DATE: August 22, 2008

TO: Interested Parties / Applicant

RE: Rolls Royce Corporation / 097-26350-00311

FROM: Kyle Walker
Deputy Director

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, Room 501, Indianapolis, IN 46204, **within fifteen (15) calendar days of the receipt 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 Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures

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Office of Environmental Services
2700 Belmont Avenue
Indianapolis, IN 46221
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August 22, 2008

Mr. Pravin Patel
Rolls Royce Corporation
2355 South Tibbs Avenue
Indianapolis, IN 46241

CERTIFIED MAIL: 7008 0150 0003 5246 9833

Re: SSM097-26350-00311
Second Significant Source Modification to
Part 70 Operating Permit No.: T097-7238-00311

Dear Mr. Patel:

Rolls Royce Corporation was issued Part 70 Operating Permit No.T097-7238-00311 on August 15, 2003 for a manufacturing and testing source for aerospace engines located at 2001 & 2355 South Tibbs Avenue, Indianapolis, Indiana. A Significant Source Modification application was received from Rolls Royce Corporation on March 26, 2008, relating to the modification of an existing test cell (824) and two existing shack heaters. Rolls Royce Corporation is proposing to modify test cell 824 in Plant 8 to accommodate a different engine. In order to accommodate the different engine, Rolls Royce must make the test cell larger. In addition, Rolls Royce Corporation is proposing to convert two (2) of the three (3) American Shack Heaters from burning distillate oil to natural gas. The modification to test cell 824 and the Shack Heaters are considered the same project because the Shack Heaters provide a support function to test cell 824. The application is assigned the tracking number SSM097-26350-00311. Pursuant to 326 IAC 2-7-10.5(e), the following emission units are approved for construction at the source:

(a) Three (3) American Shack Heaters, identified as emission unit 0070-70, exhausting out stacks identified 8-6 A through C consisting of:

(1) Two (2) heaters, identified as 0070-70A and 0070-70B, with a maximum heat input capacity of 90 million British thermal units per hour each, modified in 2008 to burn natural gas, and exhausting to stacks 8-6A and 8-6B, respectively; and

(2) One (1) heater, identified as 0070-70C, capable of being fired with either natural gas or distillate fuel and has a maximum heat input capacity of 90 million British thermal units per hour.

(b) Fifty (50) Engine test stand cells identified below. These test stand cells are used to test engines manufactured at the source. The engines tested are fueled by either Jet fuel, Diesel Oil #2, or Natural Gas. All test stand cells were constructed prior to 1977, except test stand cells Emission Unit ID 0070-87 and 0070-88 that received approval to construct in 2007. Test cell 0070-N32 (824) was approved for modification in 2008.

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Engine Test Cells - Plant 5				
Emission Unit ID No.	Engine Test Cell ID	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID
0070-N3	109	5000 brake horsepower	Jet fuel, Diesel	SN3
0070-N4	111	10000 pounds of thrust	Jet fuel	SN4
0070-N5	113	10000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN5
0070-N6	114	30000 pounds of thrust	Jet fuel	SN6
0070-N7	115	7000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN7
0070-N8	116	5000 brake horsepower	Jet fuel, Diesel	SN8
0070-N9	117	5000 brake horsepower	Jet fuel, Diesel	SN9
0070-N10	118	5000 brake horsepower	Jet fuel, Diesel	SN10
0070-N11	119	5000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN11
0070-N12	120	7000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN12
0070-N13	121	10000 brake horsepower	Jet fuel, Diesel	SN13
0070-N15	123	5000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN15
0070-N16	140	1500 brake horsepower	Jet fuel	SN16
0070-N17	141	750 brake horsepower	Jet fuel	SN17
0070-N18	142	800 brake horsepower	Jet fuel	SN18
0070-N19	143	750 brake horsepower	Jet fuel	SN19
0070-N20	144	750 brake horsepower	Jet fuel	SN20
0070-N21	145	750 brake horsepower	Jet fuel	SN21
0070-N22	146	1500 brake horsepower	Jet fuel	SN22
0070-N23	147	1500 brake horsepower	Jet fuel	SN23
0070-N24	148	1500 brake horsepower	Jet fuel	SN24
0070-N25	149	650 brake horsepower	Jet fuel	SN25
0070-N27	152	1500 brake horsepower	Jet fuel	SN27
0070-87	133	715 brake horsepower, with maximum fuel flow capacity of 59 gal/hr	Jet fuel	S87
0070-88	135	715 brake horsepower,	Jet fuel	S88

Engine Test Cells - Plant 5				
Emission Unit ID No.	Engine Test Cell ID	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID
		with maximum fuel flow capacity of 59 gal/hr		

Engine Test Cells - Plant 8				
Emission Unit ID	Engine Test Cell	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID
0070-N34	843	10000 brake horsepower	Jet fuel	SN34(A,B)
0070-N35	861	9000 pounds of thrust	Jet fuel, Diesel	SN35
0070-N36	862	6000 brake horsepower	Jet fuel, Diesel	SN36
0070-N37	871	15000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN37(A,B)
0070-N38	872	9000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN38(A,B)
0070-N39	873	9000 brake horsepower	Jet fuel	SN39(A,B,C)
0070-N40	875	5000 brake horsepower	Diesel	SN40
0070-N41	881	10000 pounds of thrust	Jet fuel	SN41(A,B)
0070-N42	882	30000 pounds of thrust	Jet fuel	SN42(A,B,C,D,E,F)
0070-N43	883	2500 brake horsepower	Jet fuel	SN43(A,B)
0070-N44	884	2000 brake horsepower	Jet fuel	SN44
0070-N45	885	800 brake horsepower	Jet fuel, Diesel	SN45(A,B)
0070-N46	886	30000 pounds of thrust	Jet fuel, Diesel	SN46(A,B,C,D)
0070-N47	893	500 pounds of thrust	Diesel	SN47
0070-N48	894	350 brake horsepower	Diesel	SN48
0070-N29	821	10 pounds/second air	Jet fuel, Diesel & Natural Gas	SN29(A,B)
0070-N30	822	50 pounds/second air	Jet fuel, Diesel & Natural Gas	SN30(A,B)
0070-N31	823	60 pounds/second air	Jet fuel, Diesel & Natural Gas	SN31(A,B)
0070-N32	824	120 pounds/second air	Jet fuel, Diesel & Natural Gas	SN32(A,B)
0070-N33	826	25 pounds/second air	Jet fuel, Diesel	SN33(A,B)
0070-54	8137	10 pounds/second air	Jet fuel, Diesel & Natural Gas	SN54
0070-N54a	8137	12.5 MMBtu/hr	No. 2 Diesel fuel	Not Available

0070-N55	8126	0.5 pounds/second air	Jet fuel, Diesel & Natural Gas	Not Available
0070-N56	8128	1 pounds/second air	Jet fuel, Diesel & Natural Gas	Not Available

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. 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) and the City of Indianapolis Office of Environmental Services (OES).

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 and 326 IAC 2-7-10.5(i), 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.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to the modification of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction when the source modification has been issued. The source must comply with the requirements of 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12 before operation of any of the proposed emission units can begin.

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 Anh-tuan Nguyen at (317) 327-2353.

Sincerely,

Original Signed by

Kyle Walker
Deputy Director

Attachments: Significant Source Modification
Technical Support Document
TSD Appendix A

an
cc: Files
Marion County Health Department
Matt Mosier – OES Air Compliance Section
Mindy Hahn – IDEM, OAQ

PART 70 Significant Source Modification

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
CITY OF INDIANAPOLIS
OFFICE OF ENVIRONMENTAL SERVICES

Rolls Royce Corporation
Plant 8 - 2001 South Tibbs Avenue
Plant 5 - 2355 South Tibbs Avenue
Indianapolis, Indiana 46241

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15, IC 13-17 and the Code of Indianapolis and Marion County, Chapter 511. 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 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Second Significant Source Modification: 097-26350-00311	
Issued by: Original Signed by Kyle Walker, Deputy Director Department of Public Works	Issuance Date: August 22, 2008

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and The Indianapolis Office of Environmental Services (OES).The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a manufacturing and testing source for aerospace engines.

