INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: August 23, 2011

RE: NSK Corporation / 081-30120-00023

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER.dot12/03/07

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Kevin Dodds
NSK Corporation
3400 Bearing Drive
Franklin, IN 46131-9660

August 23, 2011

Re: 081-30120-00023
First Significant Revision to
F081-28776-00023

Dear Kevin Dodds:

NSK Corporation - Franklin Campus was issued a Federally Enforceable State Operating Permit (FESOP) No. F081-28776-00023 on July 29, 2010 for a stationary hub bearing and ball screw manufacturing plant located at 3400 Bearing Drive, Franklin, Indiana 46131. On January 13, 2011, the Office of Air Quality (OAQ) received an application from the source relating to the revision of its FESOP to add two (2) new Taper Roller Bearing manufacturing lines, consisting of twenty-two (22) new emission units to its NSK Corporation Hub Plant; to add new equipment, consisting of eight (8) new emission units, in it s assembly, grind, and turning areas of its NSK Precision America (NPA) Plant. Additional changes were requested April 25, 2011 to add four (4) more taper roller grinders, to remove Aerostokes Mist Eliminators, to re-route existing lines to other mist collectors, and to add a new exhaust fan as control for these new lines. The new lines added are identical to other existing units. However, the new exhaust fan, EF-19 has the potential to emit particulate of 29 tons per year. This caused an adjustment in the emissions limits for particulate for this source. The attached Technical Support Document (TSD) provides additional explanation of the changes to the source/permit. Pursuant to the provisions of 326 IAC 2-8-11.1, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-8-11.1(f). Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

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 Jack Harmon, of my staff, at 317-233-4228 or 1-800-451-6027, and ask for extension 3-4228.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Technical Support Document and revised permit

IC/jh

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

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New Source Construction and Federally Enforceable State Operating Permit OFFICE OF AIR QUALITY

NSK Corporation - Franklin Campus
3400 Bearing Drive and 3450 Bearing Drive
Franklin, Indiana 46131

(herein known as the Permittee) is hereby authorized to construct and 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. 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 2-8 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. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-8-11.1, applicable to those conditions.

Indiana statutes from IC 13 and rules from 326 IAC, quoted 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 FESOP under 326 IAC 2-8.

Operation Permit No.: F081-28776-00023	
Original Signed by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: July 29, 2010 Expiration Date: July 29, 2015
First Significant Permit Revision No.: 081-30120-00023	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: August 23, 2011 Expiration Date: July 29, 2015

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E.1.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Compression Ignition Internal Combustion Engines [40 CFR 63, Subpart ZZZZ]

Atachment A: NESHAP ZZZZ

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 2-8-3(b)]

The Permittee owns and operates a stationary hub bearing and ball screw manufacturing plant.

Source Address(es):	3400 Bearing Drive, Franklin, IN 46131; and 3450 Bearing Drive, Franklin, IN 46131
Mailing Address:	3400 Bearing Drive, Franklin, IN 46131
General Source Phone Number:	(317) 738-5000
SIC Code:	3562 (Ball and Roller Bearings)
County Location:	Johnson
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD, Emission Offset Rules and Nonattainment New Source Review 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 2-8-3(c)(3)]

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

NSK Corporation Hub Plant

(a) One (1) Grinding Operation, identified as G1 Grinding, consisting of:

(1) Three (3) wet grinding machines, identified as EU-G1-01 through EU-G1-03, constructed in 1989 through 1994, respectively, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building.

(2) Three (3) wet grinding machines, identified as EU-G1-04 through EU-G1-06, constructed in 1989 through 2010, respectively, utilizing no control devices, and exhausting within the building.

(b) One (1) Grinding Operation, identified as G2 Grinding, consisting of forty-two (42) wet grinding machines, divided into three sections HUB I, HUB II, and HUB III, with emission units identified as EU-G2-01 through EU-G2-08, and EU-G2-10 through EU-G2-43, constructed in 1990 through 2010, utilizing Aerostokes mist eliminators for particulate control, and exhausting through vents EP-17 or EP-18.

(c) One (1) Grinding Operation, identified as New Concept Grinding, constructed in 2009, consisting of twenty-four (24) wet grinding machines, identified as EU-NCG-01 through EU-NCG-08, and EU-NCG-10 through EU-NCG-25, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building.

(d) One (1) grinding operation, identified as Taper Roller Grinding, consisting of the following:

(1) eight (8) wet grinding machines, constructed in 2009, identified as EU-TRG-01 through EU-TRG-08, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building**;**

(2) Two (2) taper roller grinders, identified as EU-TRG-09 and EU-TRG-13, approved for construction in 2011, utilizing Exhaust Fan EF-19 for control, exhausting through Vent EP-18;

(3) Six (6) taper roller grinders, identified as EU-TRG-10, EU-TRG-11, EU-TRG-12, and EU-TRG-14 through EU-TRG-16, approved for construction in 2011, utilizing Clark Air #8 Mist Eliminators for control, exhausting within the building.

(e) One (1) superfinish operation, identified as Superfinish G2, constructed in 1990 through 2010, consisting of twenty-five (25) wet machining units, identified as EU-SFG2-01 through EU-SFG2-04, EU-SFG2-07, EU-SFG2-09 through EU-SFG2-12, EU-SFG2-14 through EU-SFG2-18, EU-SFG2-20 through EU-SFG2-25, and EU-SFG2-27 through EU-SFG2-31, utilizing Aerostokes mist eliminators for particulate control, exhausting through vents EP-17 or EP-18.

(f) One (1) superfinish operation, identified as Superfinish New Concept, constructed in 1990 through 2010, consisting of fourteen (14) wet machining units, identified as EU-SFNC-01 through EU-SFNC-03, and EU-SFNC-05 through EU-SFNC-15, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building.

(g) One (1) superfinish operation, identified as Superfinish Taper Roller, consisting of the following:

(1) three (3) wet machining units, constructed in 2009, identified as EU-SFTR-01 through EU-SFTR-03, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building**;**

(2) In its taper roller superfinish operation, five (5) wet machining units, identified as EU-SFTR-04 through EU-SFTR-08, approved for construction in 2011, as follows:

(A) One (1) taper roller superfinish grinder, identified asEU-SFTR-04, utilizing Clark Air #9 Mist eliminators for particulate control, and exhausting within the building;

(B) Two (2) taper roller superfinish grinders, identified asEU-SFTR-06 and EU-SFTR-08, utilizing Clark Air #8 Mist eliminators for particulate control, and exhausting within the building;

(C) Two (2) taper roller superfinish grinders, identified as EU-SFTR-05 and EU-SFTR-07, utilizing Exhaust Fan EF-19 for control, exhausting through Vent EP-18.

(h) One (1) hard turning process, identified as FS-4 Turning, consisting of five (5) wet machining units, identified as EU-HTFS-01 through EU-HTFS-05, constructed in 2002 through 2010, utilizing no control devices, and exhausting within the building.

(i) One (1) hard turning process, identified as LU300 Turning, consisting of six (6) wet machining units, identified as EU-HTLU-01 through EU-HTLU-06, constructed in 2002 through 2010, utilizing no control devices, and exhausting within the building.

(j) One (1) broaching process, identified as Broaching, consisting of two (2) wet broaching units, identified as EU-BR-01 and EU-BR-02, constructed in 2002 through 2010, respectively, utilizing no control devices, and exhausting within the building.

(k) One (1) painting process, identified as Painting, consisting of:

(1) Seven (7) paint lines, identified as EU-PNT-01 through EU-PNT-07, constructed in 2009, utilizing Clark Air Unit mist eliminators as particulate control, and exhausting within the building.

(2) Three (3) paint lines, identified as EU-PNT-08 through EU-PNT-10, constructed in 1990 through 2010, utilizing no control devices, and exhausting within the building.

(l) One (1) rust preventative application operation, identified as Hub I – Assembly Rust Preventative, constructed in 1990 through 2001, consisting of three (3) coating lines, identified as EU-H1RP-01 through EU-H1RP-03, utilizing no control devices, and exhausting within the building.

(m) One (1) rust preventative application operation, identified as Hub II – Assembly Rust Preventative, constructed in 1992 and 1996, consisting of two (2) coating lines, identified as EU-H2RP-01 and EU-H2RP-02, utilizing Clark Air Unit mist eliminators as particulate control, and exhausting within the building.

(n) One (1) rust preventative application operation, identified as Hub III – Assembly / New Concept Rust Preventative, constructed in 1995 through 2010, consisting of nine (9) coating lines, identified as EU-H3/NCRP-01 through EU-H3/NCRP-09, utilizing Clark Air Unit mist eliminators as particulate control, and exhausting within the building.

(o) One (1) rust preventative application operation, identified as Taper Roller Rust Preventative, consisting of the following:

(1) one (1) coating line, constructed in 1990, identified as EU-TRRP-01, utilizing a Clark Air Unit #8 mist eliminator as particulate control, and exhausting within the building**;**

(2) two (2) coating lines, approved for construction in 2011, identified as EU-TRRP-02 utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and EU-TRRP-03, utilizing Clark Air Unit #9 mist eliminator for control, and exhausting within the building.

(p) Conveyorized Degreasers including:

(1) One (1) superfinish wash operation conveyorized degreasing operation, consisting of the following:

(A) conveyorized degreasing operation, identified as Superfinish Wash, constructed in 1990 through 2010, consisting of twenty-five (25) conveyorized degreasing units, identified as EU-SFW-01 through EU-SFW-04, EU-SFW-08 through EU-SFW-11, EU-SFW-13 through EU-SFW-18, EU-SFW-20 through EU-SFW-25, and EU-SFW-27 through EU-SFW-31, utilizing no control device, and exhausting within the building**;**

(B) conveyorized degreasing operation, consisting of eight (8) conveyorized degreasing units, approved for construction in 2011, identified as EU-

SFW-32 through EU-SFW-39, utilizing no control device, and exhausting within the building.

(2) One (1) parts wash conveyorized degreasing process, including three operations identified as Parts Wash, Rough Wash, and Finish Wash, consisting of the following:

(A) conveyorized degreasing process, constructed in 1990 through 2008, collectively consisting of forty-four (44) conveyorized degreasing units, identified as EU-PW-01 through EU-PW-37, EU-PW-39 through EU-PW-41, EU-PW-43, and EU-PW-44, utilizing Clark Air Units #8 mist eliminators as control, and exhausting within the building**;**

(B) three (3) conveyorized degreasing units, approved for construction in 2011, identified as EU-PW-47 and EU-PW-48, utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and unit EU-PW-49, utilizing Clark Air Unit #9 mist eliminators for control, and exhausting within the building.

(3) One (1) ball wash conveyorized degreasing process, identified as Ball Wash, constructed in 2001, 1993, 1996, and 2008, consisting of four (4) conveyorized degreasing units, identified as EU-BW-01 through EU-BW-04, utilizing no control device, and exhausting within the building.

(q) Miscellaneous process tanks including:

(1) One (1) finish wash tank, identified as EU-Tank-02, constructed in 1992, with a maximum capacity of 7,500 gallons, containing 95% kerosene and 5% additive, supplying the Finish Wash conveyorized degreasing units, and exhausting through vent EP-2.

(2) One (1) ball wash tank, identified as EU-Tank-03, constructed in 1992, with a maximum capacity of 4,000 gallons, containing 95% kerosene and 5% additive, supplying the Ball Wash conveyorized degreasing units, and exhausting through vent EP-3.

(3) One (1) rough wash tank, identified as EU-Tank-04, constructed in 1992, with a maximum capacity of 7,500 gallons, containing 95% kerosene and 5% additive, supplying the Rough Wash conveyorized degreasing units, and exhausting through vent EP-4.

(4) One (1) parts wash tank, identified as EU-Tank-06, constructed in 1992, with a maximum capacity of 7,500 gallons, containing 95% kerosene and 5% additive, supplying the Parts Wash conveyorized degreasing units, and exhausting through vent EP-6.

(5) One (1) superfinish oil tank, identified as EU-Tank-07, constructed in 1992, with a maximum capacity of 4,000 gallons, containing Superfinish G2, Superfinish New Concept, and Superfinish Taper Roller dirty oil, and exhausting through vent EP-7.

(6) One (1) superfinish oil tank, identified as EU-Tank-08, constructed in 1992, with a maximum capacity of 3,000 gallons, containing Superfinish G2, Superfinish New Concept, and Superfinish Taper Roller clean oil, and exhausting through vent EP-8.

(7) One (1) super finish wash tank, identified as EU-Tank 10, constructed in 1992,

with a maximum capacity of 2,500 gallons of superfinish wash fluid, supplying the Super Finish Wash conveyorized degreasing units, and an exhausting through vent EP-10.

(8) One (1) coolant tank, identified as EU-Tank-12, constructed in 1992, with a maximum capacity of 6,500 gallons, containing G2 Grinding, New Concept Grinding, and Taper Roller Grinding dirty coolant, and exhausting through vent EP-12.

(9) One (1) coolant tank, identified as EU-Tank-13, constructed in 1992, with a maximum capacity of 5,000 gallons, containing G2 Grinding, New Concept Grinding, and Taper Roller Grinding dirty coolant, and exhausting through vent EP-13.

(10) One (1) coolant tank, identified as EU-Tank-14, constructed in 1992, with a maximum capacity of 5,000 gallons, containing G1 Grinding dirty coolant, and exhausting through vent EP-14.

(11) One (1) coolant tank, identified as EU-Tank-15, constructed in 1992, with a maximum capacity of 4,000 gallons, containing G1 Grinding clean coolant, and exhausting through vent EP-15.

Note: The NSK Corporation Plant consists of ten (10) Aerostokes mist eliminators and nine (9) Clark Air Unit mist eliminators for particulate control. The Aeorostokes mist eliminators exhaust through vents EP-17 and/or EP-18 and the Clark Air Unit mist eliminators exhaust within the building.

NSK Precision America, Inc. Plant

(a) One (1) cutting process, identified as Cutting, constructed in 1995 through 2009, consisting of:

(1) Seven (7) wet machining units, identified as EU-NPACT-01 through EU-NPACT-03, and EU-NPACT-05 through EU-NPACT-08, utilizing no control devices, and exhausting within the building.

(2) Two (2) wet machining cut-off-saws, identified as EU-NPACT-09 and EU-NPACT-10, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(3) One (1) dry mill saw, identified as EU-NPACT-04 utilizing no control devices, and exhausting within the building.

(4) One (1) dry chamfer machine, identified as EU-NPACT-11, utilizing no control devices, and exhausting within the building.

(5) One (1) dry nut polisher, identified as EU-NPACT-12, utilizing a dust collector for particulate control, and exhausting within the building.

(6) One (1) dry miter saw, identified as EU-NPACT-13, utilizing an integrated shop-vac as particulate control, and exhausting within the building.

(b) One (1) turning process, identified as Turning, constructed in 1994 through 2011, consisting of:

(1) Eleven (11) shaft turning wet machining units, identified as EU-NPAT-01 through EU-NPAT-11, utilizing no control devices, and exhausting within the building.

(2) Two (2) blank turning wet machining units, identified as EU-NPAT-12 and EU-NPAT-13, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(3) Five (5) ball circuit wet machining units, identified as EU-NPAT-14 through EU-NPAT-18, utilizing no control devices, and exhausting within the building.

(4) Eight (8) flange milling wet machining units, identified as EU-NPAT-19 through EU-NPAT-24, and EU-NPAT-26 and EU-NPAT-27, utilizing no control devices, and exhausting within the building.

(5) One (1) shaft turning wet machine unit, approved for construction in 2011, identified as EU-NPAT-28, utilizing no control device, and exhausting within the building.

(c) One (1) grinding operation, constructed in 1993 through 2005, consisting of:

(1) Nine (9), shaft END/OD wet grinding machines, identified as EU-NPAG-01 through NPAG-9, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(2) Three (3) shaft end milling wet machining units, identified as EU-NPAG-10 through EU-NPAG-12, utilizing no control devices, and exhausting within the building.

(3) Five (5) nut thread wet grinding machines, identified as EU-NPAG-13, EU-NPAG-27, EU-NPAG-28, EU-NPAG-31, and EU-NPAG-33, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(4) Two (2) surface wet grinding machines, identified as EU-NPAG-14 and EU-NPAG-15, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(5) Six (6) shaft thread wet grinding machines, identified as EU-NPAG-16 through EU-NPAG-21, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(6) Five (5) shaft thread wet grinding machines, identified as EU-NPAG-22 through EU-NPAG-26, utilizing the central oil mist collectors (OMC) for particulate control, exhausting through vent EP-19.

(7) Three (3) nut thread wet grinding machines, identified as EU-NPAG-29, EU-NPAG-30, and EU-NPAG-32, utilizing the central mist collectors (OMC) for particulate control, exhausting through vent EP-19.

(d) One (1) dip process, identified as Dip Process, consisting of the following:

(1) Dip Process, constructed in 2008, consisting of four (4) dip tanks, identified as EU-NPAD-01 through EU-NPAD-04, utilizing no control device, and exhausting within the building**;**

(2) Dip process, one (1) dip tank, approved for construction in 2011, identified as EU-NPAD-05, utilizing no control device, and exhausting within the building.

(e) One (1) cold cleaner degreasing process, identified as Cleaning Process, consisting of

the following:

(1) Cold cleaner degreasing process, constructed in 1993, 2003, and 2006, consisting of three (3) dip tanks, identified as EU-NPACL-01 through EU-NPACL-03; exhausting within the building**;**

(2) Cold cleaner degreasing process, consisting of six (6) dip tanks, approved for construction in 2011, identified as EU-NPACL-04 through EU-NPACL-09, utilizing no control devices, and exhausting within the building.

(f) One (1) packing process, identified as Packing Process, consisting of one hand packing operating and hand application of rust preventive, utilizing no control device, and exhausting within the building.

Note: The Precision Plant consists of two (2) central oil mist collectors for particulate control, identified as OMC. The OMC exhausts through vent EP-19.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

NSK Corporation

(1) Twenty (20) Interior Heaters nominally rated at 0.075 MMBtu/hr each
(2) Fifteen (15) Rooftop HVAC Units nominally rated at 0.85 MMBtu/hr each
(3) One (1) Rooftop HVAC Unit nominally rated at 2.0 MMBtu/hr
(4) One (1) Rooftop HVAC Unit nominally rated at 0.4 MMBtu/hr
(5) Two (2) Rooftop HVAC Units nominally rated at 0.3 MMBtu/hr each
(6) One (1) Rooftop HVAC Unit nominally rated at 0.15 MMBtu/hr
(7) Five (5) Rooftop HVAC Units nominally rated at 0.05 MMBtu/hr each
(8) One (1) Rooftop HVAC Unit nominally rated at 0.356 MMBtu/hr
(9) Two (2) Boilers nominally rated at 1.68 MMBtu/hr each
(10) One (1) natural gas-fired emergency stand-by generator nominally rated at 0.13 MMBtu/hr

Under NESHAP, Subpart ZZZZ, the natural gas-fired generator is considered an affected source.

NSK Precision America

(1) Seven (7) Interior Heaters nominally rated at 0.075 MMBtu/hr each
(2) Two (2) Interior Heaters nominally rated at 0.15 MMBtu/hr each
(3) Two (2) Interior Heaters nominally rated at 0.30 MMBtu/hr each
(4) Two (2) HVAC Units nominally rated at 0.85 MMBtu/hr each
(5) Three (3) HVAC Units nominally rated at 0.15 MMBtu/hr each
(6) Two (2) Boilers nominally rated at 4.5 MMBtu/hr each
(7) One (1) Water Heater nominally rated at 0.032 MMBtu/hr
(8) One (1) natural gas-fired emergency stand-by generator nominally rated at 0.13 MMBtu/hr

Under NESHAP, Subpart ZZZZ, the natural gas-fired generator is considered an affected source.

(b) Vessels storing the following:

(1) Hydraulic Oils
(2) Lubricating Oils

(c) Equipment used exclusively for packaging greases.

(d) Filling drums, pails, or other packaging containers with greases.

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

(f) Blowdown for the following:

(1) Compressors
(2) Cooling Tower

(g) Paved roads and parking lots with public access.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4][326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as described in the application or the permit. The emission units covered in this permit may continue operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as described.

(b) If actual construction of the emission units differs from the construction described in the application, the source may not continue operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.

(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

B.4 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, F081-28776-00023, 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, until the renewal permit has been issued or denied.

B.5 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.6 Enforceability [326 IAC 2-8-6] [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.7 Severability [326 IAC 2-8-4(4)]

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.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.9 Duty to Provide Information [326 IAC 2-8-4(5)(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.10 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

(i) it contains a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1), and

(ii) the certification is 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) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent 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

(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 2-8-4(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, 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.

The Permittee shall implement the PMPs.

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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) 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.14 Emergency Provisions [326 IAC 2-8-12]

(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 except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or 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 2-8-4(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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 2-8-3(c)(6) 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 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) 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.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F081-28776-00023 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.16 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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 2-8-3(h) and 326 IAC 2-8-9.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State 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 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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 2-8-8(a)]

(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 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(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 2-8-8(c)]

B.18 Permit Renewal [326 IAC 2-8-3(h)]

(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 2-8-3. 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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 2-8 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 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.19 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.20 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) 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 approval required by 326 IAC 2-8-11.1 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 2-8-15(b) through (d). 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 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(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 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(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 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) 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.21 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.22 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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 FESOP 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, at reasonable times, 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, at reasonable times, 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, at reasonable times, 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.23 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ no later than 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) 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.25 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][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 2-8-4(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 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 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.4 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.5 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.6 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).

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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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.

Testing Requirements [326 IAC 2-8-4(3)]

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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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 2-8-4][326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(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.

