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

August 25, 2016

Journal Gazette
600 W Main Street
PO Box 100
Fort Wayne, IN 46801

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Dana Light Axle Products, LLC, Allen County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than August 27, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call «admincontact» at 800-451-6027 and ask for extension «extension» or dial 317-23«extension».

Sincerely,

Greg Hotopp

Greg Hotopp
Permit Branch
Office of Air Quality

Permit Level: Significant Permit Modification
Permit Number: 003-37389-00003

Enclosure

PN Newspaper.dot 2/17/2016

Mail Code 61-53

IDEM Staff	GHOTOPP 8/25/2016 Dana Light Axle Products, LLC 003-37389-00003 Draft		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Bob Cole Dana Light Axle Products, LLC 2100 W State Blvd Fort Wayne IN 46808 (Source CAATS)									
2		Daniel & Sandy Trimmer 15021 Yellow River Road Columbia City IN 46725 *(Affected Party)*									
3		Duane & Deborah Clark Clark Farms 6973 E. 500 S. Columbia City IN 46725 *(Affected Party)*									
4		Fort Wayne City Council and Mayors Office 200 E Berry Street Ste 120 Fort Wayne IN 46802 *(Local Official)*									
5		Mr. Jeff Coburn Plumbers & Steamfitters, Local 166 2930 W Ludwig Rd Fort Wayne IN 46818-1328 *(Affected Party)*									
6		Allen Co. Board of Commissioners 200 E Berry Street Ste 410 Fort Wayne IN 46802 *(Local Official)*									
7		Fort Wayne-Allen County Health Department 200 E Berry St Suite 360 Fort Wayne IN 46802 *(Health Department)*									
8		Allen County Public Library 200 East Berry Street Fort Wayne IN 46802 *(Library)*									
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