Source Address:	Plant 8 - 2001 South Tibbs Ave., Indianapolis, Indiana 46241 Plant 5 - 2355 South Tibbs Ave., Indianapolis, Indiana 46241
Mailing Address:	2355 South Tibbs Ave., Indianapolis, Indiana 46241
Phone Number:	317-230-4141
SIC Code:	3724
County Location:	Marion
County Status:	Nonattainment for PM-2.5 Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD, and Nonattainment NSR Major Source, Section 112 of the Clean Air Act Nested Source with fossil fuel fired boilers (or combinations thereof) totaling more than two hundred fifty million (250,000,000) British thermal units per hour heat input, as 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

(a) Six (6) boilers identified below:

EU ID	Unit Identification	MMBtu/hr	Fuels Permitted to Use	Stack	Date constructed
0070-58	Babcock & Wilcox Boiler	44	Natural Gas, Landfill Gas, No. 2, No. 4 & No. 6 fuel oil	8-3	1953
0070-59	Babcock & Wilcox Boiler	44	Natural Gas, Landfill Gas, No. 2, No. 4, & No. 6 fuel oil	8-4	1953
0070-62	Combustion Engineering Boiler	244	Natural Gas, Landfill Gas, No. 2, No. 4, & No. 6 fuel oil	8-5	1969
0070-63	Combustion Engineering Boiler	244	Natural Gas, Landfill Gas, No. 2, No. 4, & No. 6 fuel oil	8-6	1969
0070-64	Combustion Engineering Boiler	244	Natural Gas, Landfill Gas, No. 2, No. 4, & No. 6 fuel oil	8-7	1969
0070-65	Combustion Engineering Boiler	244	Natural Gas, Landfill Gas, No. 2, No. 4, & No. 6 fuel oil	8-8	1969

(b) Five (5) gas turbines identified below:

Emission Unit ID No.	Unit Identification	Maximum Capacity, MMBtu/hr	Fuels Permitted to use	Stack No.	Date Constructed or last permitted
0070-76	Gas Turbine	51	Natural Gas, Landfill gas	5-22	1999
0070-79	Gas Turbine	48	Natural Gas, Landfill gas	8-79	1999
0070-80	Gas Turbine	68	Natural Gas, Landfill gas	8-80	1999
0070-81	Gas Turbine	80	Natural Gas, Landfill gas	8-81	pending
0070-71	Gas Turbine	35	Natural Gas	8-9	1999

(c) Nine (9) paint booths identified as emission units 0070-N56a and 0070-N56b, units 0070-10a, 0070-10b, 0070-10c, 0070-10d, 0070-84, 0070-85, and 0070-86, controlled by dry filters, exhausting out stacks identified as SN56 a & b, 5-10a, 5-10b, 5-10c, 5-10d, S-84, S-85, and S-86, respectively. Paint booths 0070-N56a, 0070-N56b, 0070-10a, 0070-10b, 0070-10c, and 0070-10d were installed prior to 1974 and modified in 1998 to comply with the aerospace NESHAPs. Paint booths 0070-84, 0070-85, and 0070-86 were installed in 2003.

(d) Facility-wide wipe cleaning operations.

(e) Degreasing operations, consisting of:

(1) Two (2) Open Top Vapor Degreasers, identified as emission units 0070-13 and 0070-31, using perchloroethylene as the solvent, exhausting inside the building and reconstructed in 1997.

(2) One (1) Open Top Vapor Degreasers, identified as emission units 0311-82 is permitted to use N-Propyl Bromide and Perchlorethylene as the solvent, exhausting inside the building and reconstructed in 2000.

(3) Portable Cold Cleaner Degreasing Tanks, used for degreasing parts, identified as emission unit 0070-12, using mineral spirits as the solvent and exhausting into the building.

(4) Spray cleaning booths, constructed prior to 1990, identified as emission unit 0070-14, using mineral spirits as the solvent and exhausting outside the building.

(5) One (1) stationary enclosed parts cleaning machine, Vacuum Degreaser Model V4-EX, identified as emission unit 24087, receiving approval to construct in 2006, using only Tetrachloroethylene as the solvent, with a cleaning capacity of 1.135 cubic meters, and exhausting inside the building.

(f) Miscellaneous sand and shot Blast Machines operations identified as:

(1) Emission unit 0070-08, shot blasting, each controlled by a baghouse, exhausting out stack 5-8, constructed in 1964.

(2) Emission unit 0070-N55, miscellaneous sanding and blasting, controlled by dust collector, exhausting out stack SN55, constructed in 1991.

(3) Emission unit 0070-74, sand blasting, controlled by a baghouse, exhausting out stack 8-18, constructed prior to 1969.

(g) Woodworking operations, prior to 1969, consisting of:

(1) Emission unit 0070-72, controlled by dust collector, exhausting out stack 8-16,

(2) Emission unit 0070-73, controlled by dust collector, exhausting out stack 8-17,

(3) Emission unit 0070-05, controlled by dust collector, exhausting out stack 5-8.

(h) Jet fueled turbine engines, constructed in 1955, identified as follows:

(1) Two (2) emission units identified as 0070-66, with a maximum operating capacity of 107 million British thermal units per hour each, exhausting out stacks identified as 8-11A and 8-11B;

(2) Twelve (12) emission units identified as 0070-67, with a maximum operating capacity of 27.2 million British thermal units per hour each, exhausting out stacks identified 8-13A

through M respectively.

(3) Ten (10) emission units identified as 0070-68, with a maximum operating capacity of 27.2 million British thermal units per hour each, exhausting out stacks identified as 8-12A through J.

(4) Four (4) emission units identified as 0070-69, with a maximum operating capacity of 27.2 million British thermal per hour units each, exhausting out stacks identified as 8-14A through D.

(i) Three (3) American Shack Heaters, identified as emission unit 0070-70, exhausting out stacks identified 8-6 A through C consisting of:

(1) Two (2) natural gas fired heaters, identified as 0070-70A and 0070-70B, having a maximum heating put capacity of 90.0 million British thermal units per hour each; and

(2) One (1) heater, identified as 0070-70C, capable of being fired with either natural gas or distillate fuel and has a maximum heat input capacity of 90 million British thermal units per hour.

(j) Fifty (50) Engine test stand cells identified below. These test stand cells are used to test engines manufactured at the source. The engines tested are fueled by either Jet fuel, Diesel Oil #2, or Natural Gas. All test stand cells were constructed prior to 1977, except test stand cells Emission Unit ID 0070-87 and 0070-88 that received approval to construct in 2007. Test cell 0070-N32 (824) was approved for modification in 2008.

Engine Test Cells - Plant 5				
Emission Unit ID No.	Engine Test Cell ID	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID
0070-N3	109	5000 brake horsepower	Jet fuel, Diesel	SN3
0070-N4	111	10000 pounds of thrust	Jet fuel	SN4
0070-N5	113	10000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN5
0070-N6	114	30000 pounds of thrust	Jet fuel	SN6
0070-N7	115	7000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN7
0070-N8	116	5000 brake horsepower	Jet fuel, Diesel	SN8
0070-N9	117	5000 brake horsepower	Jet fuel, Diesel	SN9
0070-N10	118	5000 brake horsepower	Jet fuel, Diesel	SN10
0070-N11	119	5000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN11
0070-N12	120	7000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN12
0070-N13	121	10000 brake horsepower	Jet fuel, Diesel	SN13
0070-N15	123	5000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN15
0070-N16	140	1500 brake horsepower	Jet fuel	SN16
0070-N17	141	750 brake horsepower	Jet fuel	SN17
0070-N18	142	800 brake horsepower	Jet fuel	SN18

Engine Test Cells - Plant 5				
Emission Unit ID No.	Engine Test Cell ID	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID
0070-N19	143	750 brake horsepower	Jet fuel	SN19
0070-N20	144	750 brake horsepower	Jet fuel	SN20
0070-N21	145	750 brake horsepower	Jet fuel	SN21
0070-N22	146	1500 brake horsepower	Jet fuel	SN22
0070-N23	147	1500 brake horsepower	Jet fuel	SN23
0070-N24	148	1500 brake horsepower	Jet fuel	SN24
0070-N25	149	650 brake horsepower	Jet fuel	SN25
0070-N27	152	1500 brake horsepower	Jet fuel	SN27
0070-87	133	715 brake horsepower, with maximum fuel flow capacity of 59 gal/hr	Jet fuel	S87
0070-88	135	715 brake horsepower, with maximum fuel flow capacity of 59 gal/hr	Jet fuel	S88

Engine Test Cells - Plant 8				
Emission Unit ID	Engine Test Cell	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID
0070-N34	843	10000 brake horsepower	Jet fuel	SN34(A,B)
0070-N35	861	9000 pounds of thrust	Jet fuel, Diesel	SN35
0070-N36	862	6000 brake horsepower	Jet fuel, Diesel	SN36
0070-N37	871	15000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN37(A,B)
0070-N38	872	9000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN38(A,B)
0070-N39	873	9000 brake horsepower	Jet fuel	SN39(A,B,C)
0070-N40	875	5000 brake horsepower	Diesel	SN40
0070-N41	881	10000 pounds of thrust	Jet fuel	SN41(A,B)
0070-N42	882	30000 pounds of thrust	Jet fuel	SN42(A,B,C,D,E,F)
0070-N43	883	2500 brake horsepower	Jet fuel	SN43(A,B)
0070-N44	884	2000 brake horsepower	Jet fuel	SN44
0070-N45	885	800 brake horsepower	Jet fuel, Diesel	SN45(A,B)
0070-N46	886	30000 pounds of thrust	Jet fuel, Diesel	SN46(A,B,C,D)

0070-N47	893	500 pounds of thrust	Diesel	SN47
0070-N48	894	350 brake horsepower	Diesel	SN48
0070-N29	821	10 pounds/second air	Jet fuel, Diesel & Natural Gas	SN29(A,B)
0070-N30	822	50 pounds/second air	Jet fuel, Diesel & Natural Gas	SN30(A,B)
0070-N31	823	60 pounds/second air	Jet fuel, Diesel & Natural Gas	SN31(A,B)
0070-N32	824	120 pounds/second air	Jet fuel, Diesel & Natural Gas	SN32(A,B)
0070-N33	826	25 pounds/second air	Jet fuel, Diesel	SN33(A,B)
0070-54	8137	10 pounds/second air	Jet fuel, Diesel & Natural Gas	SN54
0070-N54a	8137	12.5 MMBtu/hr	No. 2 Diesel fuel	Not Available
0070-N55	8126	0.5 pounds/second air	Jet fuel, Diesel & Natural Gas	Not Available
0070-N56	8128	1 pounds/second air	Jet fuel, Diesel & Natural Gas	Not Available

(k) One (1) engine test cell, identified as emission unit 00311-83. The engines tested in this test cell have a operating capacity of 10,000 pounds of thrust and are fired with Jet A fuel. A maximum of six engines per day can be tested in this test cell. Emissions from this test cell are exhausted out stack 5-83 and are not controlled. This emission unit was initially constructed prior to 1970 and modified in 1999.