(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 2-8-4][326 IAC 2-8-5(a)(1)]

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 prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval 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 180 days from the date on which this source commences operation.

The ERP does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) 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 2-8-4] [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 [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation 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.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(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. 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.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. 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 2-8-5(a)(1) by an "authorized individual" as defined

by 326 IAC 2-1.1-1(1). 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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. 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.18 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

Emissions Unit Description:

NSK Corporation Hub Plant

(a) One (1) Grinding Operation, identified as G1 Grinding, consisting of:

(1) Three (3) wet grinding machines, identified as EU-G1-01 through EU-G1-03, constructed in 1989 through 1994, respectively, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building.

(2) Three (3) wet grinding machines, identified as EU-G1-04 through EU-G1-06, constructed in 1989 through 2010, respectively, utilizing no control devices, and exhausting within the building.

(b) One (1) Grinding Operation, identified as G2 Grinding, consisting of forty-two (42) wet grinding machines, divided into three sections HUB I, HUB II, and HUB III, with emission units identified as EU-G2-01 through EU-G2-08, and EU-G2-10 through EU-G2-43, constructed in 1990 through 2010, utilizing Aerostokes mist eliminators for particulate control, and exhausting through vents EP-17 or EP-18.

(c) One (1) Grinding Operation, identified as New Concept Grinding, constructed in 2009, consisting of twenty-four (24) wet grinding machines, identified as EU-NCG-01 through EU-NCG-08, and EU-NCG-10 through EU-NCG-25, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building.

(d) One (1) grinding operation, identified as Taper Roller Grinding, consisting of the following:

(1) eight (8) wet grinding machines, constructed in 2009, identified as EU-TRG-01 through EU-TRG-08, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building**;**

(2) Two (2) taper roller grinders, identified as EU-TRG-09 and EU-TRG-13, approved for construction in 2011, utilizing Exhaust Fan EF-19 for control, exhausting through Vent EP-18;

(3) Six (6) taper roller grinders, identified as EU-TRG-10, EU-TRG-11, EU-TRG-12, and EU-TRG-14 through EU-TRG-16, approved for construction in 2011, utilizing Clark Air #8 Mist Eliminators for control, exhausting within the building.

(e) One (1) superfinish operation, identified as Superfinish G2, constructed in 1990 through 2010, consisting of twenty-five (25) wet machining units, identified as EU-SFG2-01 through EU-SFG2-04, EU-SFG2-07, EU-SFG2-09 through EU-SFG2-12, EU-SFG2-14 through EU-SFG2-18, EU-SFG2-20 through EU-SFG2-25, and EU-SFG2-27 through EU-SFG2-31, utilizing Aerostokes mist eliminators for particulate control, exhausting through vents EP-17 or EP-18.

(f) One (1) superfinish operation, identified as Superfinish New Concept, constructed in 1990 through 2010, consisting of fourteen (14) wet machining units, identified as EU-SFNC-01 through EU-SFNC-03, and EU-SFNC-05 through EU-SFNC-15, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building.

(g) One (1) superfinish operation, identified as Superfinish Taper Roller, consisting of the following:

(1) three (3) wet machining units, constructed in 2009, identified as EU-SFTR-01 through EU-SFTR-03, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building**;**

(2) In its taper roller superfinish operation, five (5) wet machining units, identified as EU-SFTR-04 through EU-SFTR-08, approved for construction in 2011, as follows:

(A) One (1) taper roller superfinish grinder, identified asEU-SFTR-04, utilizing Clark Air #9 Mist eliminators for particulate control, and exhausting within the building;

(B) Two (2) taper roller superfinish grinders, identified asEU-SFTR-06 and EU-SFTR-08, utilizing Clark Air #8 Mist eliminators for particulate control, and exhausting within the building;

(C) Two (2) taper roller superfinish grinders, identified as EU-SFTR-05 and EU-SFTR-07, utilizing Exhaust Fan EF-19 for control, exhausting through Vent EP-18.

(h) One (1) hard turning process, identified as FS-4 Turning, consisting of five (5) wet machining units, identified as EU-HTFS-01 through EU-HTFS-05, constructed in 2002 through 2010, utilizing no control devices, and exhausting within the building.

(i) One (1) hard turning process, identified as LU300 Turning, consisting of six (6) wet machining units, identified as EU-HTLU-01 through EU-HTLU-06, constructed in 2002 through 2010, utilizing no control devices, and exhausting within the building.

(j) One (1) broaching process, identified as Broaching, consisting of two (2) wet broaching units, identified as EU-BR-01 and EU-BR-02, constructed in 2002 through 2010, respectively, utilizing no control devices, and exhausting within the building.

(k) One (1) painting process, identified as Painting, consisting of:

(1) Seven (7) paint lines, identified as EU-PNT-01 through EU-PNT-07, constructed in 2009, utilizing Clark Air Unit mist eliminators as particulate control, and exhausting within the building.

(2) Three (3) paint lines, identified as EU-PNT-08 through EU-PNT-10, constructed in 1990 through 2010, utilizing no control devices, and exhausting within the building.

(l) One (1) rust preventative application operation, identified as Hub I – Assembly Rust Preventative, constructed in 1990 through 2001, consisting of three (3) coating lines, identified as EU-H1RP-01 through EU-H1RP-03, utilizing no control devices, and exhausting within the building.

(m) One (1) rust preventative application operation, identified as Hub II – Assembly Rust Preventative, constructed in 1992 and 1996, consisting of two (2) coating lines, identified as EU-H2RP-01 and EU-H2RP-02, utilizing Clark Air Unit mist eliminators as particulate control, and exhausting within the building.

(n) One (1) rust preventative application operation, identified as Hub III – Assembly / New Concept Rust Preventative, constructed in 1995 through 2010, consisting of nine (9) coating lines, identified as EU-H3/NCRP-01 through EU-H3/NCRP-09, utilizing Clark Air Unit mist eliminators as particulate control, and exhausting within the building.

(o) One (1) rust preventative application operation, identified as Taper Roller Rust Preventative, consisting of the following:

(1) one (1) coating line, constructed in 1990, identified as EU-TRRP-01, utilizing a Clark Air Unit #8 mist eliminator as particulate control, and exhausting within the building**;**

(2) two (2) coating lines, approved for construction in 2011, identified as EU-TRRP-02 utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and EU-TRRP-03, utilizing Clark Air Unit #9 mist eliminator for control, and exhausting within the building.

(p) Conveyorized Degreasers including:

(1) One (1) superfinish wash operation conveyorized degreasing operation, consisting of the following:

(A) conveyorized degreasing operation, identified as Superfinish Wash, constructed in 1990 through 2010, consisting of twenty-five (25) conveyorized degreasing units, identified as EU-SFW-01 through EU-SFW-04, EU-SFW-08 through EU-SFW-11, EU-SFW-13 through EU-SFW-18, EU-SFW-20 through EU-SFW-25, and EU-SFW-27 through EU-SFW-31, utilizing no control device, and exhausting within the building**;**

(B) conveyorized degreasing operation, consisting of eight (8) conveyorized degreasing units, approved for construction in 2011, identified as EU-SFW-32 through EU-SFW-39, utilizing no control device, and exhausting within the building.

(2) One (1) parts wash conveyorized degreasing process, including three operations identified as Parts Wash, Rough Wash, and Finish Wash, consisting of the following:

(A) conveyorized degreasing process, constructed in 1990 through 2008, collectively consisting of forty-four (44) conveyorized degreasing units, identified as EU-PW-01 through EU-PW-37, EU-PW-39 through EU-PW-41, EU-PW-43, and EU-PW-44, utilizing Clark Air Units #8 mist eliminators as control, and exhausting within the building**;**

(B) three (3) conveyorized degreasing units, approved for construction in 2011, identified as EU-PW-47 and EU-PW-48, utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and unit EU-PW-49, utilizing Clark Air Unit #9 mist eliminators for control, and exhausting within the building.

(3) One (1) ball wash conveyorized degreasing process, identified as Ball Wash, constructed in 2001, 1993, 1996, and 2008, consisting of four (4) conveyorized degreasing units, identified as EU-BW-01 through EU-BW-04,

utilizing no control device, and exhausting within the building.

(q) Miscellaneous process tanks including:

(1) One (1) finish wash tank, identified as EU-Tank-02, constructed in 1992, with a maximum capacity of 7,500 gallons, containing 95% kerosene and 5% additive, supplying the Finish Wash conveyorized degreasing units, and exhausting through vent EP-2.

(2) One (1) ball wash tank, identified as EU-Tank-03, constructed in 1992, with a maximum capacity of 4,000 gallons, containing 95% kerosene and 5% additive, supplying the Ball Wash conveyorized degreasing units, and exhausting through vent EP-3.

(3) One (1) rough wash tank, identified as EU-Tank-04, constructed in 1992, with a maximum capacity of 7,500 gallons, containing 95% kerosene and 5% additive, supplying the Rough Wash conveyorized degreasing units, and exhausting through vent EP-4.

(4) One (1) parts wash tank, identified as EU-Tank-06, constructed in 1992, with a maximum capacity of 7,500 gallons, containing 95% kerosene and 5% additive, supplying the Parts Wash conveyorized degreasing units, and exhausting through vent EP-6.

(5) One (1) superfinish oil tank, identified as EU-Tank-07, constructed in 1992, with a maximum capacity of 4,000 gallons, containing Superfinish G2, Superfinish New Concept, and Superfinish Taper Roller dirty oil, and exhausting through vent EP-7.

(6) One (1) superfinish oil tank, identified as EU-Tank-08, constructed in 1992, with a maximum capacity of 3,000 gallons, containing Superfinish G2, Superfinish New Concept, and Superfinish Taper Roller clean oil, and exhausting through vent EP-8.

(7) One (1) super finish wash tank, identified as EU-Tank 10, constructed in 1992, with a maximum capacity of 2,500 gallons of superfinish wash fluid, supplying the Super Finish Wash conveyorized degreasing units, and an exhausting through vent EP-10.

(8) One (1) coolant tank, identified as EU-Tank-12, constructed in 1992, with a maximum capacity of 6,500 gallons, containing G2 Grinding, New Concept Grinding, and Taper Roller Grinding dirty coolant, and exhausting through vent EP-12.

(9) One (1) coolant tank, identified as EU-Tank-13, constructed in 1992, with a maximum capacity of 5,000 gallons, containing G2 Grinding, New Concept Grinding, and Taper Roller Grinding dirty coolant, and exhausting through vent EP-13.

(10) One (1) coolant tank, identified as EU-Tank-14, constructed in 1992, with a maximum capacity of 5,000 gallons, containing G1 Grinding dirty coolant, and exhausting through vent EP-14.

(11) One (1) coolant tank, identified as EU-Tank-15, constructed in 1992, with a maximum capacity of 4,000 gallons, containing G1 Grinding clean coolant, and exhausting through vent EP-15.

Note: The NSK Corporation Plant consists of ten (10) Aerostokes mist eliminators and nine (9) Clark Air Unit mist eliminators for particulate control. The Aeorostokes mist eliminators exhaust through vents EP-17 and/or EP-18 and the Clark Air Unit mist eliminators exhaust within the building.

NSK Precision America, Inc. Plant

(a) One (1) cutting process, identified as Cutting, constructed in 1995 through 2009, consisting of:

(1) Seven (7) wet machining units, identified as EU-NPACT-01 through EU-NPACT-03, and EU-NPACT-05 through EU-NPACT-08, utilizing no control devices, and exhausting within the building.

(2) Two (2) wet machining cut-off-saws, identified as EU-NPACT-09 and EU-NPACT-10, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(3) One (1) dry mill saw, identified as EU-NPACT-04 utilizing no control devices, and exhausting within the building.

(4) One (1) dry chamfer machine, identified as EU-NPACT-11, utilizing no control devices, and exhausting within the building.

(5) One (1) dry nut polisher, identified as EU-NPACT-12, utilizing a dust collector for particulate control, and exhausting within the building.

(6) One (1) dry miter saw, identified as EU-NPACT-13, utilizing an integrated shop-vac as particulate control, and exhausting within the building.

(b) One (1) turning process, identified as Turning, constructed in 1994 through 2011, consisting of:

(1) Eleven (11) shaft turning wet machining units, identified as EU-NPAT-01 through EU-NPAT-11, utilizing no control devices, and exhausting within the building.

(2) Two (2) blank turning wet machining units, identified as EU-NPAT-12 and EU-NPAT-13, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(3) Five (5) ball circuit wet machining units, identified as EU-NPAT-14 through EU-NPAT-18, utilizing no control devices, and exhausting within the building.

(4) Eight (8) flange milling wet machining units, identified as EU-NPAT-19 through EU-NPAT-24, and EU-NPAT-26 and EU-NPAT-27, utilizing no control devices, and exhausting within the building.

(5) One (1) shaft turning wet machine unit, approved for construction in 2011, identified as EU-NPAT-28, utilizing no control device, and exhausting within the building.

(c) One (1) grinding operation, constructed in 1993 through 2005, consisting of:

(1) Nine (9), shaft END/OD wet grinding machines, identified as EU-NPAG-01

through NPAG-9, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(2) Three (3) shaft end milling wet machining units, identified as EU-NPAG-10 through EU-NPAG-12, utilizing no control devices, and exhausting within the building.

(3) Five (5) nut thread wet grinding machines, identified as EU-NPAG-13, EU-NPAG-27, EU-NPAG-28, EU-NPAG-31, and EU-NPAG-33, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(4) Two (2) surface wet grinding machines, identified as EU-NPAG-14 and EU-NPAG-15, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(5) Six (6) shaft thread wet grinding machines, identified as EU-NPAG-16 through EU-NPAG-21, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(6) Five (5) shaft thread wet grinding machines, identified as EU-NPAG-22 through EU-NPAG-26, utilizing the central oil mist collectors (OMC) for particulate control, exhausting through vent EP-19.

(7) Three (3) nut thread wet grinding machines, identified as EU-NPAG-29, EU-NPAG-30, and EU-NPAG-32, utilizing the central mist collectors (OMC) for particulate control, exhausting through vent EP-19.

(d) One (1) dip process, identified as Dip Process, consisting of the following:

(1) Dip Process, constructed in 2008, consisting of four (4) dip tanks, identified as EU-NPAD-01 through EU-NPAD-04, utilizing no control device, and exhausting within the building**;**

(2) Dip process, one (1) dip tank, approved for construction in 2011, identified as EU-NPAD-05, utilizing no control device, and exhausting within the building.

(e) One (1) cold cleaner degreasing process, identified as Cleaning Process, consisting of the following:

(1) Cold cleaner degreasing process, constructed in 1993, 2003, and 2006, consisting of three (3) dip tanks, identified as EU-NPACL-01 through EU-NPACL-03; exhausting within the building**;**

(2) Cold cleaner degreasing process, consisting of six (6) dip tanks, approved for construction in 2011, identified as EU-NPACL-04 through EU-NPACL-09, utilizing no control devices, and exhausting within the building.

(f) One (1) packing process, identified as Packing Process, consisting of one hand packing operating and hand application of rust preventive, utilizing no control device, and exhausting within the building.

Note: The Precision Plant consists of two (2) central oil mist collectors for particulate control, identified as OMC. The OMC exhausts through vent EP-19.

(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 2-8-4(1)]

D.1.1 FESOP and PSD Minor Limits [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, the input of volatile organic compounds (VOC), including coatings, to the below listed emission units, minus the VOC containing waste materials shipped out, shall be limited to 98.18 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with this limit, combined with the potential to emit VOC from other emission units at the source, shall limit the VOC from the entire source to less than 100 tons per twelve (12) consecutive month period and render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Processes	Controls	Exhaust IDs	Emission Unit IDs
NSK Corporation Hub Plant			
G1 Grinding	Clark Air Units	Internal	EU-G1-01 through EU-G1-03
	N/A	Internal	EU-G1-04 through EU-G1-06
G2 Grinding	Aerostokes	EP17 / EP18	EU-G2-01 through EU-G2-08
			EU-G2-10 through EU-G2-43
New Concept Grinding	Clark Air Units	Internal	EU-NCG-01 through EU-NCG-08
			EU-NCG-10 through EU-NCG-25
Taper Roller Grinding	Clark Air Units	Internal	EU-TRG-01 through EU-TRG-08, EU-TRG-10, EU-TRG-12, EU-TRG-14 through EU-TRG-16
Taper Roller Grinding	Exhaust Fan EF-19	EP18	EU-TRG-9, EU-TRG-11, EU-TRG-13
Superfinish G2	Aerostokes	EP17 / EP18	EU-SFG2-01 through EU-SFG2-04
			EU-SFG2-07
			EU-SFG2-09 through EU-SFG2-12
			EU-SFG2-14 through EU-SFG2-18
			EU-SFG2-20 through EU-SFG2-25
			EU-SFG2-27 through EU-SFG2-31
Superfinish New Concept	Clark Air Units	Internal	EU-SFNC-01 through EU-SFNC-03
			EU-SFNC-05 through EU-SFNC-15
Superfinish Taper Roller	Clark Air Units	Internal	EU-SFTR-01 through EU-SFTR-4
Superfinish Taper Roller	Exhaust Fan EF-19	EP18	EU-SFTR-05 through EU-SFTR-08
FS-4 Turning	N/A	Internal	EU-HTFS-01 through EU-HTFS-05
LU300 Turning	N/A	Internal	EU-HTLU-01 through EU-HTLU-06
Broaching	N/A	Internal	EU-BR-01 and EU-BR-02
Painting	Clark Air Units	Internal	EU-PNT-01 through EU-PNT-07
	N/A	Internal	EU-PNT-08 through EU-PNT-10
HUB I - Assembly Rust Preventative	N/A	Internal	EU-H1RP-01 through EU-H1RP-03
HUB II - Assembly Rust Preventative	Clark Air Units	Internal	EU-H2RP-01 and EU-H2RP-02
HUB III - Assembly / New Concept Rust Preventative	Clark Air Units	Internal	EU-H3/NCRP-01 through EU-H3/NCRP-09
Taper Roller Rust Preventative	Clark Air Unit	Internal	EU-TRRP-01, EU-TRRP-03
Taper Roller Rust Preventive	Exhaust Fan EF-19	EP18	EU-TRRP-02
Superfinish Wash	N/A	Internal	EU-SFW-01 through EU-SFW-04
			EU-SFW-08 through EU-SFW-11
			EU-SFW-13 through EU-SFW-18
			EU-SFW-20 through EU-SFW-25
			EU-SFW-27 through EU-SFW-31
Parts Wash, Rough Wash, Finish Wash	Clark Air Units	Internal	EU-PW-01 through EU-PW-37
			EU-PW-39 through EU-PW-41
			EU-PW-43 and EU-PW-47 through EU-PW-49
Ball Wash	N/A	Internal	EU-BW-01 through EU-BW-04
Finish Wash, Ball Wash, Rough Wash - Tanks	N/A	Internal	EU-Tank-02 through EU-Tank-04
Parts Wash and Coolant Tanks	N/A	Internal	EU-Tank-06 through EU-Tank-08
Superfinish Wash Tank	N/A	Internal	EU-Tank-10
Coolant Tanks	N/A	Internal	EU-Tank-12 through EU-Tank-15
NSK Precision America, Inc. Plant			
Cutting	N/A	Internal	EU-NPACT-01 through EU-NPACT-08
	On-Board	Internal	EU-NPACT-09 and EU-NPACT-10
	N/A	Internal	EU-NPACT-11
	Dust Collector	Internal	EU-NPACT-12
	Shop-Vac	Internal	EU-NPACT-13
Turning	N/A	Internal	EU-NPAT-01 through EU-NPAT-11
	On-Board	Internal	EU-NPAT-12 and EU-NPAT-13
	N/A	Internal	EU-NPAT-14 through EU-NPAT-18
	N/A	Internal	EU-NPAT-19 through EU-NPAT-24
	N/A	Internal	EU-NPAT-26 and EU-NPAT-27
Grinding	On-Board	Internal	EU-NPAG-01 through EU-NPAG-09
	N/A	Internal	EU-NPAG-10 through EU-NPAG-12

	On-Board	Internal	EU-NPAG-27, 28, 31, and 33
	On-Board	Internal	EU-NPAG-13 through EU-NPAG-21
	OMC	EP19	EU-NPAG-22 through EU-NPAG-26
	OMC	EP19	EU-NPAG-29, 30, and 32
Dip Process	N/A	Internal	EU-NPAD-01 through EU-NPAD-04
Cleaning Process	N/A	Internal	EU-NPACL-01 through EU-NPACL-09
Packing Process	N/A	Internal	EU-NPAPK-01

Notes: On-Board = On-board Mist Eliminator; OMC = Central Oil Mist Collectors

D.1.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2][326 IAC 2-1.1-5]

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), and to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-1.1-5 (Nonattainment New Source Review) not applicable, the source shall comply with the following:

(a) Combined PM10 Emissions from the AEROSTOKES mist eliminators, controlling the G2 Grinding and Superfinish G2**,** (NSK Corporation Plant) processes, and exhausting through EP-17 and/or EP-18, shall not exceed 5.15 lbs/hr.

(b) Combined PM2.5 Emissions from the AEROSTOKES mist eliminators, controlling the G2 Grinding and Superfinish G2**,** (NSK Corporation Plant) processes, and exhausting through EP-17 and/or EP-18, shall not exceed 5.15 lbs/hr.

(c) Combined PM10 Emissions from the Clark Air mist eliminators, and the Exhaust Fan EF-19, controlling the Taper Roller grinding, and Taper Roller Superfinish (NSK Corporation Plant) processes, shall not exceed 5.15 lbs/hr.