(l) Chrome plating and anodizing line consisting of seven (7) chromium tanks (six hard chrome electroplating tanks and one anodizing tank), identified as 0070-99, with a common add-on air pollution control device with a maximum cumulative potential rectifier capacity of less than 60 million amp-hr/yr, controlled using a composite mesh pad system, identified as ID 253155, which exhausts out stack 5-99. This facility was installed October 6, 1997 consisting of:

(1) Six (6) hard chrome electroplating tanks 1-11, 1-12, 1-13, 1-14, 1-15, 1-16 and

(2) One (1) anodizing tank 2-20.

(m) Two (2) rental diesel-fired generators, identified as 0070-89, approved for installation in 2008, each with a maximum rated capacity of 540 HP or less. Any rental generators brought on site shall have a manufactured date prior to April 1, 2006.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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

(a) Storage vessels, containing volatile organic liquid, identified as tank 1 through 6 and 9 through 20 at plant 5 and tanks 1 through 5 at plant 8. Each tank has a capacity greater than 40 cubic meters but less than 75 cubic meters and a construction date after July 23, 1984. [40 CFR 60, Subpart Kb]

(b) Classified documents incinerator with a maximum rated capacity of 125 pounds per two hour cycle. [40 CFR 52, Subpart P] [326 IAC 4-2] [326 IAC 9-1]

(c) The following activities or categories of activities with individual HAP emissions not previously identified which have potential emissions greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP. [326 IAC 6-1]

(1) Stationary and portable welding, brazing, soldering and cutting operations

(2) Fuel and oil nozzle test stands

(3) Penetrant test

(4) Chemical milling and deoxidizing solution

(5) Air stripper at waste treatment plant

(6) Print shop operations

(7) All plating operations

(8) Powder coating

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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

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

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

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, T097-7238-00311, 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 and OES, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

B.4 Enforceability [326 IAC 2-7-7]

(a) 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 and OES, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

(b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by OES.

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ and OES, within a reasonable time, any information that IDEM, OAQ and OES 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. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ and OES copies of records required to be kept by this permit.

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

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

(a) Where specifically designated by this permit or required by an applicable requirement, any

application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) the "Responsible Official" is defined at 326 IAC 2-7-1(34).

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

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. 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 April 15 of each year to:

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

and

Office of Environmental Services
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

and

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

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

and

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

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

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

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

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

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

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

and

Office of Environmental Services
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A copy of the PMPs shall be submitted to IDEM, OAQ and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and OES. IDEM, OAQ and OES 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 or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

logs or other relevant evidence that describe the following:

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

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

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

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and OES 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 Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865
Office of Environmental Services phone: (317) 327-2234; fax: (317) 327-2274

(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 Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Office of Environmental Services
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

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

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

(A) A description of the emergency;

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

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 and OES may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

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

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

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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

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

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

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

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

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

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

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

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

the Clean Air Act.

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

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

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

(h) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determinations regarding this source:

None of the facilities listed in Section A, Emission Units and Pollution Control Equipment Summary are subject to the requirements of the following:

(A) 40 CFR Part 63, Subpart JJ, Wood Furniture Surface Coating NESHAPs does not apply to the maintenance coating operations, since they do not manufacture wood furniture.
(B) 40 CFR Part 63, Subpart KK, National Emission Standards for the Printing and Publishing Industry, does not apply to the print shop operations, since none of the operations is a publication rotogravure, product or packaging rotogravure, or a wide-web flexographic printing o peration.
(C) 326 IAC 8-2-12, Wood Surface Coating, since the maintenance coating operations do not surface coat wood furnishings.
(D) 326 IAC 8-1-6 does not apply to the printing and wood surface coating operations, since these operations were consyructed prior to January, 1980, and since each has a potential to emit less than 25 tons/year.
(E) 326 IAC 6-5, Fugitive Dust Control Plan does not apply to this source, since the potential to emit from fugitive dust sources does not exceed 25 tons/year.

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

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

(1) incorporated as originally stated,

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

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

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

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

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

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

and

Office of Environmental Services
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. 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.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

(1) That this permit contains a material mistake.

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

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

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

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

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and OES and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-

1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

and

Office of Environmental Services
Air Permits
2700 South Belmont Ave.
Indianapolis, IN 46221

(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, and OESon or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ and OES 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 in writing by IDEM, OAQ and OES any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12][40 CFR 72]

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

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

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

and

Office of Environmental Services
Air Permits
2700 South Belmont Ave.
Indianapolis, IN 46221

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request.

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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

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

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

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

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

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

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

(4) The Permittee notifies the:

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

and

Office of Environmental Services
Air Permits
2700 South Belmont Ave.
Indianapolis, IN 46221

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). 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 and OES in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

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

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

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

(3) Any change in emissions; and

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

B.21 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2] [326 IAC 2-3]

(a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

(b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2 and/or 326 IAC 2-3-2.

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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

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

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

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

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

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

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

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

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

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

and

Office of Environmental Services
Air Permits
2700 South Belmont Ave.
Indianapolis, IN 46221

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

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

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

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

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Opacity [326 IAC 5-1]

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:

(a) Opacity shall not exceed an average of thirty percent (30%) 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.2 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.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

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

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

C.5 Stack Height [326 IAC 1-7]

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

C.6 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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Office of Environmental Services
Air Enforcement
2700 South Belmont Ave.
Indianapolis, IN 46221

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 by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

C.7 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

and

Office of Environmental Services
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and OES 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.8 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, 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 Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Office of Environmental Services
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

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

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

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

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

C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

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

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on September 4, 1992.

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

C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(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;

(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 maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

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

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

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) (“Regulated pollutant which is used only for purposes of Section 19 of this rule”) from the source, for purposes of Part 70 fee assessment.

(b) The emission statement 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 and OES on or before the date it is due.

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

(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 or OES makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or OES within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

(c) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A), 40 CFR 51.165 (a)(6)(vi)(B), 40 CFR 51.166 (r)(6)(vi)(a), and/or 40 CFR 51.166 (r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq)) and/or 326 IAC 2-1-3(ll)) at an existing emissions unit, other than projects at a source with a Plant-wide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or IAC 2-3-1(mm)), the Permittee shall comply with the following:

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

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A) and/or 40 CFR 51.166 (r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

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

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

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

(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. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

and

Office of Environmental Services
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

(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, and OES on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit 097-7552-00315, 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.

(f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C- General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ and OES:

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

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

(g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

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

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

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

(4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

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

and

Office of Environmental Services
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

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

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

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

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) Six (6) boilers identified below:

Emission Unit ID No.	Unit Identification	Maximum Capacity, MMBtu/hr	Fuels Permitted to Use	Stack No.	Date Constructed or Reconstructed
0070-58	Babcock & Wilcox Boiler	44	Natural Gas, Landfill Gas, No. 2, No. 4 & No. 6 fuel oil	8-3	1953
0070-59	Babcock & Wilcox Boiler	44	Natural Gas, Landfill Gas, No. 2, No. 4 & No. 6 fuel oil	8-4	1953
0070-62	Combustion Engineering Boiler	244	Natural Gas, Landfill Gas, No. 2, No. 4 & No. 6 fuel oil	8-5	1969
0070-63	Combustion Engineering Boiler	244	Natural Gas, Landfill Gas, No. 2, No. 4 & No. 6 fuel oil	8-6	1969
0070-64	Combustion Engineering Boiler	244	Natural Gas, Landfill Gas, No. 2, No. 4 & No. 6 fuel oil	8-7	1969
0070-65	Combustion Engineering Boiler	244	Natural Gas, Landfill Gas, No. 2, No. 4 & No. 6 fuel oil	8-8	1969

(b) Five (5) gas turbines identified below:

Emission Unit ID No.	Unit Identification	Maximum Capacity, MMBtu/hr	Fuels Permitted to Use	Stack No.	Date Constructed
0070-76	Gas Turbine	51	Natural Gas, Landfill gas	5-22	1999
0070-79	Gas Turbine	48	Natural Gas, Landfill gas	8-79	1999
0070-80	Gas Turbine	68	Natural Gas, Landfill gas	8-80	1999
0070-81	Gas Turbine	80	Natural Gas, Landfill gas	8-81	pending
0070-71	Gas Turbine	35	Natural Gas	8-9	1999

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

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

D.1.1 Applicability [326 IAC 12-1-1][40 CFR 60, Subpart GG][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart GG.

D.1.2 Applicability [326 IAC 12-1-1][40 CFR 60, Subpart GG]

The emission standards contained in 40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines are applicable to the five emission units, identified as 0070-71, 0070-76, 0070-79, 0070-80, and 0070-81, when combusting natural gas and/or landfill gas.

D.1.3 Standards of Performance for Stationary Gas Turbines [326 IAC 12-1-1][40 CFR 60, Subpart GG]

(a) Pursuant to 40 CFR 60.332(a)(2), nitrogen oxides emissions shall not be discharged into the atmosphere from any stationary gas turbine in excess of STD derived from the equation below:

STD = 0.0075x(14.4)/Y + F

where:

STD = allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis)
Y = manufacturer=s rated heat rate at manufacturer=s rated peak load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.
F = NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(3); Pursuant to Emission Measurement Technical Information Center Guideline Document, ADetermination of Fuel-Bound Nitrogen@, Recommendation: F = 0 in 60.332(a)(2) equation;

and

(b) Pursuant to 40 CFR 60.333(b) any fuel combusted in any stationary gas turbine which contains sulfur shall not exceed a sulfur content of 0.8 percent by weight.

D.1.4 Sulfur Content [326 IAC 12-1-1][40 CFR 60, Subpart GG]

Pursuant to 40 CFR 60.334(b), the Permittee shall monitor sulfur content and nitrogen content of the fuel being fired in emission units 0070-71, 0070-76, 0070-79, 0070-80, and 0070-81.

(a) Pursuant to 40 CFR 60.334(b)(2) a substantiated custom schedule was approved by the US EPA Region V on June 1, 2001 via an Approval letter (AE-17J) RE: Alternative fuel monitoring NSPS 40 CFR Part 60, Subpart GG. The custom schedule is as follows:

(1) The Permittee is exempt from the nitrogen monitoring for both the landfill gas and the pipeline quality natural gas.

(2) The Permittee shall be required to perform semi-annual testing of sulfur content. Should any semi annual sulfur analysis indicate noncompliance with the standard in Subpart GG, the Permittee shall notify the U.S. EPA immediately and this custom schedule shall be reexamined.

(3) If there is a change in fuel supply, the Permittee shall notify the U.S. EPA of such change for re-examination of this schedule. A substantial change in fuel quality shall be considered as a change in fuel supply.

D.1.5 Oxides of Nitrogen (NOx) and Particulate Matter ten microns in aerodynamic diameter (PM10) emissions limits [326 IAC 2-7-5(1)] [326 IAC 2-2] [40 CFR 52.21]

Pursuant to condition 9 of CP-099-0311-01, issued on June 10, 1999 and amended by 097-11888-0311, issued August 17, 2000 the net increases of NOx and PM10 emissions from the modification are limited to less than the significance levels. The Permittee accepted emission limits on all units involved in the modification for NOx of 325.75 tons per year and PM10 of 130 tons per year to keep the net emissions of the modification below 40 tons per year. The following limits from CP-099-0311-01 and 097-11888-0311 apply:

(a) NOx limitations (based on all boilers and turbines, Emission Units 58, 59, 62, 63, 64, 65, 71, 76, 79, 80 and 81): The input of natural gas and natural gas equivalents to the equipment covered in this permit shall be limited to less than 6205 MMCF natural gas per twelve (12) month consecutive period with compliance determined at the end of each month. This usage limitation is equivalent to a potential to emit of less than 325.74 tons per year, which keeps net emissions from the 1999 modification below 40 tons per year.

(1) For the purposes of determining compliance every million cubic feet of natural gas shall be equivalent to the following:

Natural Gas Equivalents for Nitrogen Oxide Emissions					
Emission Units	MMCF per gal #4 oil	MMCF per gal #2 oil	MMCF per MMCF landfill gas	MMCF per MMCF natural gas	MMCF per gal #6 oil
Boilers (Emission Unit ID 0070-58 and 59)	0.00023	0.00023	N.A.	N.A.	0.00048
Boilers (Emission Unit ID 0070-62, 63, 64 and 65)	N.A.	0.00023	0.31928	N.A.	0.00060
Turbine (Emission Unit ID 0070-80)	N.A.	N.A.	0.8257	3.90000	N.A.
Turbine (Emission Unit ID 81)	N.A.	N.A.	0.34130	3.90000	N.A.
Turbines (Emission Unit ID 0070-71)	N.A.	N.A.	0.34130	4.50000	N.A.
Turbines (Emission Unit ID 0070-76, 79)	N.A.	N.A.	0.34130	6.50000	N.A.

and

(2) NOx emissions are limited to:

(A) Boilers (Emission Unit ID ## 0070-62, 63, 64 and 65) shall be limited to 0.1 lbs/MMBtu when burning natural gas;

(B) Boilers (Emission Unit ID 0070- 58, 59, 62, 63, 64 and 65) shall be limited to 0.175 lbs/MMBtu when burning #2 fuel oil;

(C) Boilers (Emission Unit ID 0070- 62, 63, 64 and 65) shall be limited to 0.058 lbs/MMBtu when burning landfill gas;

(D) Boilers (Emission Unit ID 0070-58 and 59) shall be limited to 0.175 lbs/MMBtu when burning #4 fuel oil;

(E) Boilers (Emission Unit ID 0070-58 and 59) shall be limited to 0.336 lbs/MMBtu when burning #6 fuel oil;

(F) Boilers (Emission Unit ID 0070-62, 63, 64 and 65)shall be limited to 0.447 lbs/MMBtu when burning #6 fuel oil;

(G) Turbines (Emission Unit ID 0070-71, 76, 79, 80 and 81) shall be limited to 0.062 lbs/MMBtu when burning landfill gas.

(H) Turbine (Emission Unit ID 0070-80) shall be limited to 0.15 lbs/MMBtu when burning landfill gas.

(I) Turbines (Emission Unit ID 0070-80 and 81) are limited to 0.390 lbs/MMBtu when combusting natural gas.

(J) Turbine (Emission Unit ID 0070-71) is limited to 0.450 lbs/MMBtu when combusting natural gas.

(K) Turbines (Emission Unit ID 0070-76 and 79) are limited to 0.650 lbs/MMBtu when combusting natural gas.

(b) PM10 limitation for Emission Unit ID 0070-58, 0070-59, 0070-62, 0070-63, 0070-64, 0070-65, 0070-71, 0070-76, 0070-79, 0070-80 and 0070-81: the input of No.4 oil and No. 4 oil equivalents shall be limited to 37,142,800 gallons of No.4 oil per twelve (12) month consecutive period with compliance determined at the end of each month.

(1) For the purposes of determining compliance every gallon of No.4 oil shall be equivalent to the following:

Fuel Oil Equivalents for PM-10 Emissions				
Emission Units	gal per gal #2 oil	gal per CF landfill gas	gal per CF natural gas	gal per gal #6 oil
Boilers (Emission Unit ID 0070-62, 63, 64 and 65)	0.280	0.00116	0.00088	2.60
Boilers (Emission Unit ID 0070- 58, 59)	0.280	N.A.	0.00088	2.60
Turbines (Emission Unit ID 0070-76, 79, 80 and 81)	N.A.	0.00132	0.00088	N.A.

and

(2) PM10 emissions are limited to:

(A) Boilers (Emission Unit ID 0070-01, 02, 03, 04, 62, 63, 64 and 65) shall be limited to 0.014 lbs/MMBtu when combusting landfill gas; and

(B) Turbines (Emission Unit ID 0070-76, 79, 80 and 81) shall be limited to 0.016 lbs/MMBtu when combusting landfill gas

D.1.6 Marion County PM Limitations [326 IAC 6-1-12]

(a) Pursuant to 326 IAC 6-1-12(a) (Nonattainment Area Particulate Limitations: Marion County), the Permittee shall comply with the following emission limitations for Particulate Matter (PM):

Source	NEDS Plant ID	Point Input ID	Process	Emission Limits	
				tons per year	Lbs/million Btu
Rolls Royce Corporation				130.0/yr	
	0311	02	Boilers 0070-58 and 0070-59		0.15
	0311	03	Boilers 0070-62 thru 0070-65		0.15

(b) Pursuant to 326 IAC 6-1-12(b) this source shall be considered in compliance with the tons per year emissions limitation established in 326 IAC 6-1-12(a) if within 5% of the emission limit.