(d) Combined PM2.5 Emissions from the Clark Air mist eliminators, and the Exhaust Fan EF-19, controlling the Taper Roller grinding, and Taper Roller Superfinish (NSK Corporation Plant) processes, shall not exceed 5.15 lbs/hr.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from other emission units at the source, shall limit the PM10 and PM2.5 from the entire source to less than 100 tons per twelve (12) consecutive month period and render 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-1.1-5 (Nonattainment New Source Review) not applicable.

D.1.3 Volatile Organic Compound (VOC) Limit [326 IAC 8-2-9]

To render the requirements of 326 IAC 8-2-9 (Miscellaneous Coating Operations) not applicable, the owner or operator of this source shall comply with the following:

(a) The VOC usage for the Hub I - Assembly Rust Preventative process (EU-H1RP-01 through EU-H1RP-03) shall be less than 15.0 pounds per day.

(b) The VOC usage for the Hub II - Assembly Rust Preventative process (EU-H2RP-01 and EU-H2RP-02) shall be less than 15.0 pounds per day.

(c) The VOC usage for the Hub III - Assembly / New Concept Rust Preventative process (EU-H3/NCRP-01 through EU-H3/NCRP-09) shall be less than 15.0 pounds per day.

(d) The VOC usage for the Taper Roller Rust Preventative (EU-TRRP-01) process shall be less than 15.0 pounds per day.

Compliance with these limits renders the requirements of 326 IAC 8-2-9 not applicable

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes),

particulate emissions from each of following emission units shall not exceed the pound per hour limit listed in the table below:

Process	Emission Units	Process Weight Rate (tons/hr)	Particulate Emissions (lbs/hr)
NSK Corporation Plant			
G1 Grinding	EU-G1-01 through EU-G1-03	0.34 (each)	2.00 (each)
	EU-G1-04	0.21	1.44
	EU-G1-05 and EU-G1-06	0.07 (each)	0.68 (each)
G2 Grinding	EU-G2-01 through EU-G2-08	0.07 (each)	0.69 (each)
	EU-G2-10 through EU-G2-39		
	EU-G2-40 and EU-G2-41	0.33 (each)	1.97 (each)
	EU-G2-42	0.22	1.50
	EU-G2-43	0.43	2.32
New Concept Grinding	EU-NCG-01 through EU-NCG-08	0.11 (each)	0.92 (each)
	EU-NCG-10 through EU-NCG-24		
	EU-NCG-25	0.43	2.32
Taper Roller Grinding	EU-TRG-01 through EU-TRG-07, EU-TRG-09 through EU-TRG-16	0.03 (each)	0.551 (each)
	EU-TRG-08	0.20	1.39
Superfinish G2	EU-SFG2-01 through EU-SFG2-04	0.10 (each)	0.85 (each)
	EU-SFG2-07		
	EU-SFG2-09 through EU-SFG2-12		
	EU-SFG2-14 through EU-SFG2-18		
	EU-SFG2-20 through EU-SFG2-25		
	EU-SFG2-27 through EU-SFG2-31		
Superfinish New Concept	EU-SFNC-01 through EU-SFNC-03	0.18 (each)	1.32 (each)
	EU-SFNC-05 through EU-SFNC-15		
Superfinish Taper Roller	EU-SFTR-01 through EU-SFTR-03, EU-SFTR-04 through EU-SFTR-08	0.07 (each)	0.66 (each)
FS-4 Turning	EU-HTFS-01 through EU-HTFS-05	0.02 (each)	0.551 (each)
LU300 Turning	EU-HTLU-01 through EU-HTLU-06	0.27 (each)	1.71 (each)
Broaching	EU-BR-01 and EU-BR-02	0.27 (each)	1.71 (each)
NSK Precision America, Inc. Plant			
Cutting	EU-NPACT-01 through EU-NPACT-13	0.15 (each)	1.15 (each)
Turning	EU-NPAT-01 through EU-NPAT-24	0.06 (each)	0.59 (each)
	EU-NPAT-26 and EU-NPAT-27, EU-NPAT-28		
Grinding Operation	EU-NPAG-01 through EU-NPAG-32	0.05 (each)	0.551 (each)

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 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

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and their control devices (Aerostokes mist eliminators and Clark Air Unit mist eliminators). Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plans required by this condition.

Compliance Determination Requirements

D.1.6 Volatile Organic Compounds (VOC)

(a) Compliance with the VOC content and input limitations contained in Conditions D.1.1 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(b) If the amount of VOC in the waste shipped offsite for recycling or disposal is deducted from the monthly VOC input reported, the Permittee shall determine the VOC content of the waste shipped offsite using one or a combination of the following methods:

(1) On-Site Sampling

(A) VOC content shall be determined pursuant to 326 IAC 8-1-4(a)(3) by EPA Reference Method 24 and the sampling procedures in 326 IAC 8-1-4 or other methods as approved by the Commissioner.

(B) A representative sample of the VOC containing waste to be shipped offsite shall be analyzed within 90 days of the issuance of this permit F081-28776-00023.

(C) If multiple waste streams are collected and bulked separately, a sample shall be collected and analyzed from each waste stream.

(D) A new representative sample shall be collected and analyzed whenever a change or changes occur(s) that could result in a cumulative 10% or more decrease in the VOC content of the VOC containing waste. Such change could include, but is not limited to, the following:

(i) A change in VOC material usage selection or formulation, as supplied or as applied, or

(ii) An operational change in the VOC material usage application or cleanup operations.

The new VOC content shall be used in calculating the amount of VOC shipped offsite, starting with the date that the change occurred. The sample shall be collected and analyzed within 30 days of the change.

(2) Certified Waste Report: The VOC reported by analysis of an offsite waste processor may be used, provided the report certifies the amount of VOC in the waste.

(3) Minimum Assumed VOC content: The VOC content of the waste shipped offsite may be assumed to be equal to the VOC content of the material with the lowest VOC content that could be present in the waste, as determined using the as supplied" and "as applied" VOC data sheets, for each month.

(c) IDEM reserves the right to request a representative sample of the VOC containing waste stream and conduct an analysis for VOC content.

(d) Compliance with the VOC input limitations contained in Condition D.1.1 shall be demonstrated within 30 days of the end of each month. This shall be based on the total volatile organic compound input for the previous month, minus the amount VOC in the

waste shipped out for recycling or disposal, and adding it to previous 11 months total VOC input, minus the amount VOC in the waste shipped out for recycling or disposal, so as to arrive at VOC input for the most recent twelve (12) consecutive month period.

(e) The VOC input for a month shall be calculated using the following equation:

$$\text{VOC}\,input = \text{SCL} - \text{SR}$$

Where:

SCL = The total amount of VOC containing materials, in tons, including coatings, from the source; and

SR = The total amount of VOC containing materials, in tons, shipped out for either recycling or disposal, including coatings, from the source.

D.1.7 Particulate Control

(a) In order to comply with Conditions D.1.2 and D.1.4, the Aerostokes mist eliminators**,** Clark Air Mist Eliminators, and Exhaust Fan EF-19 shall be in operation at all times when the G2 Grinding and Superfinish G2**,** Taper Roller Grinding and Taper Roller Superfinish, processes, are in operation.

(b) In order to assure compliance with Condition D.1.4, the Clark Air Units and Exhaust Fan EF-19 shall operate at all times the G1 Grinding, New Concept Grinding, Taper Roller Grinding, Superfinish New Concept, and Superfinish Taper Roller processes are in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.1.8 Visible Emissions Notations

(a) Visible emission notations of the EP17, EP18, and EP19 exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.9 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4)

shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1 and D.1.3, and to document the quantity of any VOC shipped offsite and deducted from total reported VOC usage. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

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

(2) The amount of coating material and solvent used on a monthly basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(3) If the amount of VOC in waste material is being deducted from the VOC input as allowed in paragraph (b) of Condition D.1.6, then the following records shall be maintained:

(A) The amount of VOC containing waste shipped out to be recycled or disposed each month. If multiple waste streams are collected and drummed separately, the amount shipped out shall be recorded separately for each VOC containing waste stream.

(B) The VOC content of the waste and all records necessary to verify the amount and VOC content of the VOC containing waste shipped out for recycling or disposal.

(C) The weight of VOC input, minus the weight of VOC shipped out to be recycled or disposed, for each compliance period.

(4) The total VOC usage for each month; and

(b) To document compliance with Condition D.1.3, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.1.3.

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

(2) The amount of coating material used on a daily basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(c) To document compliance with Condition D.1.8, the Permittee shall maintain daily records of the visible emission notations from each of the EP17, EP18, and EP19 exhaust stacks, when exhausting to the atmosphere. 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 plant did not operate that day).

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

D.1.10 Reporting Requirements

(a) A quarterly report of the information to document the compliance status with Condition D.1.1 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.

(b) A quarterly report of the information to document the compliance status with Condition D.1.3 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Degreasers
NSK Corporation Hub Plant

(p) Conveyorized Degreasers including:

(1) One (1) superfinish wash operation conveyorized degreasing operation, consisting of the following:

(A) conveyorized degreasing operation, identified as Superfinish Wash, constructed in 1990 through 2010, consisting of twenty-five (25) conveyorized degreasing units, identified as EU-SFW-01 through EU-SFW-04, EU-SFW-08 through EU-SFW-11, EU-SFW-13 through EU-SFW-18, EU-SFW-20 through EU-SFW-25, and EU-SFW-27 through EU-SFW-31, utilizing no control device, and exhausting within the building**;**

(B) conveyorized degreasing operation, consisting of eight (8) conveyorized degreasing units, approved for construction in 2011, identified as EU-SFW-32 through EU-SFW-39, utilizing no control device, and exhausting within the building.

(2) One (1) parts wash conveyorized degreasing process, including three operations identified as Parts Wash, Rough Wash, and Finish Wash, consisting of the following:

(A) conveyorized degreasing process, constructed in 1990 through 2008, collectively consisting of forty-four (44) conveyorized degreasing units, identified as EU-PW-01 through EU-PW-37, EU-PW-39 through EU-PW-41, EU-PW-43, and EU-PW-44, utilizing Clark Air Units #8 mist eliminators as control, and exhausting within the building**;**

(B) three (3) conveyorized degreasing units, approved for construction in 2011, identified as EU-PW-47 and EU-PW-48, utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and unit EU-PW-49, utilizing Clark Air Unit #9 mist eliminators for control, and exhausting within the building.

(3) One (1) ball wash conveyorized degreasing process, identified as Ball Wash, constructed in 2001, 1993, 1996, and 2008, consisting of four (4) conveyorized degreasing units, identified as EU-BW-01 through EU-BW-04, utilizing no control device, and exhausting within the building.

NSK Precision America, Inc. Plant

(e) One (1) cold cleaner degreasing process, identified as Cleaning Process, consisting of the following:

(1) Cold cleaner degreasing process, constructed in 1993, 2003, and 2006, consisting of three (3) dip tanks, identified as EU-NPACL-01 through EU-NPACL-03; exhausting within the building**;**

(2) Cold cleaner degreasing process, consisting of six (6) dip tanks, approved for construction in 2011, identified as EU-NPACL-04 through EU-NPACL-09, utilizing no control devices, and exhausting within the building.

(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 2-8-4(1)]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-4]

Pursuant to 326 IAC 8-3-4 (Conveyorized Degreaser Operation), the owner or operator of a conveyorized degreaser shall:

(1) minimize carryout emissions by:

(A) racking parts for best drainage;

(B) maintaining the vertical conveyor speed at less than 3.3 meters per minute (eleven (11) feet per minute);

(2) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;

(3) repair solvent leaks immediately, or shut down the degreaser;

(4) not use workplace fans near the degreaser opening;

(5) not allow water in solvent exiting the water separator; and

(6) provide a permanent, conspicuous label summarizing the operating requirements.

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

The cold cleaner degreasers EU-NPACL-01 through EU-NPACL-09 are subject to the provisions of 326 IAC 8-3-2 (Organic solvent degreasing operations: cold cleaner operations). Pursuant to this rule, the owner or operator of the one (1) cold cleaner degreasing process (Cleaning Process) shall:

(a) equip the cleaner with a cover;

(b) equip the cleaner with a facility for draining cleaned parts;

(c) close the degreaser cover whenever parts are not being handled in the cleaner;

(d) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) provide a permanent, conspicuous label summarizing the operating requirements;

(f) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.2.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaner degreasers (EU-NPACL-01 through EU-NPACL-09) shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION E.1 FACILITY OPERATION CONDITIONS - 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

Facility Description [326 IAC 2-8-4(10)]:

Insignificant Activities:

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

NSK Corporation

(1) Twenty (20) Interior Heaters nominally rated at 0.075 MMBtu/hr each
(2) Fifteen (15) Rooftop HVAC Units nominally rated at 0.85 MMBtu/hr each
(3) One (1) Rooftop HVAC Unit nominally rated at 2.0 MMBtu/hr
(4) One (1) Rooftop HVAC Unit nominally rated at 0.4 MMBtu/hr
(5) Two (2) Rooftop HVAC Units nominally rated at 0.3 MMBtu/hr each
(6) One (1) Rooftop HVAC Unit nominally rated at 0.15 MMBtu/hr
(7) Five (5) Rooftop HVAC Units nominally rated at 0.05 MMBtu/hr each
(8) One (1) Rooftop HVAC Unit nominally rated at 0.356 MMBtu/hr
(9) Two (2) Boilers nominally rated at 1.68 MMBtu/hr each
(10) One (1) natural gas-fired emergency stand-by generator nominally rated at 0.13 MMBtu/hr

Under NESHAP, Subpart ZZZZ, the natural gas-fired generator is considered an affected source.

NSK Precision America

(1) Seven (7) Interior Heaters nominally rated at 0.075 MMBtu/hr each
(2) Two (2) Interior Heaters nominally rated at 0.15 MMBtu/hr each
(3) Two (2) Interior Heaters nominally rated at 0.30 MMBtu/hr each
(4) Two (2) HVAC Units nominally rated at 0.85 MMBtu/hr each
(5) Three (3) HVAC Units nominally rated at 0.15 MMBtu/hr each
(6) Two (2) Boilers nominally rated at 4.5 MMBtu/hr each
(7) One (1) Water Heater nominally rated at 0.032 MMBtu/hr
(8) One (1) natural gas-fired emergency stand-by generator nominally rated at 0.13 MMBtu/hr

Under NESHAP, Subpart ZZZZ, the natural gas-fired generator is considered an affected source.

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

National Emissions Standards for Hazardous Air Pollutants (NESHAP) Requirements: Stationary Reciprocating Internal Combustion Engines

E.1.1 General Provisions Relating to National Emissions 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 63.6580, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-82, for the natural gas-fired emergency stand-by generators as specified in Table 8 of 40 CFR Part 63, Subpart ZZZZ in accordance with the schedule in 40 CFR 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.1.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment A) which are incorporated by reference as 326 IAC 20-82 for the reciprocating internal combustion engine:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a),(c),(d)
(3) 40 CFR 63.6590(a)(1)(iii),(iv),(b)(3)
(4) 40 CFR 63.6605
(5) 40 CFR 63.6625(e),(f)
(6) 40 CFR 63.6645(a)(5)
(7) 40 CFR 63.6670
(8) 40 CFR 63.6675

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: NSK Corporation - Franklin Campus
Source Address: 3400 Bearing Drive, Franklin, Indiana 46131
FESOP Permit No.: F081-28776-00023

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:

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

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: NSK Corporation - Franklin Campus
Source Address: 3400 Bearing Drive, Franklin, Indiana 46131
FESOP Permit No.: F081-28776-00023

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 Describe:
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

FESOP Quarterly Report

Source Name:	NSK Corporation - Franklin Campus
Source Address(es):	3400 Bearing Drive, Franklin, IN 46131; and 3450 Bearing Drive, Franklin, IN 46131
FESOP Permit No.:	F081-28776-00023
Facilities:	See Table Below
Parameter:	VOC
Limit:	The input of volatile organic compounds (VOC) to the below listed emission units, minus the VOC containing waste materials shipped out, shall be limited to 98.18 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

This form consists of 3 pages **Page 1 of 3**

Processes	Controls	Exhaust IDs	Emission Unit IDs
NSK Corporation Hub Plant			
G1 Grinding	Clark Air Units	Internal	EU-G1-01 through EU-G1-03
	N/A	Internal	EU-G1-04 through EU-G1-06
G2 Grinding	Aerostokes	EP17 / EP18	EU-G2-01 through EU-G2-08
			EU-G2-10 through EU-G2-43
New Concept Grinding	Clark Air Units	Internal	EU-NCG-01 through EU-NCG-08
			EU-NCG-10 through EU-NCG-25
Taper Roller Grinding	Clark Air Units	Internal	EU-TRG-01 through EU-TRG-08, EU-TRG-10, EU-TRG-12, EU-TRG-14 through EU-TRG-16
Taper Roller Grinding	Exhaust Fan EF-19	EP18	EU-TRG-9, EU-TRG-11, EU-TRG-13
Superfinish G2	Aerostokes	EP17 / EP18	EU-SFG2-01 through EU-SFG2-04
			EU-SFG2-07
			EU-SFG2-09 through EU-SFG2-12
			EU-SFG2-14 through EU-SFG2-18
			EU-SFG2-20 through EU-SFG2-25
			EU-SFG2-27 through EU-SFG2-31
Superfinish New Concept	Clark Air Units	Internal	EU-SFNC-01 through EU-SFNC-03
			EU-SFNC-05 through EU-SFNC-15
Superfinish Taper Roller	Clark Air Units	Internal	EU-SFTR-01 through EU-SFTR-4
Superfinish Taper Roller	Exhaust Fan EF-19	EP18	EU-SFTR-05 through EU-SFTR-08
FS-4 Turning	N/A	Internal	EU-HTFS-01 through EU-HTFS-05
LU300 Turning	N/A	Internal	EU-HTLU-01 through EU-HTLU-06
Broaching	N/A	Internal	EU-BR-01 and EU-BR-02
Painting	Clark Air Units	Internal	EU-PNT-01 through EU-PNT-07
	N/A	Internal	EU-PNT-08 through EU-PNT-10
HUB I - Assembly Rust Preventative	N/A	Internal	EU-H1RP-01 through EU-H1RP-03
HUB II - Assembly Rust Preventative	Clark Air Units	Internal	EU-H2RP-01 and EU-H2RP-02
HUB III - Assembly / New Concept Rust Preventative	Clark Air Units	Internal	EU-H3/NCRP-01 through EU-H3/NCRP-09
Taper Roller Rust Preventative	Clark Air Unit	Internal	EU-TRRP-01, EU-TRRP-03
Taper Roller Rust Preventive	Exhaust Fan EF-19	EP18	EU-TRRP-02
Superfinish Wash	N/A	Internal	EU-SFW-01 through EU-SFW-04
			EU-SFW-08 through EU-SFW-11
			EU-SFW-13 through EU-SFW-18
			EU-SFW-20 through EU-SFW-25
			EU-SFW-27 through EU-SFW-31
Parts Wash, Rough Wash, Finish Wash	Clark Air Units	Internal	EU-PW-01 through EU-PW-37
			EU-PW-39 through EU-PW-41
			EU-PW-43 and EU-PW-47 through EU-PW-49
Ball Wash	N/A	Internal	EU-BW-01 through EU-BW-04
Finish Wash, Ball Wash, Rough Wash - Tanks	N/A	Internal	EU-Tank-02 through EU-Tank-04
Parts Wash and Coolant Tanks	N/A	Internal	EU-Tank-06 through EU-Tank-08
Superfinish Wash Tank	N/A	Internal	EU-Tank-10
Coolant Tanks	N/A	Internal	EU-Tank-12 through EU-Tank-15
NSK Precision America, Inc. Plant			
Cutting	N/A	Internal	EU-NPACT-01 through EU-NPACT-08
	On-Board	Internal	EU-NPACT-09 and EU-NPACT-10
	N/A	Internal	EU-NPACT-11
	Dust Collector	Internal	EU-NPACT-12
	Shop-Vac	Internal	EU-NPACT-13
Turning	N/A	Internal	EU-NPAT-01 through EU-NPAT-11
	On-Board	Internal	EU-NPAT-12 and EU-NPAT-13
	N/A	Internal	EU-NPAT-14 through EU-NPAT-18
	N/A	Internal	EU-NPAT-19 through EU-NPAT-24
	N/A	Internal	EU-NPAT-26 and EU-NPAT-27
Grinding	On-Board	Internal	EU-NPAG-01 through EU-NPAG-09
	N/A	Internal	EU-NPAG-10 through EU-NPAG-12

	On-Board	Internal	EU-NPAG-27, 28, 31, and 33
	On-Board	Internal	EU-NPAG-13 through EU-NPAG-21
	OMC	EP19	EU-NPAG-22 through EU-NPAG-26
	OMC	EP19	EU-NPAG-29, 30, and 32
Dip Process	N/A	Internal	EU-NPAD-01 through EU-NPAD-04
Cleaning Process	N/A	Internal	EU-NPACL-01 through EU-NPACL-09
Packing Process	N/A	Internal	EU-NPAPK-01

YEAR:_____

Month	Column 1			Column 2			Column 1 + Column 2		
	This Month			Previous 11 Months			12 Month Total		
	VOC Input (tons)	VOC Recycled (tons)	VOC Emitted (tons)	VOC Input (tons)	VOC Recycled (tons)	VOC Emitted (VOC)	VOC Input (tons)	VOC Recycled (tons)	VOC Emitted (tons)
Month 1									
Month 2									
Month 3									

□ No deviation occurred in this quarter.

□ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Usage Report
(Submit Report Quarterly)

Source Name: NSK Franklin - Franklin Campus
Source Address(es): 3400 Bearing Drive, Franklin, IN 46131; and
3450 Bearing Drive, Franklin, IN 46131
FESOP Permit No.: F081-28776-00023
Facility: Hub I - Assembly Rust Preventative
Parameter: VOC Usage
Limit: The VOC usage for the Hub I - Assembly Rust Preventative process (EU-H1RP-01 through EU-H1RP-03) shall be less than 15.0 pounds per day.