(c) Pursuant to 326 IAC 6-1-12(f), the Permittee shall comply with the following:

(1) Boilers 0070-58, 0070-59, and 0070-62 thru 0070-65 shall use only #6 fuel oil, #4 fuel oil, #2 fuel oil, natural gas or landfill gas as fuel.

(2) Boilers 0070-58, 0070-59, and 0070-62 thru 0070-65 shall have the following limitations depending upon the fuel being used:

(A) When using #4 fuel oil, the amount used for the listed boilers collectively shall not exceed thirty-seven million one hundred forty-two thousand eight hundred (37,142,800) gallons per year based on a three hundred sixty-five (365) day rolling figure.

(B) When either #6 fuel oil, #2 fuel oil, natural gas or land fill gas is used, the limitation listed in clause (A) shall be adjusted as follows:

(i) When using #6 fuel oil, the gallons per year of #4 fuel oil shall be reduced by two and six-tenths (2.6) gallon used.

(ii) When using natural gas, the gallons per year of #4 fuel oil shall be reduced by eighty-eight hundred-thousandths (0.00088) gallon per cubic foot of natural gas burned.

(iii) When using #2 fuel oil, the gallons per year of #4 fuel oil shall be reduced by twenty-eight hundredths (0.28) gallon per gallon used.

(iv) When using landfill gas, the gallons per year of #4 fuel oil shall be reduced by one hundred sixteen hundred thousandths (0.00116) gallon per cubic foot of landfill gas burned.

D.1.7 PM Emissions Limitations [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a)(Particulate Limitations), particulate matter (PM) emissions from emission units 0070-71, 0070-76, 0070-79, 0070-80 and 0070-81 shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.1.8 Sulfur Dioxide Emission Limitation [326 IAC 7-4-2]

(a) Pursuant to 326 IAC 7-4-2(28), the sulfur dioxide emissions from Boilers 0070-58, 0070-59, and 0070-62 thru 0070-65 shall be limited as follows:

(1) Boilers 0070-58, 0070-59, and 0070-62 thru 0070-65 shall be allowed to burn Natural gas at any time.

(2) Babcock and Wilcox 0070-58 and 0070-59 and Combustion Engineering Boilers 0070-62 thru 0070-65 shall burn fuel oil with a sulfur content of two and one tenths (2.1) pounds per million Btu during periods when one of the following conditions are met:

(A) Fuel oil is burned in no more than three (3) Babcock and Wilcox Boilers and fuel oil is not burned in any Combustion Engineering Boilers.

(B) Fuel oil is burned in no more than two (2) Babcock and Wilcox Boilers and no more than two (2)Combustion Engineering Boilers

(C) Fuel oil is burned in no more than one (1) Babcock and Wilcox Boilers and no more than three (3) Combustion Engineering Boilers.

D.1.9 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for emission units 0070-58, 0070-59, and 0070-62 through 0070-65 when burning fuel oil.

Compliance Determination Requirements

D.1.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3-6] [326 IAC 3-7-4] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-2-1 and 326 IAC 3-7-4 or 326 IAC 3-6. the Permittee shall demonstrate that the sulfur dioxide emissions from boilers 0070-58, 0070-59, and 0070-62 thru 0070-65 do not exceed the pounds per million Btu heat input limits in condition D.1.8. Compliance shall be determined utilizing one of the following options.

(a) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;

(b) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(1) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(2) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

(c) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from 0070-58, 0070-59, and 0070-62 thru 0070-65, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a), (b), or (c) above shall not be refuted by evidence of compliance pursuant to the other method.

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

(a) Within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, in order to demonstrate compliance with Condition D.1.5, the Permittee shall perform NOx testing utilizing methods approved by the Commissioner:

(1) emission units 0070-76, 0070-79, 0070-80, and 0070-81 shall be tested when combusting landfill gas, and

(2) emission unit 0070-71, 0070-76, 0070-79, 0070-80, and 0070-81 shall be tested when combusting natural gas.

Testing shall be conducted in accordance with Section C- Performance Testing.

(b) Within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, in order to demonstrate compliance with Condition D.1.5, the Permittee shall perform PM-10 testing utilizing methods approved by the Commissioner as follows:

(1) emission units 0070-62 when combusting landfill gas, and

(2) emission unit 0070-76 when combusting landfill gas.

PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

(c) After the initial performance tests outlined in (a) and (b), this permit does not require the Permittee to perform repetitive testing on these units. However, IDEM or OES may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or OES, compliance with the PM and/or NOx limits specified in this permit shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.12 PM, PM-10, and NOx Emissions

Compliance with Condition D.1.5 and D.1.6 shall be demonstrated within 30 days of the end of each month based on the amount of fuel combusted for the most recent 365 day period.

D.1.13 Sulfur Content

Pursuant to 40 CFR 60.335(d) and 40 CFR 60.335(e), compliance with the sulfur content standard in 60.333(b) and the sulfur content monitoring requirements in 60.334(b) shall be determined as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference -- see 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

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

D.1.14 Visible Emissions Notations

(a) Visible emission notations of the emission units 0070-58, 0070-59, 0070-62, 0070-63, 0070-64 and 0070-65 stack exhausts shall be performed once per day during normal daylight operations when burning fuel oil and hazardous waste. 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 2-7-5(3)] [326 IAC 2-7-19]

D.1.15 Record Keeping Requirements

(a) To document compliance with condition D.1.6, the Permittee shall maintain records of the day and quantity of each type of fuel used in boilers, identified as emission units 0070-58, 0070-59, 0070-62, 0070-63, 0070-64, and 0070-65, and its #4 fuel oil equivalence for PM.

(b) To document compliance with Condition D.1.8 and D.1.10, the Permittee shall maintain records in accordance with (1) through (6) below.

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

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

(3) To certify compliance when burning natural gas only, the Permittee shall maintain records of fuel used.

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

(4) Fuel supplier certifications;

(5) The name of the fuel supplier; and

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

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

(c) To document compliance with condition D.1.5, the Permittee shall maintain records of the day, amount and type of fuel combusted in emission units 0070-58, 0070-59, 0070-62, 0070-63, 0070-64 and 0070-65 and the natural gas equivalence for NOx and PM-10.

(d) To document compliance with condition D.1.3 and D.1.4, the Permittee shall, maintain records of semi-annual sulfur sampling when natural gas and/or landfill gas are combusted in emission Unit ID 0070-71, 0070-76, 0070-79, 0070-80 and 0070-81.

(e) To document compliance with Condition D.1.14, the Permittee shall maintain records of daily visible emission notations of the stack exhaust for emission units 0070-58, 0070-59, 0070-62, 0070-63, 0070-64, and 0070-65 when combusting fuel oil once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.16 Reporting Requirements

(a) The natural gas and landfill gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or its equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas and landfill gas fired boiler certification does require the certification by the responsible official as defined by 326 IAC 2-7-1(34).

(b) A quarterly summary of the information to document compliance with conditions D.1.5, D.1.6, and D.1.8, shall be submitted to the addresses listed in Section C - General Reporting Requirements of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(c) Nine (9) paint booths identified as emission units 0070-N56a and 0070-N56b, units 0070-10a, 0070-10b, 0070-10c, 0070-10d, 0070-84, 0070-85, and 0070-86, controlled by dry filters, exhausting out stacks identified as SN56 a & b, 5-10a, 5-10b, 5-10c, 5-10d, S-84, S-85, and S-86, respectively. Paint booths 0070-N56a, 0070-N56b, 0070-10a, 0070-10b, 0070-10c, and 0070-10d were installed prior to 1974 and modified in 1998 to comply with the aerospace NESHAPs. Paint booths 0070-84, 0070-85, and 0070-86 were installed in 2003.

(d) Facility-wide wipe cleaning operations.

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

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

D.2.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63.743(a)(4) through (a)(10) and in Table 1 of 40 CFR 63, Subpart GG.

D.2.2 Applicability [326 IAC 20-15-1] [40 CFR 63, Subpart GG]

The provisions of 40 CFR 63, Subpart GG and 326 IAC 20-15-1 which incorporates by reference 40 CFR 63, Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facilities, apply to the facility described in this section.

D.2.3 Standards for Cleaning Operations [40 CFR 63.744]

(a) Pursuant to 40 CFR 63.744 (a), the Permittee shall comply with the housekeeping measures of 40 CFR 63.744(a), paragraphs (1) through (3) below, unless the cleaning solvent used is identified in Table 1 of 40 CFR 63.744, or contains HAP or VOC below the de-minimis levels specified in 63.741(f).

(1) Pursuant to 40 CFR 63.744(a)(1) place cleaning solvent-laden cloth, paper, or other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times, except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton tipped swabs used for very small cleaning operations are exempt from this requirement.

(2) Pursuant to 40 CFR 63.744(a)(2) store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.

(3) Pursuant to 40 CFR 63.744(a)(3) conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.

(b) Pursuant to 40 CFR 63.744(b) (Hand-wipe cleaning), the Permittee shall use cleaning solvents that meet (1) or (2) below. Cleaning solvents that contain HAP and VOC below the de minimis levels specified in 63.741(f) and cleaning operations described in 40 CFR 63.744(e) are exempt from these requirements.