Month: _____ **Year:** _____

Day		Day	
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16			

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
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

FESOP Usage Report
(Submit Report Quarterly)

Source Name: NSK Franklin - Franklin Campus
Source Address(es): 3400 Bearing Drive, Franklin, IN 46131; and
3450 Bearing Drive, Franklin, IN 46131
FESOP Permit No.: F081-28776-00023
Facility: Hub II - Assembly Rust Preventative
Parameter: VOC Usage
Limit: The VOC usage for the Hub II - Assembly Rust Preventative process (EU-H2RP-01 and EU-H2RP-02) shall be less than 15.0 pounds per day.

Month: _____ **Year:** _____

Day		Day	
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16			

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
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

FESOP Usage Report
(Submit Report Quarterly)

Source Name: NSK Franklin - Franklin Campus
Source Address(es): 3400 Bearing Drive, Franklin, IN 46131; and
3450 Bearing Drive, Franklin, IN 46131
FESOP Permit No.: F081-28776-00023
Facility: Hub III - Assembly / New Concept Rust Preventative
Parameter: VOC Usage
Limit: The VOC usage for the Hub III - Assembly / New Concept Rust Preventative process (EU-H3/NCRP-01 through EU-H3/NCRP-09) shall be less than 15.0 pounds per day.

Month: _____ **Year:** _____

Day		Day	
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16			

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
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

FESOP Usage Report
(Submit Report Quarterly)

Source Name: NSK Franklin - Franklin Campus
Source Address(es): 3400 Bearing Drive, Franklin, IN 46131; and
3450 Bearing Drive, Franklin, IN 46131
FESOP Permit No.: F081-28776-00023
Facility: Taper Roller Rust Preventative
Parameter: VOC Usage
Limit: The VOC usage for the Taper Roller Rust Preventative (EU-TRRP-01) process shall be less than 15.0 pounds per day each.

Month: _____ **Year:** _____

Day		Day	
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16			

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
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
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: NSK Corporation - Franklin Campus
Source Address(es): 3400 Bearing Drive, Franklin, IN 46131; and
3450 Bearing Drive, Franklin, IN 46131
FESOP Permit No.: F081-28776-00023

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. 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: _____

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

NSK Corporation - Franklin Campus
3400 Bearing Drive
Franklin, Indiana 46131

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)

4. I hereby certify that NSK Corporation - Franklin Campus 3400 Bearing Drive, Franklin, Indiana 46131, has constructed and will operate a hub bearing and ball screw manufacturing plant on _____ in conformity with the requirements and intent of the permit application received by the Office of Air Quality on December 22, 2009 and as permitted pursuant to New Source Construction Permit and Federally Enforceable State Operating Permit No. F081-28776-00023, Plant ID No. 081-00023 issued on _____.

5. **Permittee, please cross out the following statement if it does not apply:** Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

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

Signature_____
Date_____

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana

on this _____ day of _____, 20 _____. My Commission expires: _____.

Signature_____
Name_____ (typed or printed)

Indiana Department of Environmental Management
Office of Air Quality

Attachment A

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

§ 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 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.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

§ 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(h) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) A stationary RICE which is an existing spark ignition 4 stroke rich burn (4SRB) stationary RICE located at an area source of HAP emissions; an existing spark ignition 4SRB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions; an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE; an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE; an existing compression ignition emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; an existing spark ignition emergency or limited use stationary RICE; an existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; or an existing stationary residential, commercial, or institutional emergency stationary RICE located at an area source of HAP emissions, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that is a new or reconstructed stationary RICE located at an area source, or is a new or reconstructed stationary RICE located at a major source of HAP emissions and is a spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of less than 500 brake HP, a spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of less than 250 brake HP, or a 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP, a stationary RICE with a site rating of less than or equal to 500 brake HP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010]

§ 63.6595 When do I have to comply with this subpart?

(a) *Affected Sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010]

Emission and Operating Limitations

§ 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill

gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

§ 63.6601 What emission limitations must I meet if I own or operate a 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

§ 63.6602 What emission limitations must I meet if I own or operate an existing stationary CI RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

If you own or operate an existing stationary CI RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

[75 FR 9675, Mar. 3, 2010]

§ 63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary CI RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.

[75 FR 9675, Mar. 3, 2010]

§ 63.6604 What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

If you own or operate an existing non-emergency CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Existing non-emergency CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or at area sources in areas of Alaska not accessible by the FAHS are exempt from the requirements of this section.

[75 FR 9675, Mar. 3, 2010]

General Compliance Requirements

§ 63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010]

Testing and Initial Compliance Requirements

§ 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

§ 63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008]

§ 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing CI stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary CI RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010]

§ 63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

§ 63.6620 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 1)}$$

Where:

C_i= concentration of CO or formaldehyde at the control device inlet,

C_o= concentration of CO or formaldehyde at the control device outlet, and

R = percent reduction of CO or formaldehyde emissions.

(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2concentration is measured in lieu of oxygen concentration measurement, a CO_2correction factor is needed. Calculate the CO_2correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific $F_o$value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = \frac{0.209\, F_d}{F_c} \qquad \text{(Eq. 2)}$$

Where:

F_o= Fuel factor based on the ratio of oxygen volume to the ultimate CO_2volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d= Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3 /J ($dscf/10^6$ Btu).

F_c= Ratio of the volume of CO_2produced to the gross calorific value of the fuel from Method 19, dsm^3 /J ($dscf/10^6$ Btu).

(ii) Calculate the CO_2correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{co_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$$

Where:

X_{co2}= CO_2correction factor, percent.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2correction value, percent.

(iii) Calculate the $NO_X$and SO_2gas concentrations adjusted to 15 percent O_2using CO_2as follows:

$$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2} \qquad \text{(Eq. 4)}$$

Where:

$\%CO_2$= Measured CO_2concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.,* operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.,* wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010]

§ 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO_2at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO_2concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in §63.8.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions, an existing stationary emergency RICE, or an existing stationary RICE located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d to this subpart, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (g)(2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska not accessible by the FAHS do not have to meet the requirements of paragraph (g) in this section.

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

(h) If you operate a new or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary engine that is subject to the work, operation or management practices in items 1, 2, or 4 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three

parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil before continuing to use the engine. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010]

§ 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

Continuous Compliance Requirements

§ 63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) [Reserved]

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the engine according to the conditions described in paragraphs (f)(1) through (4) of this section.

(1) For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

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

(3) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. 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 year.

(4) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(4), as long as the power provided by the financial arrangement is limited to emergency power.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010]

Notifications, Reports, and Records

§ 63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary CI RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary CI RICE less than 100 HP, an existing stationary emergency CI RICE, or an existing stationary CI RICE that is not subject to any numerical emission standards.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010]

§ 63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

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

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010]

§ 63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary CI RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency CI RICE.

(3) An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you 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. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

(1) An existing emergency stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

§ 63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

Other Requirements and Information

§ 63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

§ 63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

§ 63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

Black start engine means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.,* as amended by Public Law 101–549, 104 Stat. 2399).

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

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

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 fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (*e.g.* biodiesel) that is suitable for use in compression ignition engines.

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 CO_2.

Dual-fuel engine means any stationary RICE 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.

Emergency stationary RICE means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. 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.* Stationary CI ICE used for peak shaving are not considered emergency stationary ICE. Stationary CI ICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under §63.6640(f). Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may also operate an additional 50 hours per year in non-emergency situations. All other emergency stationary RICE must comply with the requirements specified in §63.6640(f).

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

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.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

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.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes “rich” glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The “lean” glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

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.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

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

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

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.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_X) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_X, CO, and volatile organic compounds (VOC) into CO_2, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.,* remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities

subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8.

Residential/commercial/institutional emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or residences, commercial establishments such as office buildings, hotels, or stores, or institutional establishments such as medical centers, research centers, and institutions of higher education.

Responsible official means responsible official as defined in 40 CFR 70.2.

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 December 19, 2002 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.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine 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 CI 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 reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

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

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

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.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010]

Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for existing, new and reconstructed 4SRB stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[1]
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010]

Table1bto Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

[As stated in §§63.6600, 63.6630 and 63.6640, you must comply with the following operating emission limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions]

For each...	You must meet the following operating limitation...
1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and
4SRB stationary RICE complying with the requirement to limit the concentration of	b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal

formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent $O_2$and using NSCR.	to 750 °F and less than or equal to 1250 °F.
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent $O_2$and not using NSCR.	

[73 FR 3607, Jan. 18, 2008]

Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O_2. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O_2until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[1]
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O_2	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP Located at a Major Source of HAP Emissions, Existing Non-Emergency Compression Ignition Stationary RICE >500 HP, and New and Reconstructed 4SLB Burn Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6601, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed lean burn and existing, new and reconstructed compression ignition stationary RICE:

For each . . .	You must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and
	b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.[1]
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst	Comply with any operating limitations approved by the Administrator.

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

[75 FR 9680, Mar. 3, 2010]

Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary Rice Located at Major Sources of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency CI and black start CI.[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[3]

	annually, whichever comes first, and replace as necessary.[3]	
2. Non-Emergency, non-black start CI < 100 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;[2]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
3. Non-Emergency, non-black start CI RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O_2.	
4. Non-Emergency, non-black start CI 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start CI>500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	

[1]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[2]Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2c of this subpart.

[3]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9681, Mar. 3, 2010]

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission and operating limitations for existing compression ignition stationary RICE:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI ≤ 300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary	
2. Non-Emergency, non-black start CI 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more	
3. Non-Emergency, non-black start CI > 500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more	
4. Emergency CI and black start CI.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary	

[1]Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[75 FR 9681, Mar. 3, 2010]

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each . . .	Complying with the requirement to . . .	You must . . .
1. 2SLB and 4SLB stationary RICE with a brake horsepower >500 located at major sources and new or reconstructed CI stationary RICE with a brake horsepower >500 located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually.[1]
2. 4SRB stationary RICE with a brake horsepower ≥5,000 located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually.[1]
3. Stationary RICE with a brake horsepower >500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually.[1]
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are limited use stationary RICE		Conduct subsequent performance tests every 8,760 hrs or 5 years, whichever comes first.

[1]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[75 FR 9682, Mar. 3, 2010]

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE for existing sources:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE	a. Reduce CO emissions	i. Measure the O_2 at the inlet and outlet of the control device; and	(1) Portable CO and O_2 analyzer.	(a) Using ASTM D6522–00 (2005)[a] (incorporated by reference, *see* §63.14). Measurements to determine O_2 must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control	(1) Portable CO and O_2 analyzer.	(a) Using ASTM D6522–00 (2005)[a,b] (incorporated by reference, *see* §63.14) or

		device		Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O_2, dry basis.
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005)	(a) Measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the inlet and the outlet of the control device.	(1) Method 320 of 40 CFR part 63, appendix A; or ASTM D6348–03[c], provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522–00 (2005)	(a) Measurements to determine O_2 concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 of 40 CFR part 63, appendix A; or ASTM D6348–03[c], provided in ASTM D6348–03 Annex A5 (Analyte Spiking	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

			Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	
		v. Measure CO at the exhaust of the stationary RICE.	(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522–00 (2005)[a], Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03	(a) CO concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour longer runs.

[a]You may also use Methods 3A and 10 as options to ASTM–D6522–00 (2005). You may obtain a copy of ASTM–D6522–00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM–D6522–00 (2005) may be used to test both CI and SI stationary RICE.

[b]You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03.

[c]You may obtain a copy of ASTM–D6348–03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[75 FR 9682, Mar. 3, 2010]

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations and Operating Limitations

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the

		requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
3. 2SLB and 4SLB stationary RICE >500 HP located at a major source and new or reconstructed CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2or CO_2at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
4. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
5. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
6. Stationary RICE >500 HP located at a major source	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and

		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
7. Stationary RICE >500 HP located at a major source	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
8. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source	a. Reduce CO or formaldehyde emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
9. Existing stationary non-emergency RICE ≥100 HP located at a major source, existing non-emergency CI stationary RICE >500 HP, and existing stationary non-emergency RICE ≥100 HP located at an area source	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

[75 FR 9684, Mar. 3, 2010]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations and Operating Limitations

As stated in §63.6640, you must continuously comply with the emissions and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[a]; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and

		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[a]; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. 2SLB and 4SLB stationary RICE >500 HP located at a major source and CI stationary RICE >500 HP located at a major source	a. Reduce CO emissions and using a CEMS	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to §63.6620; and
		ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; and
		iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		ii. reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. 4SRB stationary RICE >500 HP located at a major source	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and

		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. 4SRB stationary RICE with a brake HP ≥5,000 located at a major source	Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved.[a]
7. Stationary RICE >500 HP located at a major source	Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[a]; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. Stationary RICE >500 HP located at a major source	Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[a]; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing stationary CI RICE not subject to any numerical emission limitations	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
		ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
10. Existing stationary RICE >500 HP that are not limited use stationary	a. Reduce CO or formaldehyde emissions; or	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the

RICE, except 4SRB >500 HP located at major sources	b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit.
11. Existing limited use stationary RICE >500 HP that are limited use CI stationary RICE	a. Reduce CO or formaldehyde emissions; or b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit.

[a]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[75 FR 9685, Mar. 3, 2010]

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in §63.6650, you must comply with the following requirements for reports:

You must submit a(n) . . .	The report must contain . . .	You must submit the report . . .
1. Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in §63.6650(b)(1)–(5) for engines that are not limited use stationary CI RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)–(9) for engines that are limited use stationary CI RICE subject to numerical emission limitations.
	b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	i. Semiannually according to the requirements in §63.6650(b).
	c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).	i. Semiannually according to the requirements in §63.6650(b).
2. Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in §63.6650.
	b. The operating limits provided in your Federally	i. *See* item 2.a.i.

	enforceable permit, and any deviations from these limits; and	
	c. Any problems or errors suspected with the meters	i. *See* item 2.a.i.

[75 FR 9687, Mar. 3, 2010]

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in §63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)–(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)–(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)–(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	

§63.6(g)(1)–(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)–(3)	Multiple effluents and multiple monitoring systems	Yes.	

§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	Yes.	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes.	
§63.8(c)(2)–(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)–(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
		Except that §63.8(e) only applies as specified in §63.6645.	
§63.8(f)(1)–(5)	Alternative monitoring method	Yes	Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that §63.8(f)(6) only applies as specified in §63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)–(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
		Except that §63.9(b) only applies as specified in §63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that §63.9(c) only applies as specified in §63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that §63.9(d) only applies as specified in §63.6645.

§63.9(e)	Notification of performance test	Yes	Except that §63.9(e) only applies as specified in §63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that §63.9(g) only applies as specified in §63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that §63.9(g) only applies as specified in §63.6645.	
§63.9(h)(1)–(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
			Except that §63.9(h) only applies as specified in §63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes.	
§63.10(b)(2)(i)–(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)–(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)–(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	

§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

[75 FR 9688, Mar. 3, 2010]

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP)

Source Description and Location

Source Name:	**NSK Corporation - Franklin Campus**
Source Location:	**3400 Bearing Drive, Franklin, IN 46131** **3450 Bearing Drive, Franklin, IN 46131**
County:	**Johnson**
SIC Code:	**3562 (Ball and Roller Bearings)**
Operation Permit No.:	**F 081-28776-00023**
Operation Permit Issuance Date:	**July 29, 2010**
Significant Permit Revision No.:	**081-30120-00023**
Permit Reviewer:	**Jack Harmon**
Source Status:	**Not 1 of 28 Source Categories**

On January 13, 2011, the Office of Air Quality (OAQ) received an application from NSK - Franklin Campus related to a modification to an existing stationary existing hub bearing and ball screw manufacturing plant. Additional information was received on April 11, April 25, May 11, May 23, and July 7, 2011.

Source Definition

This source consists of the following plants:

(a) NSK Corporation Building is located at 3400 Bearing Drive, Franklin, IN 46131; and

(b) NSK Precision America, Inc. Building is located at 3450 Bearing Drive, Franklin, IN 46131.

In order to consider both plants as one single source, all three of the following criteria must be met:

(1) The plants must have common ownership/control;
(2) The plants must have the same SIC code; and
(3) The plants must be located on contiguous or adjacent properties.

These plants are located on the same property, have the same SIC codes of 3562 and are under common control; therefore they will be considered one (1) source, as defined by 326 IAC 2-7-1(22). This determination was initially made under FESOP No. 081-28776-00023, issued on July 29, 2010.

Existing Approvals

The source was issued FESOP No. 081-28776-00023 on July 29, 2010. There have been no other approvals since that FESOP was issued.

County Attainment Status

The source is located in Johnson County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Attainment effective October 19, 2007, for the 8-hour ozone standard.[1]

Pollutant	Designation
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

Basic nonattainment designation effective federally April 5, 2005, for PM2.5.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) 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 NOx emissions are considered when evaluating the rule applicability relating to ozone. Johnson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5
U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Johnson County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a law suit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM2.5 promulgated on May 8, 2008, and effective on July 15, 2008. Therefore, direct PM2.5 and SO2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
Johnson 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.

Status of the Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed permit revision, after consideration of all enforceable limits established in the effective permits:

Process/ Emission Unit	Potential To Emit of the Entire Source (FESOP) (tons/year)								
	PM	PM10, PM2.5	SO_2	NOx	VOC	CO	GHG, as CO_2e**	Total HAPs	Worst Single HAP
NSK Corporation Natural Gas Combustion	0.18	0.72	0.06	9.42	0.52	7.91	11,367.06	0.18	-
NSK Precision America (NPA) Natural Gas Combustion	0.11	0.42	0.03	5.58	0.31	4.69	6,735.31	0.11	-
NSK Corporation Wet Machining									
Aerostokes Mist Eliminators (b)	84.85	35.04	-	-	98.18 (a)	-	-	5.79	4.09 Ethylene Glycol
Clark Air Unit Mist Eliminators	27.54	27.54	-	-		-	-		
NSK Precision America (NPA) Wet Machining	21.93	21.93	-	-		-	-		
Spray Coating	0.43	0.43	-	-		-	-		
HUB I Rust Preventative	-	-	-	-		-	-		
HUB II Rust Preventative	-	-	-	-		-			
HUB III Rust Preventative	-	-	-	-		-			
Taper Roller Rust Preventative	-	-	-	-		-			
Conveyorized Degreasers	-	-	-	-		-			
Dip Coating	-	-	-	-		-	-		
Cold Cleaner Degreasers	-	-	-	-		-	-		
Packing Process	-	-	-	-		-	-		
Roadways (fugitive)	1.43	0.28	-	-	-	-	-	-	-
Total PTE of Entire Source	**135.04**	**86.08**	**0.09**	**14.99**	**99.00**	**12.60**	**18,102.37**	**6.08**	**4.09 Ethylene Glycol**
Title V Major Source Thresholds	NA	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA

negl. = negligible
* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
(a) VOC emissions are included under a combined VOC usage limitation.
(b) PM10 and PM2.5 emissions from the AEROSTOKES Mist Eliminators controlling the G2 and Superfinish G2 processes are limited to less than 8.0 lbs/hr (35.04 tons/yr).
The Potential to Emit and corresponding limits shown above were determined under FESOP No. 081-28776-00023, issued July 29, 2010.
** The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD. This was effective July 1, 2011, and has been calculated for the existing source with this permit revision.

(a) FESOP Status / PSD Minor Source
This existing source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source will be limited to less than the Title V major source threshold levels, and is not one of the twenty-eight source categories. Therefore, this source is an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-8 (FESOP).

(b) This existing source is not a major stationary source under Emission Offset (326 IAC 2-3),

because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more.

(c) This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the unlimited potential to emit HAPs 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).

(d) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year.

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by NSK – Franklin Campus on January 12, 2011, relating to the administrative amendment of its FESOP to add two (2) new Taper Roller Bearing manufacturing lines, consisting of twenty-two (22) new emission units, to its NSK Corporation Hub Bearing Plant; to add new equipment, consisting of eight (8) new emission units, in its assembly, grind, and turning areas of its NSK Precision America (NPA) Plant. With these changes, the source will adjust its existing operations in order to keep its overall source wide emissions in order to maintain its FESOP level.

Further information was received April 11, 2011 from the source to clarify that the A-1 Mist Eliminators listed in the original application for the new emission units actually referred to the Aerostokes Mist Eliminators, and that no new control units would be added with the new grinders.

On April 25, 2011, the source requested to make additional changes to its permit, as follows:

(a) Add four (4) additional grinding machines to its new Taper Roller Grinding operations;
(b) To re-label all its existing emission units;
(c) To change fluid materials for its grinding operations;
(d) To remove all Aerostoke Mist Eliminators from the taper roller grinding operations and to re-route all existing mist eliminator connections from the grinders to other mist eliminators;
(e) To add one exhaust fan, identified as EF-19, with a flow rate of 7500 cfm. Calculation sheet showing the potential emissions associated with this air flow from this unit was submitted with those comments.

Further information was received from the source on May 11, 2011, requesting to use a grain loading factor to calculate the emissions associated with the Exhaust Fan EF-19 to replace the emission factor submitted on April 25, 2011. OAQ reviewed the request and approved the use of that factor, upon receipt of the statement from the manufacturer.

Further information was received from the source on May 23, 2011, submitted documentation from the manufacturer of the Exhaust Fan, EF-19, showing the grain loading factor. IDEM OAQ has approved the use of this factor in the determination of the potential to emit particulate matter associated with this unit.

The following is a summarized list of the new emission units and pollution control devices, as described above:

<u>NSK Corporation Hub Bearing Plant</u>

Two (2) Taper Roller Bearing manufacturing lines, consisting of the following:

(a) In its taper roller grinding operation, eight (8) wet grinding machines, identified as EU-TRG-09 through EU-TRG-16, approved for construction in 2011, as follows:

(1) Two (2) taper roller grinders, identified as EU-TRG-09 and EU-TRG-13, utilizing Exhaust Fan EF-19 for control, exhausting through Vent EP-18;

(2) Six (6) taper roller grinders, identified as EU-TRG-10, EU-TRG-11, EU-TRG-12, and EU-TRG-14 through EU-TRG-16, utilizing Clark Air #8 Mist Eliminators for control, exhausting within the building;

(b) In its taper roller superfinish operation, five (5) wet machining units, identified as EU-SFTR-04 through EU-SFTR-08, approved for construction in 2011, as follows:

(1) One (1) taper roller superfinish grinder, identified asEU-SFTR-04, utilizing Clark Air #9 Mist eliminators for particulate control, and exhausting within the building;

(2) Two (3) taper roller superfinish grinders, identified asEU-SFTR-06 and EU-SFTR-08, utilizing Clark Air #8 Mist eliminators for particulate control, and exhausting within the building;

(3) Two (2) taper roller superfinish grinders, identified as EU-SFTR-05 and EU-SFTR-07, utilizing Exhaust Fan EF-19 for control, exhausting through Vent EP-18.

(c) In its taper roller rust preventive application operation, two (2) coating lines, approved for construction in 2011, identified as EU-TRRP-02 utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and EU-TRRP-03, utilizing Clark Air Unit #9 mist eliminator for control, and exhausting within the building;

(d) In its taper roller superfinish wash conveyorized degreasing operation, eight (8) conveyorized degreasing units, approved for construction in 2011, identified as EU-SFW-32 through EU-SFW-39, utilizing no control device, and exhausting within the building;

(e) In its taper roller parts wash conveyorized degreasing process, three (3) conveyorized degreasing units, approved for construction in 2011, identified as EU-PW-47 and EU-PW-48, utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and unit EU-PW-49, utilizing Clark Air Unit #9 mist eliminators for control, and exhausting within the building.

NSK Precision America (NPA) Plant

(a) In its turning process, identified as Turning, one (1) shaft turning wet machine unit, approved for construction in 2011, identified as EU-NPAT-28, utilizing no control device, and exhausting within the building;

(b) In its dip process, one (1) dip tank, approved for construction in 2011, identified as EU-NPAD-05, utilizing no control device, and exhausting within the building;

(c) In its cold cleaner degreasing operations, six (6) dip tanks, approved for construction in 2011, identified as EU-NPACL-04 through EYU-NPACL-09, utilizing no control devices, and exhausting within the building.

Enforcement Issues

There are no pending enforcement actions related to this administrative amendment.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP Revision

The following table is used to determine the appropriate permit level under 326 IAC 2-8.11.1. This table reflects the PTE before controls of the proposed revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Uncontrolled PTE of Proposed Permit Revision (tons/year)								
	PM	PM10, PM2.5*	SO_2	NOx	VOC	CO	GHG as CO_2e**	Total HAPs	Worst Single HAP
NSK Corporation Hub Bearing Plant									
Wet Grinders EU-TRG-09 through EU-TRG-16 (controlled by Clark Air Mist Eliminators or Exhaust Fan)	21.29 (a)	21.29 (a)	0.00	0.00	0.11	0.00	0.00	0.00	0.00
Superfinish wet machines EU-SFTR-04 through EU-SFTR-08 (controlled by Clark Air Mist Eliminators or Exhaust Fan)			0.00	0.00	1.34	0.00	0.00	0.00	0.00
Rust Preventive Lines EU-TRRP-02 and EU-TRRP-03 (controlled by Clark Air Unit mist eliminators or Exhaust Fan)			0.00	0.00	0.82	0.00	0.00	0.00	0.00
Superfinish wash degreasing EU-SFW-32 through EU-SFW-39 (no control)			0.00	0.00	2.42	0.00	0.00	0.00	0.00
Parts wash process, EU-PW-47 through EU-PW-49 (controlled by Clark Air Unit mist eliminators or Exhaust Fan)			0.00	0.00	5.17	0.00	0.00	0.19	0.19
NSK Precision America (NPA) Plant									
Shaft turning EU-NPAT-28	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Dip coating tank, EU-NPAD-05	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
Dip tanks cold cleaner EU-NPACL-04 through EYU-NPACL-09	0.00	0.00	0.00	0.00	1.91	0.00	0.00	0.00	0.00
Total PTE of Proposed Revision	21.29	21.29	0.00	0.00	12.94 (b)	0.00	0.00	0.19	0.19

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

(a) The new wet machining units are controlled by Mist Eliminators that are currently in use, or by a new Exhaust Fan EF-19. Aerostokes Eliminators on the Taper roller bearing lines have been replaced by either Clark Air units or Exhaust Fan-19. Detailed emission calculations are shown in Appendix A of this document.

(b) Since the source has a source-wide VOC limit of 98.18 tons per year, the VOC emissions from this revision will be embedded within that limit, and the source will continue to maintain the overall limit of 98.18 tpy.

** The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

This FESOP is being revised through a FESOP Significant Permit Revision pursuant to 26 IAC 2-8-11.1(g)(2) because it involves adjustment to the existing source-wide emissions limitations to maintain the FESOP status of the source (see PTE of the Entire Source After The Issuance of the FESOP Revision Section).

PTE of the Entire Source After Issuance of the FESOP Revision

The table below summarizes the potential to emit of the entire source reflecting adjustment of existing limits, with updated emissions shown as **bold** values and previous emissions shown as ~~strikethrough~~ values.

	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)								
Process/ Emission Unit	PM	PM10, PM2.5	SO_2	NOx	VOC	CO	GHG as CO_2e**	Total HAPs	Worst Single HAP
NSK Corporation Natural Gas Combustion	0.18	0.72	0.06	9.42	0.52	7.91	11,367.06	0.18	-
NSK Precision America Natural Gas Combustion	0.11	0.42	0.03	5.58	0.31	4.69	6,735.31	0.11	-
NSK Corporation Wet Machining									
Aerostokes Mist Collectors	**22.56** ~~35.04~~	**22.56** ~~35.04~~				-	-	**5.98** ~~5.79~~	4.09 (Ethylene Glycol)
Exhaust Fan EF-19 [(b)]	**22.56**	**22.56**	-			-	-		
Clark Air Unit Mist Eliminators [(b)]	**22.56** ~~27.54~~	**22.56** ~~27.54~~	-			-	-		
NSK Precision America Wet Machining	21.93	21.93	-			-	-		
Spray Coating	0.43	0.43	-			-	-		
HUB I Rust Preventative	-	-	-			-	-		
HUB II Rust Preventative	-	-	-			-	-		
HUB III Rust Preventative	-	-	-			-	-		
Taper Roller Rust Preventative	-	-	-			-	-		
Conveyorized Degreasers	-	-	-			-	-		
Dip Coating	-	-	-			-	-		
Cold Cleaner Degreasers	-	-	-			-	-		
Packing Process	-	-	-			-	-		
NSK Hub Plant – Wet Grinders EU-TRG-09 through EU-TRG-12 (controlled by Clark Air Mist Eliminators or Exhaust Fan EF-19)	**(b)**	**(b)**	-		98.18 [(a)]	-	-		
NSK Hub Plant Superfinish wet machines EU-SFTR-04 through EU-SFTR-08 (controlled by Clark Air Mist Eliminators or Exhaust Fan EF-19)	**(b)**	**(b)**	-			-	-		
NSK Hub Plant – Rust Preventive Lines EU-TRRP-02 and EU-TRRP-03 (controlled by Clark Air Unit mist eliminators or Exhaust Fan EF-19)	**(b)**	**(b)**	-			-	-		
NSK Hub Plant - Superfinish wash degreasing EU-SFW-32 through EU-SFW-39 (no control)	-	-	-			-	-		

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)								
	PM	PM10, PM2.5	SO_2	NOx	VOC	CO	GHG as CO_2e**	Total HAPs	Worst Single HAP
NSK Hub Plant – Parts wash process, EU-PW-47 through EU-PW-49 (controlled by Clark Air Units or Exhaust Fan EF-19)	(b)	(b)	-	-		-	-		
NPA - Shaft turning EU-NPAT-28	-	-	-	-		-	-		
NPA -Dip coating tank, EU-NPAD-05	-	-	-	-		-	-		
NPA- Dip tanks cold cleaner EU-NPACL-04 through EYU-NPACL-09	-	-	-	-		-	-		
Roadways (fugitive)	1.43	0.28	-	-	-	-	-	-	-
Total PTE of Entire Source	**156.32** ~~135.04~~	**91.17** ~~86.08~~	0.09	14.99	99.00	12.60	18,102.37	**6.26** ~~6.08~~	4.09 Ethylene Glycol
Title V Major Source Thresholds	NA	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	100,000	NA	NA
Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA

negl. = negligible
* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
(a) VOC emissions are included under a combined VOC usage limitation.
(b) Overall PM10 and PM2.5 emissions limits are specified for the Clark Air Mist Eliminators or Exhaust Fan EF-19, which control several processes.
** The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

The table below summarizes the potential to emit of the entire source after issuance of this permit revision, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted.)

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)								
	PM	PM10, PM2.5	SO_2	NOx	VOC	CO	GHG as CO_2e**	Total HAPs	Worst Single HAP
NSK Corporation Natural Gas Combustion	0.18	0.72	0.06	9.42	0.52	7.91	11,367.06	0.18	-
NSK Precision America Natural Gas Combustion	0.11	0.42	0.03	5.58	0.31	4.69	6,735.31	0.11	-
NSK Corporation Wet Machining									
Aerostokes Mist Collectors	22.56	22.56	-	-		-	-		
Exhaust Fan EF-19 (b)	22.56	22.56	-	-	98.18 (a)	-	-	5.98	4.09 Ethylene

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)								
	PM	PM10, PM2.5	SO_2	NOx	VOC	CO	GHG as CO_2e**	Total HAPs	Worst Single HAP
Clark Air Unit Mist Eliminators [(b)]	22.56	22.56	-	-		-	-		Glycol
NSK Precision America Wet Machining	21.93	21.93	-	-		-	-		
Spray Coating	0.43	0.43	-	-		-	-		
HUB I Rust Preventative	-	-	-	-		-	-		
HUB II Rust Preventative	-	-	-	-		-			
HUB III Rust Preventative	-	-	-	-		-			
Taper Roller Rust Preventative	-	-	-	-		-			
Conveyorized Degreasers	-	-	-	-		-			
Dip Coating	-	-	-	-		-	-		
Cold Cleaner Degreasers	-	-	-	-		-	-		
Packing Process	-	-	-	-		-	-		
NSK Hub Plant – Wet Grinders EU-TRG-09 through EU-TRG-12 (controlled by Clark Air Mist Eliminators or Exhaust Fan EF-19)	(b)	(b)	-	-		-	-		
NSK Hub Plant Superfinish wet machines EU-SFTR-04 through EU-SFTR-08 (controlled by Clark Air Mist Eliminators or Exhaust Fan EF-19)	(b)	(b)	-	-		-			
NSK Hub Plant – Rust Preventive Lines EU-TRRP-02 and EU-TRRP-03 (controlled by Clark Air Unit mist eliminators or Exhaust Fan EF-19)	(b)	(b)	-	-		-	-		
NSK Hub Plant - Superfinish wash degreasing EU-SFW-32 through EU-SFW-39 (no control)	-	-	-	-		-	-		
NSK Hub Plant – Parts wash process, EU-PW-47 through EU-PW-49 (controlled by Clark Air Units or Exhaust Fan EF-19)	(b)	(b)	-	-		-	-		
NPA - Shaft turning EU-NPAT-28	-	-	-	-		-	-		
NPA -Dip coating tank, EU-NPAD-05	-	-	-	-		-	-		
NPA- Dip tanks cold cleaner EU-NPACL-04 through EYU-NPACL-09	-	-	-	-		-	-		
Roadways (fugitive)	1.43	0.28	0.04	-	-	-	-	-	-

	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)								
Process/ Emission Unit	PM	PM10, PM2.5	SO_2	NOx	VOC	CO	GHG as CO_2e**	Total HAPs	Worst Single HAP
Total PTE of Entire Source	156.32	91.17	0.09	14.99	99.00	12.60	18,102.37	6.26	4.09 Ethylene Glycol
Title V Major Source Thresholds	NA	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	100,000	NA	NA
Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA

negl. = negligible
* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
(a) VOC emissions are included under a combined VOC usage limitation.
(b) Overall PM10 and PM2.5 emissions limits are specified for the Clark Air Mist Eliminators or Exhaust Fan EF-19, which control several processes.
** The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

(a) FESOP Status
This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP).

(b) PSD Minor Source
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this proposed administrative amendment.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning, 40 CFR 63.460, Subpart T, are not included in this permit, since the source does not use any solvent containing methylene chloride (CAS No. 75–09–2), perchloroethylene (CAS No. 127–18–4), trichloroethylene (CAS No. 79–01–6), 1,1,1-trichloroethane (CAS No. 71–55–6), carbon tetrachloride (CAS No. 56–23–5) or chloroform (CAS No. 67–66–3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. Therefore, the requirements of 40 CFR 63, Subpart T do not apply to this revision.

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63.3880, Subpart MMMM (326 IAC 20-80), are not included in the permit, since this source is not a major source, located at a major source, or part of a major source of emissions of HAP. Therefore, the

requirements of 40 CFR 63, Subpart MMMM do not apply to this revision.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63.11169, Subpart HHHHHH, are not included in the permit, since this source does not perform Paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), Autobody refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations, or spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment. Therefore, the requirements of 40 CFR 63, Subpart HHHHHH do not apply to this revision.

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63.11514, Subpart XXXXXX, are not included in the permit, since the source is not primarily engaged in operations which are classified in one of the nine source categories listed in this NESHAP. Therefore, the requirements of 40 CFR 63, Subpart XXXXXX do not apply to this revision.

(f) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit administrative amendment.

Compliance Assurance Monitoring (CAM)

(g) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the proposed permit revision:

(a) 326 IAC 2-8-4 (FESOP)
This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP). See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

(c) 326 IAC 2-3 (Emission Offset)
This modification to an existing Emission Offset minor stationary source will not change the Emission Offset minor status, because the potential to emit of all nonattainment regulated pollutants from the entire source will continue to be less than the Emission Offset major source threshold levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

(d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited

potential to emit of HAPs from the grinding, turning, washing, dip coating, and rust preventive coating operations is 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.

(e) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

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

(1) 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.

(2) 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.

(g) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall continue to 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.

(h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source is not subject to the requirements of 326 IAC 6-5, because, even with the proposed revision, the fugitive potential particulate emissions are less than 25 tons per year.

(i) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the listed emission units shall not exceed the listed pounds per hour when operating at a process weight rate listed in the table below in tons per hour.

Process	Emission Units	Process Weight Rate (tons/hr)	Particulate Emissions (lbs/hr)	Total Perticulate Emissions (lb/hr)
Taper Roller Grinding	EU-TRG-09 through EU-TRG-16 (8 units)	0.03 (each)	0.551 (each)	2.20
Superfinish Taper Roller	EU-SFTR-04 through EU-SFTR-08 (5 units)	0.07 (each)	0.66 (each)	3.30
Turning	EU-NPAT-28	0.06 (each)	0.59 (each)	0.59

The pound per hour limitation was 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

The Clark Air Mist Eliminators or Exhaust Fan EF-19 shall be in operation at all times the Taper Roller Grinders and Taper Roller Superfinish Grinders are in operation, in order to comply with

this limit.

Based on calculations, the Clark Air Mist Eliminators and Exhaust Fan EF-19 are needed in order for the source to comply with its overall source wide limit.

(j) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
The requirements for 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies) are not being included for the Taper Roller Rust Preventative operations or the Taper Roller Superfinish Wash, since these processes do not have the potential to emit particulate matter emissions.

(k) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The four new Taper Roller Grinding units, the five new Taper Roller Superfinish units, the eight new Taper Roller Superfinish wash units, the three new parts wash dip tanks, and two new rust preventive tanks for the Hub Plant, and the six new cleaning tanks in the NPA Plant are each not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each of the identified processes are less than twenty-five (25) tons per year. Therefore, the proposed revision is not subject to the requirements of 326 IAC 8-1-6. However, the source shall continue to comply with the VOC limits established in its current FESOP.

(l) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
Taper Roller Rust Preventive units EU-TRRP-02 and EU-TRRP-03 are not subject to the requirements of 326 IAC 8-2-9 because VOC emissions before controls are less than 15 pounds VOC per day. Therefore, the requirements of 326 IAC 8-2-9 do not apply.

(m) 326 IAC 8-2 (Surface Coating Emissions Limits)
The Dip Process consisting of EU-NPAD-05 coats miscellaneous metal parts; however, VOC emissions before controls from coating metal are less than fifteen (15) pounds per day. Therefore, the requirements of 326 IAC 8-2-9 (Misceallaneous Metal Coating) are not applicable.

(n) 326 IAC 8-3-2 (Cold Cleaner Operation)
Pursuant to 326 IAC 8-3-2, for cold cleaning operations of EU-NPACL-04 through EU-NPACL-09 constructed after January 1, 1980, the source shall:

(1) equip the cleaner with a cover;

(2) equip the cleaner with a facility for draining cleaned parts;

(3) close the degreaser cover whenever parts are not being handled in the cleaner;

(4) drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(5) provide a permanent, conspicuous label summarizing the operating requirements;

(6) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

(o) 326 IAC 8-3-4 (Conveyorized Degreaser Operation)
For the Superfinish Wash (EU-SFW-32 through EU-SFW-39) and the Parts Wash (EU-PW-47 through EU-PW-49 units, the owner or operator of these conveyorized degreasers shall:

(1) minimize carryout emissions by:

(A) racking parts for best drainage;

(B) maintaining the vertical conveyor speed at less than 3.3 meters per minute (eleven (11) feet per minute);

(2) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;

(3) repair solvent leaks immediately, or shut down the degreaser;

(4) not use workplace fans near the degreaser opening;

(5) not allow water in solvent exiting the water separator; and

(6) provide a permanent, conspicuous label summarizing the operating requirements.

(p) 326 IAC 8-3-7 (Conveyorized Degreaser Operation and Control)
The Superfinish Wash, and Parts Wash, conveyorized degreasers, do not have an air to solvent interface of 2 square meters (21.6 square feet), therefore the requirements of 326 IAC 8-3-7 are not applicable.

(q) 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)
Pursuant to 326 IAC 8-3-5(a), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38ºC) (one hundred degrees Fahrenheit (100ºF));
(B) the solvent is agitated; or
(C) the solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38ºC) (one hundred degrees Fahrenheit (100ºF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38ºC) (one hundred degrees Fahrenheit (100ºF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9ºC) (one hundred twenty degrees Fahrenheit (120ºF)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
(B) A water cover when solvent used is insoluble in, and heavier than, water.
(C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(r) Pursuant to 326 IAC 8-3-5(b), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.
(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty per cent (20%) of the waste solvent by weight could evaporate.

(s) There are no other 326 IAC 8 Rules that are applicable to the revision.

Compliance Determination, Monitoring and Testing Requirements

(a) The compliance determination and monitoring requirements applicable to this proposed administrative amendment are as follows:

(1) Compliance with the VOC content and input limitations for the below listed emission units shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets.

Processes	Controls	Exhaust IDs	Emission Unit IDs
NSK Corporation Hub Plant			
Taper Roller Grinding	Clark Air or Exhaust Fan EF-19	EP-18 or inside building	EU-TRG-09 through EU-TRG-16
Superfinish Taper Roller	Clarck Air or Exhaust Fan EF-19	EP-18 or inside building	EU-SFTR-04 through EU-SFTR-08
Superfinish Wash	N/A	Internal	EU-SFW-32 through EU-SFW-39
Parts Wash, Rough Wash, Finish Wash	Clark Air or Exhaust Fan EF-19	EP-18 or inside building	EU-PW-47 through EU-PW-49
Rust Preventive Process	Clark Air or Exhaust Fan EF-19	EP-18 or inside building	EU-TRRP-02, EU-TRRP-03
NSK Precision America, Inc. Plant			
Turning	N/A	Internal	EU-NPAT-28
Cleaning Process	N/A	Internal	EU-NPACL-04 through EU-NPACL-09

(2) If the amount of VOC in the waste shipped offsite for recycling or disposal is deducted from the monthly VOC input reported, the Permittee shall determine the VOC content of the waste shipped offsite using one or a combination of the following methods:

(i) On-site sampling

(A) VOC content shall be determined pursuant to 326 IAC 8-1-4(a)(3) by EPA Reference Method 24 and the sampling procedures in 326 IAC 8-1-4 or other methods as approved by the Commissioner.

(B) A representative sample of the VOC containing waste to be shipped offsite shall be analyzed within 90 days of the issuance of the permit revision No. 081-30120-00023.

(C) If multiple waste streams are collected and bulked separately, a sample shall be collected and analyzed from each waste stream.

(D) A new representative sample shall be collected and analyzed whenever a change or changes occur(s) that could result in a cumulative 10% or more decrease in the VOC content of the VOC containing waste. Such change could include, but is not limited to, the following:

(i) A change in VOC material usage selection or formulation, as supplied or as applied, or

(ii) An operational change in the VOC material usage application or cleanup operations.

The new VOC content shall be used in calculating the amount of VOC in waste shipped offsite, starting with the date that the change occurred. The sample shall be collected and analyzed within 30 days of the change.

(ii) Certified Waste Report: The VOC reported by analysis of an offsite waste processor may be used, provided the report certifies the amount of VOC in the waste.