(1) Pursuant to 40 CFR 63.744(b)(1) meet one of the composition requirements in Table 1 of 40 CFR 63.744; or

(2) Pursuant to 40 CFR 63.744(b)(2) have a composite vapor pressure of 45 mm Hg (24.1 in H_2O) or less at 20°C (68°F).

(c) Pursuant to 40 CFR 63.744(c) (Spray gun cleaning) when spray guns are cleaned, the Permittee shall use one of the techniques listed below in paragraphs (1) through (3) or their equivalent. Cleaning solvents that contain HAP and VOC below the de minimis levels specified in 63.741(f) are exempt from these requirements.

(1) Pursuant to 40 CFR 63.744(c)(1)*, Enclosed system,* clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing solvent through the gun.

(2) Pursuant to 40 CFR 63.744(c)(2)*, Nonatomized cleaning*, clean the spray gun by placing cleaning solvent in the pressure pot and forcing the solvent through the spray gun with the atomizing cap in place. No atomizing air is to be used. Direct the cleaning solvent from the spray gun into a vat, drum or other waste container that is closed when not in use.

(3) Pursuant to 40 CFR 63.744(c)(3)*, Disassembled spray gun cleaning*, clean the disassembled spray gun components by hand in a vat that shall remain closed at all times except when in use or by soaking in a vat that shall remain closed during the soaking period and when not inserting or removing components.

(d) Pursuant to 40 CFR 63.744(d) (Flush Cleaning), the Permittee shall empty the used cleaning solvent each time aerospace parts or assemblies, or components of a coating unit (with the exception of spray guns) are flush cleaned into an enclosed container or collection system that is kept closed when not in use or into a system with equivalent emission control. This excludes those flush cleaning operations in which Table 1 or semi-aqueous cleaning solvents are used.

(e) The requirements of 40 CFR 63.745 do not apply to the primer and topcoat operations since the Permittee is only using specialty coatings, adhesives, adhesive bonding primers, or sealants as defined in 40 CFR 63.741(f).

D.2.4 Storage and Handling of Waste [326 IAC 20-15-1] [40 CFR 63, Subpart GG]

Pursuant to 40 CFR 63.748 and 63.741(e), unless exempt under 40 CFR 63.741(e), the Permittee shall conduct the handling and transfer of the waste that contains HAP to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.

D.2.5 Spray Gun Cleaning and Coating Operations [326 IAC 20-15-1] [40 CFR 63, Subpart GG]

(a) The Permittee shall comply with the Spray gun cleaning Enclosed system inspection and repair requirements below.

(1) Pursuant to 40 CFR 63.751(a) visually inspect seals and other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month, while operating.

(2) Pursuant to 40 CFR 63.744(c)(1)(ii) if a leak is found, repairs shall be made as soon as practicable, but no later than 15 days from detection. If the leak is not repaired by the 15th day after detection, remove the cleaning solvent and shut down the enclosed cleaning system until the leak is repaired.

D.2.6 Primer and Topcoat Application Operations [326 IAC 20-15-1] [40 CFR 63, Subpart GG]

(a) All primers and topcoats shall be applied using one or more of the application techniques specified below unless the application is exempted in 40 CFR 63.745(f)(3) and shall be operated according to company procedures, and/or the manufacturers specifications, whichever is most stringent, at all times:
- (1) Flow/curtain coat application;
- (2) Dip coat application;
- (3) Roll coating;
- (4) Brush coating;
- (5) Cotton-tipped swab application;
- (6) Electrodeposition (dip) coating;
- (7) High volume low pressure (HVLP) spraying;
- (8) Electrostatic spray application; or
- (9) Other coating application methods that achieve emission reductions equivalent to HVLP or electrostatic spray application methods, as determined according to the requirements in 40 CFR 63.750(i).

(b) Pursuant to 40 CFR 63.745(g)(1), primer or topcoat applications that are spray applied and contain inorganic HAP shall be applied in a booth or hangar in which air flow is directed downward onto or across the part of assembly being coated and exhausted through one or more outlets.

(c) Pursuant to 40 CFR 63.745(g)(2), the Permittee must control the air stream from this operation by passing the air stream through a dry particulate filter system certified using the methods described in 40 CFR 63.750(o) to meet or exceed the efficiency data points in Table 1 and 2 of 40 CFR 63.745(g)(2). Pursuant to 40 CFR 63.745(g)(2)(iv), the following requirements shall be met for each dry particulate system used to comply with the primer and top coat inorganic HAP emissions standards in 40 CFR 63.745(g)(2)(i)(A):
- (1) maintain the system in good working order;
- (2) install a differential pressure gauge across the filter banks;
- (3) continuously monitor pressure drop across the filter and read and record the pressure drop across the filter once per shift; and
- (4) take corrective action when the pressure drop exceeds or falls below the filter manufacturer's recommended limit(s).

(d) Pursuant to 40 CFR 63.745(g)(3), the Permittee shall comply with the requirements below.
- (1) If the pressure drop is outside of range, the permittee shall shut down the operation immediately and take corrective action.
- (2) If the booth maintenance procedures for the filter system have not been performed as scheduled, shut down the operation immediately and take corrective action.
- (3) The operation shall not be resumed until the pressure drop is returned within the specified range.

(e) The requirements of 40 CFR 63.745(g)(1) through (3) do not apply to the situations listed in 40 CFR 63.745(g)(4).

D.2.7 Control Device Requirements [326 IAC 20-15-1] [40 CFR 63, Subpart GG]

Pursuant to 40 CFR 63.743(b) dry particulate filter systems operated per the manufacturer's instructions are exempt from a startup, shutdown, and malfunction plan.

D.2.8 Compliance Monitoring Requirements for Aerospace Manufacturing and Rework Facilities [326 IAC 20-15] [40 CFR 63.751, Subpart GG]

The compliance monitoring requirements of 40 CFR 63.751 are applicable to the cleaning operations and dry particulate filter system. The Permittee shall perform monthly visual inspection requirements for

enclosed spray gun cleaners pursuant to 40 CFR 63.751(a). The Permittee shall also continuously monitor, read and record the pressure drop once per shift pursuant to 40 CFR 63.751(c).

D.2.9 VOC Emissions [326 IAC 8-2-9]

Any change or modification to the facilities listed below which may increase the actuals before add-on controls shall obtain prior approval from the Office of Environmental Services (OES) and Office of Air Quality (OAQ). Current equipment operations are as follows:

(a) paint booths identified as, N56a and N56b, VOC actual emissions before add-on controls of less than 15 pounds of VOC per day each; and

(b) paint booths identified as, 0070-10a, 0070-10b, 0070-10c, 0070-10d, 0070-84, 0070-85, and 0070-86, VOC actual emissions before add-on controls of less than 15 pounds of VOC per day each.

Compliance with this condition shall make the Miscellaneous Metal Parts Rule 326 IAC 8-2-9 not applicable.

D.2.10 Particulate Matter [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (formerly 326 IAC 6-1-2(a)), the particulate matter (PM) emissions from each paint booth, identified as emission units 56Na, 56Nb, 0070-10a, 0070-10b, 0070-10c, 0070-10d, 0070-84, 0070-85, and 0070-86 shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

D.2.11 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the dry filters and parametric monitoring associated with emission units N56a, N56b, 0070-10a, 0070-10b, 0070-10c, 0070-10d, 0070-84, 0070-85, and 0070-86.

Compliance Determination Requirements

D.2.12 Compliance Testing and Procedures for Aerospace Manufacturing and Rework Facilities [326 IAC 20-15] [40 CFR 63.750, Subpart GG]

The compliance test methods and procedures of 40 CFR 63.750 are to be used for demonstrating compliance with the cleaning operations. The specific requirements include the following:

(a) The composition and vapor pressure requirements for cleaning operations shall be determined by the test methods and procedures specified in 40 CFR 63.750(a) and (b).

(b) Dry particulate filters used to comply with 40 CFR 63.745(g)(2) must be certified by the filter manufacturer or distributor, paint/depainting booth supplier, and/or the facility owner or operator using method 319 in appendix A of subpart A of this part, to meet or exceed the efficiency data points found in Tables 1 and 2, or 3 and 4 of 40 CFR 63.745 for existing or new sources respectively as outlined in 40 CFR 63.750(o).

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

D.2.13 Record Keeping Requirements

(a) Pursuant to 40 CFR 63.752(a) and to demonstrate compliance with D.2.2, the Permittee shall fulfill all recordkeeping requirements specified in 40 CFR 63.10 (a), (b), (d), and (f).

(b) Pursuant to 40 CFR 63.752(b)(1) *Cleaning Operations:* and to demonstrate compliance with D.2.2, record the following for each cleaning solvent used for the affected cleaning operations:
   (1) Name of the product;
   (2) The vapor pressure; and
   (3) Documentation showing the organic HAP constituents.