(iii) Minimum Assumed VOC content: The VOC content of the waste shipped offsite may be assumed to be equal to the VOC content of the material with the lowest VOC content that could be present in the waste, as determined using the as supplied" and "as applied" VOC data sheets, for each month.

(3) IDEM reserved the right to request a representative sample of the VOC-containing waste stream and conduct an analysis for VOC content.

(4) Compliance with the VOC input limitation associated with the emission units in the table above shall be determined within 30 days of the end of each month. This shall be based on the total volatile organic compound input for the previous month, minus the amount of VOC in the waste shipped offsite for recycling or disposal, and adding it to the previous 11 months total VOC input, minus the amount of VOC in the waste shipped offsite for recycling or disposal, so as to arrive at VOC input for the most recent twelve (12) consecutive month period.

(5) The VOC input for a month shall be calculated using the following equation:

VOC input = SCL - SR

Where:

SCL = The total amount of VOC containing materials, in tons, including coatings, from the source; and

SR = The total amount of VOC containing materials, in tons, shipped out for either recycling or disposal, including coatings, from the source.

(6) Visible Emissions observations as listed in the table below:

Stack IDs	Parameter	Frequency	Range	Excursions and Exceedances
EP-18	Visible Emissions	Daily	Normal - Abnormal	Response Steps

(b) There are no testing requirements applicable to this source.

Proposed Changes

NSK Corporation – Franklin Campus has requested to make revisions to its FESOP No. 081-28776-00023, as follows:

NSK Corporation Hub Bearing Plant

Two (2) Taper Roller Bearing manufacturing lines, consisting of the following:

(a) In its taper roller grinding operation, eight (8) wet grinding machines, identified as EU-TRG-09 through EU-TRG-16, approved for construction in 2011, as follows:

(1) Two (2) taper roller grinders, identified as EU-TRG-09 and EU-TRG-13, utilizing Exhaust Fan EF-19 for control, exhausting through Vent EP-18;

(2) Six (6) taper roller grinders, identified as EU-TRG-10, EU-TRG-11, EU-TRG-12, and EU-TRG-14 through EU-TRG-16, utilizing Clark Air #8 Mist Eliminators for control, exhausting within the building;

(b) In its taper roller superfinish operation, five (5) wet machining units, identified as EU-SFTR-04 through EU-SFTR-08, approved for construction in 2011, as follows:

(1) One (1) taper roller superfinish grinder, identified asEU-SFTR-04, utilizing Clark Air #9 Mist eliminators for particulate control, and exhausting within the building;

(2) Two (2) taper roller superfinish grinders, identified asEU-SFTR-06 and EU-SFTR-08, utilizing Clark Air #8 Mist eliminators for particulate control, and exhausting within the building;

(3) Two (2) taper roller superfinish grinders, identified as EU-SFTR-05 and EU-SFTR-07, utilizing Exhaust Fan EF-19 for control, exhausting through Vent EP-18.

(c) In its taper roller rust preventive application operation, two (2) coating lines, approved for construction in 2011, identified as EU-TRRP-02 utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and EU-TRRP-03, utilizing Clark Air Unit #9 mist eliminator for control, and exhausting within the building;

(d) In its taper roller superfinish wash conveyorized degreasing operation, eight (8) conveyorized degreasing units, approved for construction in 2011, identified as EU-SFW-32 through EU-SFW-39, utilizing no control device, and exhausting within the building;

(e) In its taper roller parts wash conveyorized degreasing process, three (3) conveyorized degreasing units, approved for construction in 2011, identified as EU-PW-47 and EU-PW-48, utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and unit EU-PW-49, utilizing Clark Air Unit #9 mist eliminators for control, and exhausting within the building.

NSK Precision America (NPA) Plant

(a) In its turning process, identified as Turning, one (1) shaft turning wet machine unit, approved for construction in 2011, identified as EU-NPAT-28, utilizing no control device, and exhausting within the building;

(b) In its dip process, one (1) dip tank, approved for construction in 2011, identified as EU-NPAD-05, utilizing no control device, and exhausting within the building;

(c) In its cold cleaner degreasing operations, six (6) dip tanks, approved for construction in 2011, identified as EU-NPACL-04 through EYU-NPACL-09, utilizing no control devices, and exhausting within the building.

These new emission units are similar to existing units, and the same applicability of rules will apply to the new units. Sections A.2, D.1, and D.2 of the permit have been changed to describe the new units. With the addition of new units and an overall source-wide limit to keep the source a FESOP, existing individual limits were adjusted to maintain the overall limits with the addition of the new units. Section D.1, Conditions D.1,2, D.1.3, D.1.4, D.1.6, and D.1.7, Section D.2 and Condition D.2.3, and Quarterly Reports have been changed to include the rule applicability, and emissions limitations changes due to the proposed revision.

The following changes listed below are due to the proposed revision. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

NSK Corporation **Hub** Plant

(a) ---

(d) One (1) grinding operation, identified as Taper Roller Grinding, ~~constructed in 2009,~~ consisting of **the following:**

(1) eight (8) wet grinding machines, **constructed in 2009,** identified as EU-TRG-01 through EU-TRG-08, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building**;**

(2) Two (2) taper roller grinders, identified as EU-TRG-09 and EU-TRG-13, approved for construction in 2011, utilizing Exhaust Fan EF-19 for control, exhausting through Vent EP-18;

(3) Six (6) taper roller grinders, identified as EU-TRG-10, EU-TRG-11, EU-TRG-12, and EU-TRG-14 through EU-TRG-16, approved for construction in 2011, utilizing Clark Air #8 Mist Eliminators for control, exhausting within the building.

(e) ---

(g) One (1) superfinish operation, identified as Superfinish Taper Roller, ~~constructed in 2009,~~ consisting of the **following:**

(1) three (3) wet machining units, **constructed in 2009,** identified as EU-SFTR-01 through EU-SFTR-03, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building**;**

(2) In its taper roller superfinish operation, five (5) wet machining units, identified as EU-SFTR-04 through EU-SFTR-08, approved for construction in 2011, as follows:

(A) One (1) taper roller superfinish grinder, identified asEU-SFTR-04, utilizing Clark Air #9 Mist eliminators for particulate control, and exhausting within the building;

(B) Two (2) taper roller superfinish grinders, identified asEU-SFTR-06 and EU-SFTR-08, utilizing Clark Air #8 Mist eliminators for particulate control, and exhausting within the building;

(C) Two (2) taper roller superfinish grinders, identified as EU-SFTR-05 and EU-SFTR-07, utilizing Exhaust Fan EF-19 for control, exhausting through Vent EP-18.

(h) ---

(o) One (1) rust preventative application operation, identified as Taper Roller Rust Preventative, ~~constructed in 1990,~~ consisting of **the following:**

(1) one (1) coating line, **constructed in 1990,** identified as EU-TRRP-01, utilizing a Clark Air Unit #8 mist eliminator as particulate control, and exhausting within the building**;**

(2) two (2) coating lines, approved for construction in 2011, identified as EU-TRRP-02 utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and EU-TRRP-03, utilizing Clark Air Unit #9 mist eliminator for control, and exhausting within the building.

(p) Conveyorized Degreasers including:

(1) One (1) superfinish wash operation conveyorized degreasing operation, **consisting of the following:**

(A) conveyorized degreasing operation, identified as Superfinish Wash, constructed in 1990 through 2010, consisting of twenty-five (25) conveyorized degreasing units, identified as EU-SFW-01 through EU-SFW-04, EU-SFW-08 through EU-SFW-11, EU-SFW-13 through EU-SFW-18, EU-SFW-20 through EU-SFW-25, and EU-SFW-27 through EU-SFW-31, utilizing no control device, and exhausting within the building**;**

(B) conveyorized degreasing operation, consisting of eight (8) conveyorized degreasing units, approved for construction in 2011, identified as EU-SFW-32 through EU-SFW-39, utilizing no control device, and exhausting within the building.

(2) One (1) parts wash conveyorized degreasing process, including three operations identified as Parts Wash, Rough Wash, and Finish Wash, **consisting of the following:**

(A) conveyorized degreasing process, constructed in 1990 through 2008, collectively consisting of forty-four (44) conveyorized degreasing units, identified as EU-PW-01 through EU-PW-37, EU-PW-39 through EU-PW-

41, EU-PW-43, and EU-PW-44, utilizing Clark Air Units #8 mist eliminators as control, and exhausting within the building**;**

(B) three (3) conveyorized degreasing units, approved for construction in 2011, identified as EU-PW-47 and EU-PW-48, utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and unit EU-PW-49, utilizing Clark Air Unit #9 mist eliminators for control, and exhausting within the building.

(3) ---

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(b) One (1) turning process, identified as Turning, constructed in 1994 through ~~2009~~ **2011**, consisting of:

(1) Eleven (11) shaft turning wet machining units, identified as EU-NPAT-01 through EU-NPAT-11, utilizing no control devices, and exhausting within the building.

(2) Two (2) blank turning wet machining units, identified as EU-NPAT-12 and EU-NPAT-13, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(3) Five (5) ball circuit wet machining units, identified as EU-NPAT-14 through EU-NPAT-18, utilizing no control devices, and exhausting within the building.

(4) Eight (8) flange milling wet machining units, identified as EU-NPAT-19 through EU-NPAT-24, and EU-NPAT-26 and EU-NPAT-27, utilizing no control devices, and exhausting within the building.

(5) One (1) shaft turning wet machine unit, approved for construction in 2011, identified as EU-NPAT-28, utilizing no control device, and exhausting within the building.

(d) One (1) dip process, identified as Dip Process, **consisting of the following:**

(1) Dip Process, constructed in 2008, consisting of four (4) dip tanks, identified as EU-NPAD-01 through EU-NPAD-04, utilizing no control device, and exhausting within the building**;**

(2) Dip process, one (1) dip tank, approved for construction in 2011, identified as EU-NPAD-05, utilizing no control device, and exhausting within the building.

(g) One (1) cold cleaner degreasing process, identified as Cleaning Process, **consisting of the following:**

(1) Cold cleaner degreasing process, constructed in 1993, 2003, and 2006,

consisting of three (3) dip tanks, identified as EU-NPACL-01 through EU-NPACL-03; exhausting within the building**;**

(2) Cold cleaner degreasing process, consisting of six (6) dip tanks, approved for construction in 2011, identified as EU-NPACL-04 through EU-NPACL-09, utilizing no control devices, and exhausting within the building.

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NSK Corporation **Hub** Plant

(a) ---

(d) One (1) grinding operation, identified as Taper Roller Grinding, ~~constructed in 2009,~~ consisting of **the following:**

(1) eight (8) wet grinding machines, **constructed in 2009,** identified as EU-TRG-01 through EU-TRG-08, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building**;**

(2) Two (2) taper roller grinders, identified as EU-TRG-09 and EU-TRG-13, approved for construction in 2011, utilizing Exhaust Fan EF-19 for control, exhausting through Vent EP-18;

(3) Six (6) taper roller grinders, identified as EU-TRG-10, EU-TRG-11, EU-TRG-12, and EU-TRG-14 through EU-TRG-16, approved for construction in 2011, utilizing Clark Air #8 Mist Eliminators for control, exhausting within the building.

(e) ---

(g) One (1) superfinish operation, identified as Superfinish Taper Roller, ~~constructed in 2009,~~ consisting of the **following:**

(1) three (3) wet machining units, **constructed in 2009,** identified as EU-SFTR-01 through EU-SFTR-03, utilizing Clark Air Unit mist eliminators for particulate control, and exhausting within the building**;**

(2) In its taper roller superfinish operation, five (5) wet machining units, identified as EU-SFTR-04 through EU-SFTR-08, approved for construction in 2011, as follows:

(A) One (1) taper roller superfinish grinder, identified asEU-SFTR-04, utilizing Clark Air #9 Mist eliminators for particulate control, and exhausting within the building;

(B) Two (2) taper roller superfinish grinders, identified asEU-SFTR-06 and EU-SFTR-08, utilizing Clark Air #8 Mist eliminators for particulate control, and exhausting within the building;

(C) Two (2) taper roller superfinish grinders, identified as EU-SFTR-05 and EU-SFTR-07, utilizing Exhaust Fan EF-19 for control, exhausting through Vent EP-18.

(h) ---

(o) One (1) rust preventative application operation, identified as Taper Roller Rust Preventative, ~~constructed in 1990,~~ consisting of **the following:**

(1) one (1) coating line, **constructed in 1990,** identified as EU-TRRP-01, utilizing a Clark Air Unit #8 mist eliminator as particulate control, and exhausting within the building**;**

(2) two (2) coating lines, approved for construction in 2011, identified as EU-TRRP-02 utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and EU-TRRP-03, utilizing Clark Air Unit #9 mist eliminator for control, and exhausting within the building.

(p) Conveyorized Degreasers including:

(1) One (1) superfinish wash operation conveyorized degreasing operation, **consisting of the following:**

(A) conveyorized degreasing operation, identified as Superfinish Wash, constructed in 1990 through 2010, consisting of twenty-five (25) conveyorized degreasing units, identified as EU-SFW-01 through EU-SFW-04, EU-SFW-08 through EU-SFW-11, EU-SFW-13 through EU-SFW-18, EU-SFW-20 through EU-SFW-25, and EU-SFW-27 through EU-SFW-31, utilizing no control device, and exhausting within the building**;**

(B) conveyorized degreasing operation, consisting of eight (8) conveyorized degreasing units, approved for construction in 2011, identified as EU-SFW-32 through EU-SFW-39, utilizing no control device, and exhausting within the building.

(2) One (1) parts wash conveyorized degreasing process, including three operations identified as Parts Wash, Rough Wash, and Finish Wash, **consisting of the following:**

(A) conveyorized degreasing process, constructed in 1990 through 2008, collectively consisting of forty-four (44) conveyorized degreasing units, identified as EU-PW-01 through EU-PW-37, EU-PW-39 through EU-PW-41, EU-PW-43, and EU-PW-44, utilizing Clark Air Units #8 mist eliminators as control, and exhausting within the building**;**

(B) three (3) conveyorized degreasing units, approved for construction in 2011, identified as EU-PW-47 and EU-PW-48, utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and unit EU-PW-49, utilizing Clark Air Unit #9 mist eliminators for control, and exhausting within the building.

(3) ---

NSK Precision America, Inc. Plant

(b) One (1) turning process, identified as Turning, constructed in 1994 through ~~2009~~ **2011**, consisting of:

(1) Eleven (11) shaft turning wet machining units, identified as EU-NPAT-01 through EU-NPAT-11, utilizing no control devices, and exhausting within the building.

(2) Two (2) blank turning wet machining units, identified as EU-NPAT-12 and EU-NPAT-13, utilizing on-board mist eliminators as control devices, and exhausting within the building.

(3) Five (5) ball circuit wet machining units, identified as EU-NPAT-14 through EU-NPAT-18, utilizing no control devices, and exhausting within the building.

(4) Eight (8) flange milling wet machining units, identified as EU-NPAT-19 through EU-NPAT-24, and EU-NPAT-26 and EU-NPAT-27, utilizing no control devices, and exhausting within the building.

(5) One (1) shaft turning wet machine unit, approved for construction in 2011, identified as EU-NPAT-28, utilizing no control device, and exhausting within the building.

(d) One (1) dip process, identified as Dip Process, **consisting of the following:**

(1) Dip Process, constructed in 2008, consisting of four (4) dip tanks, identified as EU-NPAD-01 through EU-NPAD-04, utilizing no control device, and exhausting within the building**;**

(2) Dip process, one (1) dip tank, approved for construction in 2011, identified as EU-NPAD-05, utilizing no control device, and exhausting within the building.

(g) One (1) cold cleaner degreasing process, identified as Cleaning Process, **consisting of the following:**

(1) Cold cleaner degreasing process, constructed in 1993, 2003, and 2006, consisting of three (3) dip tanks, identified as EU-NPACL-01 through EU-NPACL-03; exhausting within the building**;**

(2) Cold cleaner degreasing process, consisting of six (6) dip tanks, approved for construction in 2011, identified as EU-NPACL-04 through EU-NPACL-09, utilizing no control devices, and exhausting within the building.

D.1.1 FESOP and PSD Minor Limits [326 IAC 2-8-4] [326 IAC 2-2]

Processes	Controls	Exhaust IDs	Emission Unit IDs
*NSK Corporation **Hub** Plant*			
G1 Grinding	Clark Air Units	Internal	EU-G1-01 through EU-G1-03
	N/A	Internal	EU-G1-04 through EU-G1-06
G2 Grinding	Aerostokes	EP17 / EP18	EU-G2-01 through EU-G2-08
			EU-G2-10 through EU-G2-43
New Concept Grinding	Clark Air Units	Internal	EU-NCG-01 through EU-NCG-08
			EU-NCG-10 through EU-NCG-25
Taper Roller Grinding	Clark Air Units	Internal	EU-TRG-01 through EU-TRG-08**, EU-TRG-10, EU-TRG-11, EU-TRG-12, EU-TRG-14 through EU-TRG-16**
Taper Roller Grinding	**Exhaust Fan EF-19**	**EP18**	**EU-TRG-9, EU-TRG-13**
Superfinish G2	Aerostokes	EP17 / EP18	EU-SFG2-01 through EU-SFG2-04
			EU-SFG2-07
			EU-SFG2-09 through EU-SFG2-12
			EU-SFG2-14 through EU-SFG2-18
			EU-SFG2-20 through EU-SFG2-25
			EU-SFG2-27 through EU-SFG2-31
Superfinish New Concept	Clark Air Units	Internal	EU-SFNC-01 through EU-SFNC-03
			EU-SFNC-05 through EU-SFNC-15
Superfinish Taper Roller	Clark Air Units	Internal	EU-SFTR-01 through EU-SFTR-0~~3~~ **4**
Superfinish Taper Roller	**Exhaust Fan EF-19**	**EP18**	**EU-SFTR-05 through EU-SFTR-08**
FS-4 Turning	N/A	Internal	EU-HTFS-01 through EU-HTFS-05
LU300 Turning	N/A	Internal	EU-HTLU-01 through EU-HTLU-06
Broaching	N/A	Internal	EU-BR-01 and EU-BR-02
Painting	Clark Air Units	Internal	EU-PNT-01 through EU-PNT-07
	N/A	Internal	EU-PNT-08 through EU-PNT-10
HUB I - Assembly Rust Preventative	N/A	Internal	EU-H1RP-01 through EU-H1RP-03
HUB II - Assembly Rust Preventative	Clark Air Units	Internal	EU-H2RP-01 and EU-H2RP-02
HUB III - Assembly / New Concept Rust Preventative	Clark Air Units	Internal	EU-H3/NCRP-01 through EU-H3/NCRP-09
Taper Roller Rust Preventative	Clark Air Unit	Internal	EU-TRRP-01**, EU-TRRP-03**
Taper Roller Rust Preventive	**Exhaust Fan EF-19**	**EP18**	**EU-TRRP-02**
Superfinish Wash	N/A	Internal	EU-SFW-01 through EU-SFW-04
			EU-SFW-08 through EU-SFW-11
			EU-SFW-13 through EU-SFW-18
			EU-SFW-20 through EU-SFW-25
			EU-SFW-27 through EU-SFW-31
Parts Wash, Rough Wash, Finish Wash	Clark Air Units	Internal	EU-PW-01 through EU-PW-37
			EU-PW-39 through EU-PW-41
			EU-PW-43 and EU-PW-~~44~~ **47 through EU-PW-49**
Ball Wash	N/A	Internal	EU-BW-01 through EU-BW-04
Finish Wash, Ball Wash, Rough Wash - Tanks	N/A	Internal	EU-Tank-02 through EU-Tank-04
Parts Wash and Coolant Tanks	N/A	Internal	EU-Tank-06 through EU-Tank-08
Superfinish Wash Tank	N/A	Internal	EU-Tank-10
Coolant Tanks	N/A	Internal	EU-Tank-12 through EU-Tank-15
NSK Precision America, Inc. Plant			
Cutting	N/A	Internal	EU-NPACT-01 through EU-NPACT-08
	On-Board	Internal	EU-NPACT-09 and EU-NPACT-10
	N/A	Internal	EU-NPACT-11
	Dust Collector	Internal	EU-NPACT-12
	Shop-Vac	Internal	EU-NPACT-13
Turning	N/A	Internal	EU-NPAT-01 through EU-NPAT-11
	On-Board	Internal	EU-NPAT-12 and EU-NPAT-13
	N/A	Internal	EU-NPAT-14 through EU-NPAT-18
	N/A	Internal	EU-NPAT-19 through EU-NPAT-24
	N/A	Internal	EU-NPAT-26 and EU-NPAT-27
Grinding	On-Board	Internal	EU-NPAG-01 through EU-NPAG-09

	N/A	Internal	EU-NPAG-10 through EU-NPAG-12
	On-Board	Internal	EU-NPAG-27, 28, 31, and 33
	On-Board	Internal	EU-NPAG-13 through EU-NPAG-21
	OMC	EP19	EU-NPAG-22 through EU-NPAG-26
	OMC	EP19	EU-NPAG-29, 30, and 32
Dip Process	N/A	Internal	EU-NPAD-01 through EU-NPAD-04
Cleaning Process	N/A	Internal	EU-NPACL-01 through EU-NPACL-0~~3~~ **9**
Packing Process	N/A	Internal	EU-NPAPK-01

D.1.2 FESOP Limits [326 IAC 2-8-4][326 IAC 2-2][326 IAC 2-1.1-5]

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), and to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-1.1-5 (Nonattainment New Source Review) not applicable, the source shall comply with the following:

(a) Combined PM10 Emissions from the AEROSTOKES mist eliminators, controlling the G2 Grinding and Superfinish G2**,** (NSK Corporation Plant) processes, and exhausting through EP-17 and/or EP-18, shall not exceed ~~8.0~~ **5.15** lbs/hr.

(b) Combined PM2.5 Emissions from the AEROSTOKES mist eliminators, controlling the G2 Grinding and Superfinish G2**,** (NSK Corporation Plant) processes, and exhausting through EP-17 and/or EP-18, shall not exceed ~~8.0~~ **5.15** lbs/hr.

(c) Combined PM10 Emissions from the Clark Air mist eliminators, and the Exhaust Fan EF-19, controlling the Taper Roller grinding, and Taper Roller Superfinish (NSK Corporation Plant) processes, shall not exceed 5.15 lbs/hr.

(d) Combined PM2.5 Emissions from the Clark Air mist eliminators, and the Exhaust Fan EF-19, controlling the Taper Roller grinding, and Taper Roller Superfinish (NSK Corporation Plant) processes, shall not exceed 5.15 lbs/hr.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of following emission units shall not exceed the pound per hour limit listed in the table below:

Process	Emission Units	Process Weight Rate (tons/hr)	Particulate Emissions (lbs/hr)
NSK Corporation Plant			
G1 Grinding	EU-G1-01 through EU-G1-03	0.34 (each)	2.00 (each)
	EU-G1-04	0.21	1.44
	EU-G1-05 and EU-G1-06	0.07 (each)	0.68 (each)
G2 Grinding	EU-G2-01 through EU-G2-08	0.07 (each)	0.69 (each)
	EU-G2-10 through EU-G2-39		
	EU-G2-40 and EU-G2-41	0.33 (each)	1.97 (each)
	EU-G2-42	0.22	1.50
	EU-G2-43	0.43	2.32
New Concept Grinding	EU-NCG-01 through EU-NCG-08	0.11 (each)	0.92 (each)
	EU-NCG-10 through EU-NCG-24		
	EU-NCG-25	0.43	2.32
Taper Roller Grinding	EU-TRG-01 through EU-TRG-07**, EU-TRG-09 through EU-TRG-16**	0.03 (each)	0.551 (each)
	EU-TRG-08	0.20	1.39
Superfinish G2	EU-SFG2-01 through EU-SFG2-04	0.10 (each)	0.85 (each)
	EU-SFG2-07		

	EU-SFG2-09 through EU-SFG2-12		
	EU-SFG2-14 through EU-SFG2-18		
	EU-SFG2-20 through EU-SFG2-25		
	EU-SFG2-27 through EU-SFG2-31		
Superfinish New Concept	EU-SFNC-01 through EU-SFNC-03	0.18 (each)	1.32 (each)
	EU-SFNC-05 through EU-SFNC-15		
Superfinish Taper Roller	EU-SFTR-01 through EU-SFTR-03**, EU-SFTR-04 through EU-SFTR-08**	0.07 (each)	0.66 (each)
FS-4 Turning	EU-HTFS-01 through EU-HTFS-05	0.02 (each)	0.551 (each)
LU300 Turning	EU-HTLU-01 through EU-HTLU-06	0.27 (each)	1.71 (each)
Broaching	EU-BR-01 and EU-BR-02	0.27 (each)	1.71 (each)
NSK Precision America, Inc. Plant			
Cutting	EU-NPACT-01 through EU-NPACT-13	0.15 (each)	1.15 (each)
Turning	EU-NPAT-01 through EU-NPAT-24	0.06 (each)	0.59 (each)
	EU-NPAT-26 and EU-NPAT-27**, EU-NPAT-28**		
Grinding Operation	EU-NPAG-01 through EU-NPAG-32	0.05 (each)	0.551 (each)

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and their control devices (Aerostokes mist eliminators and Clark Air Unit mist eliminators). Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plans required by this condition.

Compliance Determination Requirements.

D.1.7 Particulate Control

(a) In order to comply with Conditions D.1.2 and D.1.4, the Aerostokes mist eliminators**, Clark Air Mist Eliminators, and Exhaust Fan EF-19** shall be in operation at all times when the G2 Grinding and Superfinish G2**, Taper Roller Grinding and Taper Roller Superfinish,** processes, are in operation.

SECTION D.2 EMISSION UNIT OPERATION CONDITIONS

(p) Conveyorized Degreasers including:

(1) One (1) superfinish wash operation conveyorized degreasing operation, **consisting of the following:**

(A) conveyorized degreasing operation, identified as Superfinish Wash, constructed in 1990 through 2010, consisting of twenty-five (25) conveyorized degreasing units, identified as EU-SFW-01 through EU-SFW-04, EU-SFW-08 through EU-SFW-11, EU-SFW-13 through EU-SFW-18, EU-SFW-20 through EU-SFW-25, and EU-SFW-27 through EU-SFW-31, utilizing no control device, and exhausting within the building**;**

(B) conveyorized degreasing operation, consisting of eight (8) conveyorized degreasing units, approved for construction in 2011, identified as EU-SFW-32 through EU-SFW-39, utilizing no control device, and exhausting within the building.

(2) One (1) parts wash conveyorized degreasing process, including three operations identified as Parts Wash, Rough Wash, and Finish Wash, **consisting of the following:**

(A) conveyorized degreasing process, constructed in 1990 through 2008, collectively consisting of forty-four (44) conveyorized degreasing units, identified as EU-PW-01 through EU-PW-37, EU-PW-39 through EU-PW-41, EU-PW-43, and EU-PW-44, utilizing Clark Air Units mist eliminators as control, and exhausting within the building**;**

(B) three (3) conveyorized degreasing units, approved for construction in 2011, identified as EU-PW-47 and EU-PW-48, utilizing Exhaust Fan EF-19 for control and exhausting through Vent EP-18, and unit EU-PW-49, utilizing Clark Air Unit #9 mist eliminators for control, and exhausting within the building.

(g) One (1) cold cleaner degreasing process, identified as Cleaning Process, **consisting of the following:**

(1) Cold cleaner degreasing process, constructed in 1993, 2003, and 2006, consisting of three (3) dip tanks, identified as EU-NPACL-01 through EU-NPACL-03; exhausting within the building**;**

(2) Cold cleaner degreasing process, consisting of six (6) dip tanks, approved for construction in 2011, identified as EU-NPACL-04 through EU-NPACL-09, utilizing no control devices, and exhausting within the building.

D.2.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaner degreasers (EU-NPACL-01 through EU-NPACL-0~~3~~**9**) shall ensure that the following control equipment requirements are met:

FESOP Quarterly Report

Source Name: NSK Corporation - Franklin Campus
Source Addresses: 3400 Bearing Drive, Franklin, IN 46131; and
3450 Bearing Drive, Franklin, IN 46131
FESOP Permit No.: F081-28776-00023
Facilities: See Table Below
Parameter: VOC
Limit: The input of volatile organic compounds (VOC) to the below listed emission units, minus the VOC containing waste materials shipped out, shall be limited to 98.18 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Processes	Controls	Exhaust IDs	Emission Unit IDs

*NSK Corporation **Hub** Plant*			
G1 Grinding	Clark Air Units	Internal	EU-G1-01 through EU-G1-03
	N/A	Internal	EU-G1-04 through EU-G1-06
G2 Grinding	Aerostokes	EP17 / EP18	EU-G2-01 through EU-G2-08
			EU-G2-10 through EU-G2-43
New Concept Grinding	Clark Air Units	Internal	EU-NCG-01 through EU-NCG-08
			EU-NCG-10 through EU-NCG-25
Taper Roller Grinding	Clark Air Units	Internal	EU-TRG-01 through EU-TRG-08**, EU-TRG-10, EU-TRG-11, EU-TRG-12, EU-TRG-14 through EU-TRG-16**
Taper Roller Grinding	**Exhaust Fan EF-19**	**EP18**	**EU-TRG-9, EU-TRG-13**
Superfinish G2	Aerostokes	EP17 / EP18	EU-SFG2-01 through EU-SFG2-04
			EU-SFG2-07
			EU-SFG2-09 through EU-SFG2-12
			EU-SFG2-14 through EU-SFG2-18
			EU-SFG2-20 through EU-SFG2-25
			EU-SFG2-27 through EU-SFG2-31
Superfinish New Concept	Clark Air Units	Internal	EU-SFNC-01 through EU-SFNC-03
			EU-SFNC-05 through EU-SFNC-15
Superfinish Taper Roller	Clark Air Units	Internal	EU-SFTR-01 through EU-SFTR-0~~3~~ **4**
Superfinish Taper Roller	**Exhaust Fan EF-19**	**EP18**	**EU-SFTR-05 through EU-SFTR-08**
FS-4 Turning	N/A	Internal	EU-HTFS-01 through EU-HTFS-05
LU300 Turning	N/A	Internal	EU-HTLU-01 through EU-HTLU-06
Broaching	N/A	Internal	EU-BR-01 and EU-BR-02
Painting	Clark Air Units	Internal	EU-PNT-01 through EU-PNT-07
	N/A	Internal	EU-PNT-08 through EU-PNT-10
HUB I - Assembly Rust Preventative	N/A	Internal	EU-H1RP-01 through EU-H1RP-03
HUB II - Assembly Rust Preventative	Clark Air Units	Internal	EU-H2RP-01 and EU-H2RP-02
HUB III - Assembly / New Concept Rust Preventative	Clark Air Units	Internal	EU-H3/NCRP-01 through EU-H3/NCRP-09
Taper Roller Rust Preventative	Clark Air Unit	Internal	EU-TRRP-01**, EU-TRRP-03**
Taper Roller Rust Preventive	**Exhaust Fan EF-19**	**EP18**	**EU-TRRP-02**
Superfinish Wash	N/A	Internal	EU-SFW-01 through EU-SFW-04
			EU-SFW-08 through EU-SFW-11
			EU-SFW-13 through EU-SFW-18
			EU-SFW-20 through EU-SFW-25
			EU-SFW-27 through EU-SFW-31
Parts Wash, Rough Wash, Finish Wash	Clark Air Units	Internal	EU-PW-01 through EU-PW-37
			EU-PW-39 through EU-PW-41
			EU-PW-43 and EU-PW-~~44~~**7 through EU-PW-49**
Ball Wash	N/A	Internal	EU-BW-01 through EU-BW-04
Finish Wash, Ball Wash, Rough Wash - Tanks	N/A	Internal	EU-Tank-02 through EU-Tank-04
Parts Wash and Coolant Tanks	N/A	Internal	EU-Tank-06 through EU-Tank-08
Superfinish Wash Tank	N/A	Internal	EU-Tank-10
Coolant Tanks	N/A	Internal	EU-Tank-12 through EU-Tank-15
NSK Precision America, Inc. Plant			
Cutting	N/A	Internal	EU-NPACT-01 through EU-NPACT-08
	On-Board	Internal	EU-NPACT-09 and EU-NPACT-10
	N/A	Internal	EU-NPACT-11
	Dust Collector	Internal	EU-NPACT-12
	Shop-Vac	Internal	EU-NPACT-13
Turning	N/A	Internal	EU-NPAT-01 through EU-NPAT-11
	On-Board	Internal	EU-NPAT-12 and EU-NPAT-13
	N/A	Internal	EU-NPAT-14 through EU-NPAT-18
	N/A	Internal	EU-NPAT-19 through EU-NPAT-24
	N/A	Internal	EU-NPAT-26 and EU-NPAT-27
Grinding	On-Board	Internal	EU-NPAG-01 through EU-NPAG-09
	N/A	Internal	EU-NPAG-10 through EU-NPAG-12

	On-Board	Internal	EU-NPAG-27, 28, 31, and 33
	On-Board	Internal	EU-NPAG-13 through EU-NPAG-21
	OMC	EP19	EU-NPAG-22 through EU-NPAG-26
	OMC	EP19	EU-NPAG-29, 30, and 32
Dip Process	N/A	Internal	EU-NPAD-01 through EU-NPAD-04
Cleaning Process	N/A	Internal	EU-NPACL-01 through EU-NPACL-0~~3~~ **9**
Packing Process	N/A	Internal	EU-NPAPK-01

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 January 13, 2011. Additional information was received on April 11, April 25, May 11, May 23, and July 7, 2011.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Revision No. 081-30120-00023. The staff recommends to the Commissioner that this FESOP Significant Revision be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Jack Harmon 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) 233-4228 or toll free at 1-800-451-6027 extension 3-4228.

(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's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

SUMMARY OF EMISSIONS
AFTER PERMIT REVISION

Company Name: NSK Corporation - Franklin Campus
Address City IN Zip: 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Reviewer: Jack Harmon
Date: April, 2011

Uncontrolled Emissions (Tons/Yr)

Pollutant	NSK Corp. Nat. Gas Combustion	NSK Precision America Nat. Gas Combustion	Source-Wide VOC / HAP Usage	NSK Corp. Wet Machining	NSK Precision America Wet Machining	Spray Coating	Rust Preventative[b]	Conveyorized Degreasers	Dip Coating	Cold Cleaner Degreasers	Packing Process	Roadways (Fugitive)	Total
PM	0.18	0.11	-	133.68	21.93	0.43	-	-	-	-	-	1.43	156.32
PM10	0.72	0.42	-	133.68	21.93	0.43	-	-	-	-	-	0.28	157.18
PM2.5	0.72	0.42	-	133.68	21.93	0.43	-	-	-	-	-	0.04	157.18
VOC	0.52	0.31	256.59	-	-	[a]	[a]	[a]	[a]	[a]	[a]	-	257.41
NOx	9.42	5.58	-	-	-	-	-	-	-	-	-	-	14.99
SO2	0.06	0.03	-	-	-	-	-	-	-	-	-	-	0.09
CO	7.91	4.69	-	-	-	-	-	-	-	-	-	-	12.60
GHG as CO2e	11,367.06	6,735.31											18,102.37
Single HAP (Ethylene Glycol)	-	-	4.09	-	-	[a]	[a]	[a]	[a]	[a]	[a]	-	4.09
Combined HAPs	0.18	0.11	5.98	-	-	[a]	[a]	[a]	[a]	[a]	[a]	-	6.26

Controlled Emissions (Tons/Yr)

Pollutant	NSK Corp. Nat. Gas Combustion	NSK Precision America Nat. Gas Combustion	Source-Wide VOC / HAP Usage	NSK Corp. Wet Machining	NSK Precision America Wet Machining	Spray Coating	Rust Preventative[b]	Conveyorized Degreasers	Dip Coating	Cold Cleaner Degreasers	Packing Process	Roadways (Fugitive)	Total
PM	0.18	0.11	-	2.67	1.10	0.43	-	-	-	-	-	1.43	4.49
PM10	0.72	0.42	-	2.67	1.10	0.43	-	-	-	-	-	0.28	5.34
PM2.5	0.72	0.42	-	2.67	1.10	0.43	-	-	-	-	-	0.04	5.34
VOC	0.52	0.31	98.18	-	-	[a]	[a]	[a]	[a]	[a]	[a]	-	99.00
NOx	9.42	5.58		-	-	-	-	-	-	-	-	-	14.99
SO2	0.06	0.03	-	-	-	-	-	-	-	-	-	-	0.09
CO	7.91	4.69	-	-	-	-	-	-	-	-	-	-	12.60
GHG as CO2e	11,367.06	6,735.31											18,102.37
Single HAP (Ethylene Glycol)	-	-	4.09	-	-	[a]	[a]	[a]	[a]	[a]	[a]	-	4.09
Combined HAPs	0.18	0.11	5.98	-	-	[a]	[a]	[a]	[a]	[a]	[a]	-	6.26

Limited Emissions (Tons/Yr)

Pollutant	NSK Corp. Nat. Gas Combustion	NSK Precision America Nat. Gas Combustion	Source-Wide VOC / HAP Usage	NSK Corp. Wet Machining	NSK Precision America Wet Machining	Spray Coating	Rust Preventative[b]	Conveyorized Degreasers	Dip Coating	Cold Cleaner Degreasers	Packing Process	Roadways (Fugitive)	Total
PM	0.18	0.11	-	133.68	21.93	0.43	-	-	-	-	-	1.43	156.32
PM10	0.72	0.42	-	67.67	21.93	0.43	-	-	-	-	-	0.28	91.17
PM2.5	0.72	0.42	-	67.67	21.93	0.43	-	-	-	-	-	0.04	91.17
VOC	0.52	0.31	98.18	-	-	[a]	[a]	[a]	[a]	[a]	[a]	-	99.00
NOx*	9.42	5.58	-	-	-	-	-	-	-	-	-	-	14.99
SO2**	0.06	0.03	-	-	-	-	-	-	-	-	-	-	0.09
CO	7.91	4.69	-	-	-	-	-	-	-	-	-	-	12.60
GHG as CO2e	11,367.06	6,735.31											18,102.37
Single HAP (Ethylene Glycol)	-	-	4.09	-	-	[a]	[a]	[a]	[a]	[a]	[a]	-	4.09
Combined HAPs	0.18	0.11	5.98	-	-	[a]	[a]	[a]	[a]	[a]	[a]	-	6.26

Note:
(a) VOC and HAP emissions from all emissions units other than combustion are included in the Source-Wide VOC / HAPs.
(b) Rust Preventative emissions are from the Hub I, Hub II, Hub III / New Concept, and Taper Roller Rust Preventative processes combined.
Fugitive Emissions are not included in the Total PTE since this source is not 1 of the 28 Source Categories and no NSPS was in effect August 1980.
Greenhouse gases, as CO2e, became effective July 1, 2011, and have, therefore, been calculated in this revision. The threshold is 100,000 tons per year, and the total source is below that regulated threshold.

SUMMARY OF EMISSIONS FOR PERMIT REVISION 2011
VOC Emissions, HAP Emissions
Company Name: NSK Corporation - Franklin Campus
Address City IN Zip: 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Reviewer: Jack Harmon
Date: April, 2011

NSK Corporation - Hub Plant Permit Revision

Area	Emission Units	VOC Material Used	VOC Content (lb VOC / Gal)	Actual Usage Gallons Per Year (76% of capacity)	Maximum Usage Gallons Per Year (at 100% capacity)*	No. Existing Machines	Maximum Usage Gallons per Machine Per Year	Maximum VOC Content Per Machine (lb /yr)	No. New Machines	VOC Emissions (lb/yr)	**VOC Emissions (tons/yr)**	**HAP Emissions (tons/yr)**
Taper Roller Grind	EU-TRG-09 through EU-TRG-16	Cimcool 63	0.39	8360.0	11000.0	81	135.80	52.96	8	423.70	0.212	n/a
Superfinish and Wash	EU-SFTR-04 through EU-SFTR-08, EU-SFW-32 through EU-SFW-	SF-30A	1.00	24000.0	31578.95	42	751.88	751.88	10	7518.80	3.759	n/a
Taper Roller Parts Wash	EU-PW47 through EU-PW-49	P307 BF	6.62	19000.0	25000.0	48	520.83	3447.92	3	10343.75	5.172	0.19
Taper Roller Rust Preventive	EU-TRRP-02, EU-TRRP-03	Ferrocoat 5856BF	2.08	200.0	263.16	1	263.16	547.37	3	1642.11	0.821	n/a

WetMachining Operations: (removed one Aerostoke Mist Eliminator and replace with one Exhaust Fan, EF-19)	E.F.	Airflow	**PM**	**PM10**	**PM2.5**	**VOC**	**HAP**
One (1) Exhaust Fan EF-01	0.00206	7500	29.00	29.00	29.00		
Aerostokes Mist Eliminators (from 11 units to 10 units)	0.025288	162.5	-7.71	-7.71	-7.71		
Total NSK Hub Plant PTE			**21.29**	**21.29**	**21.29**	**9.96**	**0.19**

NPA Plant

Area	Emission Units	VOC Material Used	VOC Content (lb VOC / Gal)	Actual Usage Gallons Per Year (76% of capacity)	Maximum Usage Gallons Per Year (at 100% capacity)*	No. Existing Machines	Maximum Usage Gallons per Machine Per Year	Maximum VOC Content Per Machine (lb /yr)	No. New Machines	VOC Emissions (lb/yr)	**VOC Emissions (tons/yr)**	**HAP Emissions (tons/yr)**
Turning Wet Machine Units	EU-NPAT-28	Trim C270CG	0.64	715.0	893.8	39	22.92	14.67	1	14.67	0.007	0.00
Dip Process	EU-NPAD-05	RPO 6 BF	4.09	110.0	137.5	4	34.38	140.42	1	140.42	0.070	0.00
Cleaners/Degreasers	EU-NPACL-04 through EU_NPACL-09	F-140 Solvent	6.76	55.0	68.8	1	68.75	464.75	1	464.75	0.232	0.00
Cleaners/Degreasers	EU-NPACL-04 through EU_NPACL-09	Actrel	6.26	385.0	481.25	3	160.42	1004.21	4	4016.83	2.008	0.00
Cleaners/Degreasers	EU-NPACL-04 through EU_NPACL-09	Dykem Thinner	6.61	125.0	156.25	1	156.25	1032.81	1	1032.81	0.516	0.00
Cleaners/Degreasers	EU-NPACL-04 through EU_NPACL-09	SC410	2.00	120.0	150.00	1	150.00	300.00	1	300.00	0.150	0.00

Total NPA Plant PTE						**2.98**	**0.00**
	PM	**PM10**	**PM2.5**			**VOC**	**HAPs**
Total PTE This Permit Revision (tons per year)	**21.29**	**21.29**	**21.29**			**12.95**	**0.19**

Methodology
*Maximum Usage Gallons per year is calculated at full capacity. Actual usage is at actual operating rates, and is 76% for the Hub Plant and 80% at the NPA Plant. Maximum has been increased to 100% maximum capacity to determine PTE.
Maximum usage per machine is Maximum Usage divided by the number of existing machines
Maximum VOC Content per machine (lb/yr) = Maximum Usage per machine (gallons/yr) x VOC content (lb/gallon)
VOC Emissions (lb/yr) = Maximum VOC Content per machine x number of new machines with this administrative amendment
VOC Emissions (tons/yr) = VOC Emissions (lb/yr) / 2000 lb/ton