(c) Pursuant to 40 CFR 63.752(b)(2) *Hand-wipe Cleaning Operations*: and to demonstrate compliance with D.2.2, record the following for each cleaning solvent used in hand wipe cleaning operations that complies with the composition requirements in 40 CFR 63.744(b)(1) or for semi-aqueous cleaning solvent used for flush cleaning operations:

(1) name of each cleaning solvent used;
(2) all data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and
(3) annual records of the volume of each solvent used, from facility purchase or usage records.

(d) Pursuant to 40 CFR 63.752(b)(3) and to demonstrate compliance with D.2.2, for each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in 40 CFR 63.744(b)(1), but does comply with the vapor pressure requirements in 40 CFR 63.744(b)(2):

(1) The name of each cleaning solvent used;
(2) The composite vapor pressure of each cleaning solvent used;
(3) All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and
(4) The amount (in gallons) of each cleaning solvent used each month at each operation.

(e) Pursuant to 40 CFR 63.752(b)(5) and to demonstrate compliance with D.2.2, record the following information for each leak identified from enclosed spray gun cleaners

(1) source identification; and
(2) date leak was discovered and repaired

(f) Pursuant to 40 CFR 63.752(d) *Primer and topcoat application operations--inorganic HAP emissions* and to demonstrate compliance with D.2.2, record the pressure drop across the dry filter system once each shift during which coating operations occur. The acceptable limit(s) of pressure drop, as specified by the filter manufacturer should be included in the log.

(g) To document compliance with Condition D.2.8, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily and shall be complete and sufficient to establish compliance with Condition D.2.8.

(1) The VOC content of each coating material and solvent used.
(2) The amount of coating material and solvent less water 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 coating and those used as cleanup solvents.
(3) The weight of VOCs input each day.

(h) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.14 Reporting Requirements

(a) The Permittee shall submit a report that identifies the following information semi-annually unless otherwise specified.

(1) Pursuant to 40 CFR 63.753(b) Cleaning operation
    (A) Any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation
    (B) A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in Sec. 63.744(b)(1).
    (C) Any instance where a noncompliant spray gun cleaning method is used

(D) Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days; and

(E) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. The Permittee shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

(2) Pursuant to 40 CFR 63.753(c) *Primer and topcoat application operations*

(A) All times when a primer or topcoat application operation was not immediately shut down when the pressure drop across a dry particulate filter system was outside the limit specified by the filter manufacturer

(B) If the operations have been in compliance for the semiannual period, a statement that the operations have been in compliance with the applicable standards; and

(C) Annual reports listing the number of times the pressure drop for each dry filter system was outside the limit specified by the filter manufacturer.

(b) Pursuant to 40 CFR 63.9(j) any change in the information provided under 40 CFR 63.9 shall be reported to IDEM OAQ and OES in writing within 15 calendar days after the change.

(c) All reports shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the calendar quarter being reported.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(e) Degreasing operations, consisting of:

(1) Two (2) Open Top Vapor Degreasers, identified as emission units 0070-13 and 0070-

(2) One (1) Open Top Vapor Degreasers, identified as emission units 0311-82 is

(3) Portable Cold Cleaner Degreasing Tanks, used for degreasing parts, identified as

(4) Spray cleaning booths, constructed prior to 1990, identified as emission unit 0070-14, using mineral sprits as the solvent and exhausting outside the building.

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

D.3.1 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to emission units 0070-13, 0070-31, and 0311-82, except when otherwise specified in 40 CFR Part 63, Subpart T.

D.3.2 Applicability [326 IAC 20-6-1] [40 CFR Part 63, Subpart T]

Facilities identified as 0070-13, 0070-31, and 0311-82 are subject to 40 CFR Part 63, Subpart T, (Halogenated Solvent Cleaning NESHAP), which is incorporated by reference as 326 IAC 20-6-1. Each of the following conditions apply to 0070-13, 0070-31, and 0311-82 except when otherwise specified.

D.3.3 Halogenated Solvent Cleaning NESHAP [326 IAC 20-6-1] [40 CFR Part 63, Subpart T]

(a) Pursuant to 40 CFR 63.463(a) each cleaning machine shall comply with the design requirements listed below:

(1) Each cleaning machine shall have an idling and downtime mode cover, as described in 40 CFR 63.463(d)(1)(i), that may be readily opened or closed, that completely covers the cleaning machine openings when in place, and is free of cracks, holes, and other defects;

(2) Each cleaning machine shall have a freeboard ratio of 0.75 or greater;

(3) Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts;

(4) Each vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils;

(5) Each vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser;

(6) Each vapor cleaning machine shall have a primary condenser; and

(7) Each cleaning machine that uses a lip exhaust shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of 40 CFR 63.463(e)(2)(vii).

(b) Pursuant to 40 CFR 63.463(b) each batch vapor cleaning machine comply with the requirements listed below:

(1) Pursuant to 40 CFR 63.463(b)(1)(i), emission units 0070-13 and 0311-82 shall employ the control combination of a freeboard refrigeration device and a freeboard ratio of 1.0.

(2) Pursuant to 40 CFR 63.463(b)(2)(i), emission unit 0070-31 shall employ the control combination of a freeboard refrigeration device, reduced room draft, freeboard ratio of 1.0.

(c) Pursuant to 40 CFR 63.463(d) each cleaning machine shall meet all of the work and operational practice requirements, for 0070-13, 0070-31, and 0311-82, listed below:

(1) Cover(s) to each solvent cleaning machine shall be in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) to not be in place.

(2) The parts baskets or the parts being cleaned in the cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.

(3) Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air.

(4) Parts shall be oriented so that the solvents drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine unless an equally effective approach has been approved by the commissioner.

(5) Parts baskets or parts shall not be removed from any solvent cleaning machine until dripping has stopped.

(6) During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater.

(7) During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.

(8) When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leak proof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.

(9) Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the commissioner=s satisfaction to achieve the same or better results as those recommended by the manufacturer.

(10) Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in appendix B of 40 CFR 63, if requested during an inspection by the commissioner.

(11) Waste solvents, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.

(12) Sponges, fabric, wood, and paper products shall not be cleaned.

(d) Pursuant to 40 CFR 63.463(e) an exceedance has occurred if the following requirements are not met:

(1) For Emission Unit 0070-31, if a reduced room draft is used to comply, the Permittee must establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in 40 CFR 63.466(d).

(2) An exceedance occurs if the requirements, listed below, have not been met and are not corrected within 15 days of detection. Adjustments or repairs shall be made to the solvent cleaning system or control immediately upon adjustment or repair and demonstrated to be within required limits.

(A) If a freeboard refrigeration device is used to comply with these standards, the owner or operator shall ensure that the chilled air blanket temperature (in deg.F), measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point.

(B) For Emission Unit 0070-31, if a reduced room draft is used to comply, the Permittee shall ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at any time as measured using the procedures in 40 CFR 63.466(d).

D.3.4 Halogenated Solvent Cleaning NESHAP [326 IAC 20-6-1] [40 CFR Part 63, Subpart T]

(a) Pursuant to 40 CFR 63.466(a) and (a)(1), monitoring of equipment standards shall be conducted on a weekly basis using a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode for the freeboard refrigeration device.

(b) Pursuant to 40 CFR 63.466(b) and (b)(1) the Permittee shall conduct monthly visual inspection to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects and record the results for the control devices

(c) Pursuant to 40 CFR 63.466(c) and (c)(1) through (c)(4), the permittee shall monitor hoist speed monthly or quarterly monitoring, if one year of compliance without an exceedance is demonstrated. Monitoring shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).

D.3.5 Degreasing Operations [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the Permittee shall ensure that the following control equipment requirements are met, unless more stringent requirements are applicable under 326 IAC 8-3-5 or 326 IAC 20-6 and 40 CFR 63 Subpart T:

(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 operation 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.3.6 Degreasing Operations [326 IAC 8-3-3]

Pursuant to 326 IAC 8-3-3 (Open Top Vapor Degreasing Operations) the Permittee shall ensure that the following control equipment requirements are met, unless more stringent requirements are applicable under 326 IAC 8-3-6 or 326 IAC 20-6 and 40 CFR 63 Subpart T:

(a) Equip the open top vapor degreaser with a cover that can be opened and closed easily without disturbing the vapor zone;
(b) Keep the cover closed at all times except when processing workloads through the degreaser;
(c) Minimize solvent carry-out by:
  (1) Racking parts to allow complete drainage;
  (2) Moving parts in and out of the degreaser at less than eleven (11) feet per minute;
  (3) Degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
  (4) Tipping out any pools of solvent on the cleaned parts before removal;
  (5) Allowing parts to dry within the degreaser for at least fifteen (15) seconds or until visually dry;
(d) Not degrease porous or absorbent materials, such as cloth, leather, wood or rope;
(e) Not occupy more than half of the degreaser=s open top area with the workload;
(f) Not load the degreaser such that the vapor level drops more than fifty percent (50%) of the vapor depth when the workload is removed;
(g) Never spray above the vapor level;
(h) Repair solvent leaks immediately, or shut down the degreaser;
(i) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;
(j) Not use workplace fans near the degreaser opening;
(k) Not allow visually detectable water in the solvent exiting the water separator; and
(l) Provide a permanent, conspicuous label summarizing the operating requirements.