Appendix A: Emissions Calculations
Natural Gas Combustion Only
NSK Corporation Natural Gas Usage

Company Name: NSK Corporation - Franklin Campus
Address City IN Zip: 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Reviewer: Jack Harmon
Date: April, 2011

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Emission Units
1.50	13.14	Twenty (20) Interior Heaters @ 0.075 MMBtu/hr each
12.75	111.69	Fifteen (15) Rooftop HVAC Units @ 0.85 MMBtu/hr each
2.00	17.52	One (1) Rooftop HVAC Unit @ 2.0 MMBtu/hr
0.40	3.50	One (1) Rooftop HVAC Unit @ 0.4 MMBtu/hr
0.60	5.26	Two (2) Rooftop HVAC Units @ 0.3 MMBtu/hr each
0.15	1.31	One (1) Rooftop HVAC Unit @ 0.15 MMBtu/hr
0.25	2.19	Five (5) Rooftop HVAC Units @ 0.05 MMBtu/hr each
0.36	3.12	One (1) Rooftop HVAC Unit @ 0.356 MMBtu/hr
3.36	29.43	Two (2) Boilers @ 1.68 MMBtu/hr each
0.13	1.14	One (1) Generator @ 0.13 MMBtu/hr
21.50	188.3	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.18	0.72	0.06	9.42	0.52	7.91

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 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

See page 3 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
NSK Corporation Natural Gas Usage
HAPs Emissions

Company Name: NSK Corporation - Franklin Campus
Address City IN Zip: 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Reviewer: Jack Harmon
Date: April, 2011

	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	1.977E-04	1.130E-04	7.061E-03	1.695E-01	3.201E-04

	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	4.708E-05	1.036E-04	1.318E-04	3.578E-05	1.977E-04

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	120000	2.3	2.2
Potential Emission in tons/yr	11298.30	0.217	0.207
Summed Potential Emissions in tons/yr	11298.72		
CO2e Total in tons/yr	11,367.06		

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

Appendix A: Emissions Calculations
Natural Gas Combustion Only
NSK Precision America, Inc. Plant Natural Gas Usage

Company Name: NSK Corporation - Franklin Campus
Address City IN Zip: 3450 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Reviewer: Jack Harmon
Date: April, 2011

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Emission Units
0.53	4.6	Seven (7) Interior Heaters @ 0.075 MMBtu/hr each
0.30	2.6	Two (2) Interior Heaters @ 0.15 MMBtu/hr each
0.60	5.3	Two (2) Interior Heaters @ 0.30 MMBtu/hr each
1.70	14.9	Two (2) HVAC Units @ 0.85 MMBtu/hr each
0.45	3.9	Three (3) HVAC Units @ 0.15 MMBtu/hr each
9.00	78.8	Two (2) Boilers @ 4.5 MMBtu/hr each
0.13	1.1	One (1) Generator @ 0.13 MMBtu/hr
0.03	0.3	One (1) Water Heater @ 0.032 MMBtu/hr
12.74	111.6	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.11	0.42	0.03	5.58	0.31	4.69

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 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

See page 5 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
NSK Precision America, Inc. Plant Natural Gas Usage
HAPs Emissions

Company Name: NSK Corporation - Franklin Campus
Address City IN Zip: 3450 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Reviewer: Jack Harmon
Date: April, 2011

	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	1.172E-04	6.695E-05	4.184E-03	1.004E-01	1.897E-04

	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	2.789E-05	6.137E-05	7.810E-05	2.120E-05	1.172E-04

Methodology is the same as page 4.

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	120000	2.3	2.2
Potential Emission in tons/yr	6694.57	0.128	0.123
Summed Potential Emissions in tons/yr	6694.82		
CO2e Total in tons/yr	6,735.31		

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

Appendix A: Emissions Calculations
Source Wide VOC Usage

Company Name: NSK Corporation - Franklin Campus
Address : 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Pit ID: 081-00023
Reviewer: Jack Harmon
Date: April, 2011

Material	Associated Process(s)	Maximum Usage (gal/yr)	Pounds VOC per gallon	VOC (lb/hr)	VOC (ton/yr)
NSK Corporation Hub Plant					
Cimcool Additive 63	G1 Grinding	806.5	7.86	0.72	3.17
	G2 Grinding				
	New Concept Grinding				
	Taper Roller Grinding				
Cimstar 3800	G1 Grinding	16862.2	0.69	1.33	5.82
	G2 Grinding				
	New Concept Grinding				
	Taper Roller Grinding				
Kerosene	Superfinish G2	63049.9	6.76	48.65	213.11
	Superfinish New Concept				
	Superfinsh Taper Roller				
	Superfinish Wash				
	Parts Wash				
	Rough Wash				
	Finish Wash				
	Ball Wash				
	Rust Preventative				
Methanol		193.5	6.59	0.15	0.64
Yuman SF-30A	Superfinish Wash	10000.0	1.04	1.19	5.20
	Parts Wash				
	Rough Wash				
	Finish Wash				
	Ball Wash				
	Superfinish G2				
	Superfinish New Concept				
	Superfinish Taper Roller				
P307 H	Rust Preventative	2217.0	5.08	1.29	5.63
Houghton Rust Preventive	Paint Process	733.1	1.40	0.12	0.51
Valspar Ecoat		161.3	0.30	0.01	0.02
Valspar Resin		322.6	0.30	0.01	0.05
Cimtech 410C	FS-4 Turning	806.5	1.15	0.11	0.46
	LU300 Turning				
Quantalube 270 XL	Broaching	1048.4	0.43	0.05	0.23
				Total PTE:	**234.84**
NSK Precision America, Inc. Plant					
Actrel 3338	Cleaning Process	877.66	6.26	0.63	2.75
Chemstation 1855		2547.87	0.17	0.05	0.22
Cimtech 500	Turning	819.15	1.77	0.17	0.72
Dukem Thinner		246.81	6.61	0.19	0.82
SuperSpin2		58.51	6.77	0.05	0.20
Trim C270	Cutting	10348.94	0.64	0.76	3.31
	Turning				
	Shaft End/OD Grinding				
	Thread Grinding				
Trim OM287	Shaft End/OD Grinding	1956.38	0.47	0.11	0.46
	Thread Grinding				
Trim RP 08F	Dip Process	58.51	5.14	0.03	0.15
Yumax P375	Packing Process	114.89	4.61	0.06	0.26
Ecocool Syn 902	Cutting	175.53	0.17	0.00	0.01
Rustlick B	Cutting	5.32	2.50	0.00	0.01
				Total PTE:	**8.91**
				Source Total:	**243.75**

Note:
NSK Corporation Maximum Usage = Actual Usage (2008) at 68.2 % Capacity * (100 / Actual Capacity (%))
NSK Precision America, Inc. Maximum Usage = Actual Usage (2008) at 94 % Capacity * (100 / Actual Capacity (%))
Actual usage rates and pounds VOC per gallon provided by Source.

Methodology:
VOC (ton/yr) = Maximum Usage (gal/yr) * Pounds VOC per gallon / 2,000 lbs
VOC (lb/hr) = VOC (ton/yr) * 2,000 hrs / 8,760 hrs

Appendix A: Emissions Calculations
Source Wide HAP Usage

Company Name: NSK Corporation - Franklin Campus
Address: 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Permit Reviewer: Jack Harmon
Date: April, 2011

Material	Density (lb/Gal)	Maximum Usage (gal/yr)	Weight % Methanol	Weight % Napthalene	Weight % Ethylene Glycol	Methanol Emissions (tons/yr)	Napthalene Emissions (tons/yr)	Ethylene Glycol Emissions (tons/yr)
NSK Corporation Hub Plant								
Kerosene	6.76	63049.85	0.0%	0.50%	0.00%	0.00	1.07	0.00
Methanol	6.59	193.55	100.0%	0.00%	0.00%	0.64	0.00	0.00
Houghton Rust Preventive	8.53	733.14	0.0%	0.00%	0.30%	0.00	0.00	0.00
						0.64	**1.07**	**0.00**

Material	Density (lb/gal)	Maximum Usage (gal/yr)	Weight % Ethylene Glycol	Ethylene Glycol Emissions (tons/yr)
NSK Precision America. Inc. Plant				
Ethylene Glycol	9.35	874.47	100.00%	4.09
				4.09

Combine HAP PTE (tons/yr): **5.79**
Worst Single HAP (tons/yr): **4.09** **Ethylene Glycol**

Methodology:
PTE of HAPs (tons/yr) = Density (lb/gal) * Maximum Usage (gal/yr) * Weight % HAP / 2000 lbs

Appendix A: Emissions Calculations
NSK Corporation Hub Plant Wet Machining Emissions

Company Name: NSK Corporation - Franklin Campus
Address: 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-30120-00023
Permit Reviewer: Jack Harmon
Date: April, 2011

NSK Corporation Hub Plant

Control Device	Vent ID	Outlet Grain Loading	Flow Rate	Control Efficiency	Number of Units	Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5 PTE		Limited PM10/PM2.5 PTE	
		(gr/acfm)	(cfm)	(%)		(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Exhaust Fan EF-19	EP-18	0.00206	7500	98.00%	1	6.62	29.00	0.13	0.58	5.15	22.56
AEROSTOKES	EP-17 & EP-18	0.025288	162.5	98.00%	10	17.61	77.14	0.35	1.54	5.15	22.56
Clark Air Units	N/A	0.000741	2200	98.00%	9	6.29	27.54	0.13	0.55	5.15	22.56
						Total PTE:	**133.68**		**2.67**		**67.67**

Notes:
Flow rates and control efficiencies provided by source.
Exhaust Fan EF-19 emission factor based on grain loading provided by manufacturer.
AEROSTOKES outlet grain loading based on information provided in source's previous Registration 081-3804-00023.
Clark Air Units outlet grain loadings based on calculations used in Automotive Components Holdings, LLC FESOP 097-18528-00021 for similar operations. These units exhaust within the building.
New units added through Administrative Amendment No. 081-30120-00023 either Clark Air units or Exhaust Fan EF-19. Aerostoke control units were reduced from 11 to 10, with the addition of EF-19. Resulting emissions have increased 21.29 tons per year.

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/acfm) * Flow Rate (acfm) * 60 minutes / 1 hr * 1lb / 7000 gr * Number of Units
Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr) * 8760 hrs / 2000 lbs

Appendix A: Emissions Calculations
NSK Precision America (NPA Plant) Wet Machining Emissions

Company Name: NSK Corporation - Franklin Campus
Address: 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Permit Reviewer: Jack Harmon
Date: April, 2011

NSK Precision America, Inc. Plant

Control Device	Vent ID	Outlet Grain Loading	Flow Rate	Control Efficiency	Number of Units	Uncontrolled PM/PM10/PM2.5 PTE		Controlled PM/PM10/PM2.5 PTE		Limited PM10/PM2.5 PTE	
		(gr/acfm)	(cfm)	(%)		(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Central Oil Mist Collectors (OMC)	EP-19	0.001195215	7800	95.00%	2	3.20	14.00	0.16	0.70	3.20	14.00
On-Board Oil Mist Eliminators											
EU-NPACT-08	N/A	0.000741	450	95.00%	1	0.06	0.25	0.00	0.01	0.06	0.25
EU-NPACT-09	N/A	0.000741	900	95.00%	1	0.11	0.50	0.01	0.03	0.11	0.50
EU-NPAT-12	N/A	0.000741	900	95.00%	1	0.11	0.50	0.01	0.03	0.11	0.50
EU-NPAT-13	N/A	0.000741	900	95.00%	1	0.11	0.50	0.01	0.03	0.11	0.50
EU-NPAG-01	N/A	0.000741	276	95.00%	1	0.04	0.15	0.00	0.01	0.04	0.15
EU-NPAG-02	N/A	0.000741	276	95.00%	1	0.04	0.15	0.00	0.01	0.04	0.15
EU-NPAG-03	N/A	0.000741	250	95.00%	1	0.03	0.14	0.00	0.01	0.03	0.14
EU-NPAG-04	N/A	0.000741	276	95.00%	1	0.04	0.15	0.00	0.01	0.04	0.15
EU-NPAG-05	N/A	0.000741	476	95.00%	1	0.06	0.26	0.00	0.01	0.06	0.26
EU-NPAG-06	N/A	0.000741	1060	95.00%	1	0.13	0.59	0.01	0.03	0.13	0.59
EU-NPAG-07	N/A	0.000741	1060	95.00%	1	0.13	0.59	0.01	0.03	0.13	0.59
EU-NPAG-08	N/A	0.000741	1060	95.00%	1	0.13	0.59	0.01	0.03	0.13	0.59
EU-NPAG-09	N/A	0.000741	276	95.00%	1	0.04	0.15	0.00	0.01	0.04	0.15
EU-NPAG-13	N/A	0.000741	1060	95.00%	1	0.13	0.59	0.01	0.03	0.13	0.59
EU-NPAG-14	N/A	0.000741	210	95.00%	1	0.03	0.12	0.00	0.01	0.03	0.12
EU-NPAG-15	N/A	0.000741	210	95.00%	1	0.03	0.12	0.00	0.01	0.03	0.12
EU-NPAG-16	N/A	0.000741	456	95.00%	1	0.06	0.25	0.00	0.01	0.06	0.25
EU-NPAG-17	N/A	0.000741	456	95.00%	1	0.06	0.25	0.00	0.01	0.06	0.25
EU-NPAG-18	N/A	0.000741	456	95.00%	1	0.06	0.25	0.00	0.01	0.06	0.25
EU-NPAG-19	N/A	0.000741	456	95.00%	1	0.06	0.25	0.00	0.01	0.06	0.25
EU-NPAG-20	N/A	0.000741	456	95.00%	1	0.06	0.25	0.00	0.01	0.06	0.25
EU-NPAG-21	N/A	0.000741	456	95.00%	1	0.06	0.25	0.00	0.01	0.06	0.25
EU-NPAG-27	N/A	0.000741	456	95.00%	1	0.06	0.25	0.00	0.01	0.06	0.25
EU-NPAG-28	N/A	0.000741	456	95.00%	1	0.06	0.25	0.00	0.01	0.06	0.25
EU-NPAG-31	N/A	0.000741	456	95.00%	1	0.06	0.25	0.00	0.01	0.06	0.25
EU-NPAG-33	N/A	0.000741	500	95.00%	1	0.06	0.28	0.00	0.01	0.06	0.28
						Total PTE:	**21.93**		**1.10**		**21.93**

Notes:
OMC grain loading was back calculated based on information provided in source's previous Registration 081-3804-00023 and a revised control efficiency.
On-board oil mist eliminator flow rate provided by source in NOD response received February 12, 2010. Outlet grain loadings based on calculations used in Automotive Components Holdings, LLC FESOP 097-18528-00021 for similar operations. These units exhaut within the building.
Wet machining process is considered to have minimal particulate emissions, as detemined in F081-28776-00023, issued July 29, 2010. Therefore, those units with no control device have no emissions calculations.

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/acfm) * Flow Rate (acfm) * 60 minutes / 1 hr * 1lb / 7000 gr * Number of Units
Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr) * 8760 hrs / 2000 lbs

Appendix A: Emissions Calculations
Spray Coating Particulate Emissions

Company Name: NSK Corporation - Franklin Campus
Address: 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Permit Reviewer: Jack Harmon
Date: April, 2011

EU-PNT-01 thorugh EU-PNT-07

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Maximum (gallon/hour)	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
Houghton Rust Preventative	8.53	78.41%	62.00%	16.41%	64.00%	25.00%	0.084	3.89	1.40	0.12	2.81	0.51	0.17	5.60	75%
VECTOGARD (900 Black Pigment Paste)	11.09	45.44%	44.79%	0.65%	60.00%	39.35%	0.018	0.18	0.07	0.00	0.03	0.01	0.12	0.18	75%
VECTOGARD (900 Dispersion Resin)	8.90	59.99%	58.21%	1.78%	60.00%	40.01%	0.037	0.40	0.16	0.01	0.14	0.03	0.14	0.40	75%
									Total PTE:	**0.12**	**2.98**	**0.54**	**0.43**		

Note:
These calculations are being peformed to determine potential Particulate emissions and for State Rule Applicability determinations. VOC Emissions are already counted from this process on Page 6 of 14.

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)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
Rust Preventative Application VOC and Particulate Emissions

Company Name: NSK Corporation - Franklin Campus
Address: 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Permit Reviewer: Jack Harmon
Date: April, 2011

Combined Hub I, Hub II, Hub III / New Concept, and Taper Roller Rust Preventative processes

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Maximum (gallon/hour)	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
Yuman 307 H	5.08	100.00%	0.00%	100.00%	0.00%	0.00%	0.253	5.08	5.08	1.29	30.86	5.63	0.00	N/A	75%

Taper Roller Rust Preventative processes EU-TRRP-02 and EU-TRRP-03

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Maximum (gallon/hour)	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
RP Oil	2.08	100.00%	0.00%	100.00%	0.00%	0.00%	0.092	2.08	2.08	0.19	4.60	0.84	0.00	N/A	75%
									Total PTE:	**1.29**	**30.86**	**6.47**	**0.00**		

Note:
These calculations are being peformed to determine potential Particulate emissions and for State Rule Applicability determinations. VOC Emissions are already counted from this process on Page 6 of 14.

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)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
Dip Coating VOC Emissions

Company Name: NSK Corporation - Franklin Campus
Address: 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Permit Reviewer: Jack Harmon
Date: April, 2011

EU-NPAD-01 through EU-NPAD-04

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Maximum (gallon/hour)	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
Trip RP 08F	5.14	100.00%	0%	100.00%	0.00%	0.00%	0.007	5.14	5.14	0.03	0.82	0.15	0.00	N/A	100%

EU-NPAD-05

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Maximum (gallon/hour)	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
RPO 6 BF	4.085	100.00%	0%	100.00%	0.00%	0.00%	0.0035	4.09	4.085	0.01	0.34	0.063	0.000	N/A	100%

Total PTE: **0.21** **0.00**

Note:
These calculations are being peformed to determine potential Particulate emissions and for State Rule Applicability determinations. VOC Emissions are already counted from this process on Page 6 of 14.

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)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
Packing Process VOC & PM Emissions

Company Name: NSK Corporation - Franklin Campus
Address: 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Permit Reviewer: Jack Harmon
Date: April, 2011

EU-NPAPK-01

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Maximum (gallon/hour)	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
Yumax P-375	4.61	100.00%	0%	100.00%	0.00%	0.00%	0.013	4.61	4.61	0.06	1.45	0.26	0.00	N/A	100%
									Total PTE:	**0.06**	**1.45**	**0.26**	**0.00**		

Note:
These calculations are being peformed to determine potential Particulate emissions and for State Rule Applicability determinations. VOC Emissions are already counted from this process on Page 6 of 14.

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)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: NSK Corporation - Franklin Campus
Address: 3400 Bearing Drive, Franklin, IN 46131
Permit Number: 081-30120-00023
Plt ID: 081-00023
Permit Reviewer: Jack Harmon
Date: April, 2011

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (12/2003).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip	40.0	1.0	40.0	10.0	400.0	1200	0.227	9.1	3318.2
Vehicle (leaving plant) (one-way trip)	40.0	1.0	40.0	22.5	900.0	1200	0.227	9.1	3318.2
		Total	**80.0**		**1300.0**			**18.2**	**6636.4**

Average Vehicle Weight Per Trip = 16.3 tons/trip
Average Miles Per Trip = 0.23 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL/2)^0.65 * (W/3)^1.5 - C] (Equation 1 from AP-42 13.2.1

	PM	PM10	PM2.5	
where k =	0.082	0.016	0.0024	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
W =	16.3	16.3	16.3	tons = average vehicle weight (provided by source)
C =	0.00047	0.00047	0.00036	lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2
sL =	0.6	0.6	0.6	g/m^2 = Ubitiguous Baseline Silt Loading Values of paved roads (Table 13.2.1-3 for summe

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)]
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	0.47	0.09	0.01	lb/mile
Mitigated Emission Factor, Eext =	0.43	0.08	0.01	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip	0.78	0.15	0.02	0.72	0.14	0.02
Vehicle (leaving plant) (one-way trip)	0.78	0.15	0.02	0.72	0.14	0.02
	1.57	**0.30**	**0.04**	**1.43**	**0.28**	**0.04**

Methodology

Total Weight driven per day (ton/day)	= [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip)	= [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day)	= [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip)	= SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip)	= SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr)	= [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr)	= [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr)	= [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Kevin Dodds
NSK Corporation
3400 Bearing Dr
Franklin, IN 46131-9660

DATE: August 23, 2011

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
FESOP
081-3010-00023

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Lynn Jankowski
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

August 23, 2011

TO: Johnson County Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: NSK Corporation
Permit Number: 081-30120-00023

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	CDENNY 8/23/2011 NSK Corporation 018-30120-00023 (final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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4		Franklin City Council and Mayors Office 55 W. Madison Street Franklin IN 46131 *(Local Official)*									
5		Johnson County Health Department 86 W. Court St, Courthouse Annex Franklin IN 46131-2345 *(Health Department)*									
6		Frederick & Iva Moore 6019 W 650 N Ligonier IN 46767 *(Affected Party)*									
7		Larry and Becky Bischoff 10979 North Smokey Row Road Mooresville IN 46158 *(Affected Party)*									
8		Lynn Jankowski Quality Systems Group 147 N Milford Rd, Ste 201 Highland MI 48357 *(Consultant)*									
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