D.3.7 Degreasing Operations [326 IAC 8-3-5]

Pursuant to 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control) the Permittee shall ensure the following requirements are met, unless more stringent requirements are applicable under 326 IAC 8-3-2 or 326 IAC 20-6 and 40 CFR 63 Subpart T:

(a) The Permittee shall ensure that the following operating 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 (38°C) (one hundred degrees Fahrenheit (100°F));

    (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 (38°C) (one hundred degrees Fahrenheit (100°F)), 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 (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120°F)):

(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 of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(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 percent (20%) of the waste solvent by weight could evaporate.

D.3.8 Degreasing Operations [326 IAC 8-3-6]

Pursuant to 326 IAC 8-3-6 (Open top vapor degreaser operation and control requirements), for open top vapor degreasers existing as of July 1, 1990, emission units 0070-13, 0070-31, and 0311-82 the Permittee shall ensure that the following control equipment requirements are met:

(a) The Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover that can be opened and closed easily without disturbing the vapor zone.

(2) Equip the degreaser with the following switches:

(A) A condenser flow switch and thermostat which shuts off sump heat if condenser coolant stops circulating or becomes too warm.

(B) A spray safety switch which shuts off spray pump if the vapor level drops more than ten (10) centimeters (four (4) inches).

(3) Equip the degreaser with a permanent, conspicuous label which lists the operating requirements.

(4) Equip the degreaser with one (1) of the following control devices:

(A) A freeboard ratio of seventy-five hundredths (0.75) or greater and a powered cover if the degreaser opening is greater than one (1) square meter (ten and eight-tenths (10.8) square feet).

(B) A refrigerated chiller.

(C) An enclosed design in which the cover opens only when the article is actually entering or exiting the degreaser.

(D) A carbon adsorption system with ventilation which, with the cover open, achieves a ventilation rate of greater than or equal to fifteen (15) cubic meters per minute per square meter (fifty (50) cubic feet per minute per square foot) of air to vapor interface area and an average of less than twenty-five (25) parts per million of solvent is exhausted over one (1) complete adsorption cycle.

(E) Other systems of demonstrated equivalent or better control as those outlined in clauses (A) through (D). Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) The Permittee shall ensure that the following operating requirements are met:

(1) Keep the cover closed at all times except when processing workloads through the degreaser.

(2) Minimize solvent carryout emissions by:

(A) Racking articles to allow complete drainage;

(B) Moving articles in and out of the degreaser at less than three and three-tenths (3.3) meters per minute (eleven (11) feet per minute);

(C) Degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;

(D) Tipping out any pools of solvent on the cleaned articles before removal; and

(E) Allowing articles to dry within the degreaser for at least fifteen (15) seconds or until visually dry.

(3) Prohibit the entrance into the degreaser of porous or absorbent materials such as, but not limited to, cloth, leather, wood, or rope.

(4) Prohibit occupation of more than one-half (1/2) of the degreaser's open top area with the workload.

(5) Prohibit the loading of the degreaser to the point where the vapor level would drop more than ten (10) centimeters (four (4) inches) when the workload is removed.

(6) Prohibit solvent spraying above the vapor level.

(7) Repair solvent leaks immediately or shut down the degreaser if leaks cannot be repaired immediately.

(8) 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.

(9) Prohibit the exhaust ventilation rate from exceeding twenty (20) cubic meters per minute per square meter (sixty-five (65) cubic feet per minute per square foot) of degreaser open area unless a greater ventilation rate is necessary to meet Occupational Safety and Health Administration requirements.

(10) Prohibit the use of workplace fans near the degreaser opening.

(11) Prohibit visually detectable water in the solvent exiting the water separator.

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

D.3.9 Record Keeping Requirements

(a) Pursuant to 40 CFR 63.467(a) the Permittee shall maintain records for emission units, 0070-13, 0070-31, and 311-82, in written or electronic form for the life time of the machine as listed below:

(1) Owners=s manuals or, if owners manual is not available, written maintenance and operating procedures, for the solvent cleaning machine and control equipment.

(2) The date of installation of the solvent cleaning machine and all of its control devices.

(3) Records of the halogenated HAP solvent content for each solvent used in a solvent cleaning machine subject to 40 CFR 63, Subpart T.

(b) Pursuant to 40 CFR 63.467(b) the Permittee shall maintain records for emission units 0070-13, 0070-31, and 311-82, in written or electronic form for a period of 5 years as listed below:

(1) The results of control device monitoring required under 40 CFR63.466.

(2) Information on the actions taken to comply with 40 CFR63.463(e). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.

(3) Estimates of annual solvent consumption for each solvent cleaning machine.

D.3.10 Reporting Requirements

(a) Pursuant to 40 CFR 63.468(f) the Permittee shall submit, for 0070-13, 0070-31, and 311-82, an annual report by February 1 of each year following the one for which the reporting is being made. This report shall include the requirements as follows:

(1) A signed statement from the facility owner or his designee stating that , AAll operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in 40 CFR63.463(d)(10).@

(2) An estimate of solvent consumption for each solvent cleaning machine during the reporting period.

(b) Pursuant to 40 CFR 63.468(h), the Permittee shall submit an exceedance report for emission units 0070-13, 0070-31, and 311-82 to the US EPA, IDEM and OES semiannually except when, the Administrator of the US EPA determines on a case by case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or an exceedance occurs. Once an exceedance has occurred the Permittee shall follow a quarterly reporting format until a request to reduce reporting frequency under paragraph 40 CFR 63.468(i) is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the applicable information as given below:

(1) Information on the actions taken to comply with 40 CFR63. 463(e). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.

(2) If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.

(3) If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

(c) A summary of the information to document compliance with this Condition shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, and to the following address:

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

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(f) Miscellaneous sand and shot blast machines operations identified as:

(1) Emission unit 0070-08, shot blasting, each controlled by a baghouse, exhausting out stack 5-8, constructed in 1964.

(2) Emission unit 0070-N55, miscellaneous sanding and blasting, controlled by dust collector, exhausting out stack SN55, constructed in 1991.

(3) Emission unit 0070-74, sand blasting, controlled by a baghouse, exhausting out stack 8-18, constructed prior to 1969.

(g) Woodworking operations, prior to 1969, consisting of:

(1) Emission unit 0070-72, controlled by dust collector, exhausting out stack 8-16,

(2) Emission unit 0070-73, controlled by dust collector, exhausting out stack 8-17,

(3) Emission unit 0070-05, controlled by dust collector, exhausting out stack 5-8.

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

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

D.4.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (formerly 326 IAC 6-1-2(a)), particulate matter (PM) emissions from emission units 0070-05, 0070-72, 0070-73, 0070-08, 0070-N55, and 0070-74 shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.4.2 General Operation

Any change or modification which may increase potential emissions from the equipment covered in this permit shall obtain prior approval from the Office of Air Quality (OAQ).

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(h) Jet fueled turbine engines, constructed in 1955, identified as follows:

(1) Two (2) emission units identified as 0070-66, with a maximum operating capacity of 107 million British thermal units per hour each, exhausting out stacks identified as 8-11A and 8-11B;

(2) Twelve (12) emission units identified as 0070-67, with a maximum operating capacity of 27.2 million British thermal units per hour each, exhausting out stacks identified 8-13A through M respectively.

(3) Ten (10) emission units identified as 0070-68, with a maximum operating capacity of 27.2 million British thermal units per hour each, exhausting out stacks identified as 8-12A through J.

(4) Four (4) emission units identified as 0070-69, with a maximum operating capacity of 27.2 million British thermal per hour units each, exhausting out stacks identified as 8-14A through D.

(i) Three (3) American Shack Heaters, identified as emission unit 0070-70, exhausting out stacks identified 8-6A through C consisting of:

(1) Two natural gas fired heaters having a maximum heating put capacity of 90.0 million British thermal units per hour each; and

(2) One of the heater is capable of being fired with either natural gas or distillate fuel and has a maximum heat input capacity of 90 million British thermal units per hour.

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

Facility Description [326 IAC 2-7-5(15)]

(j) Fifty (50) Engine Test Stand Cells identified below. These test stand cells are used to test engines manufactured at the source. The engines tested are fueled by either Jet fuel, Diesel #2 or Natural Gas. All test stand cells except 0070-87 and 0070-88 were constructed prior to 1977; test stand cells 0070-87 and 0070-88 received approval to construct in 2007.

Emission Unit ID No.(s)	Engine Test Cell ID No.(s)	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID No.
Engine Test Cells - Plant 5				
0070-N3	109	5000 brake horsepower	Jet fuel, Diesel	SN3
0070-N4	111	10000 pounds of thrust	Jet fuel	SN4

SECTION D.5 **FACILITY OPERATION CONDITIONS** (Cont.)

Facility Description [326 IAC 2-7-5(15)] (j) (Cont)

Emission Unit ID No.(s)	Engine Test Cell ID No.(s)	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID No.
0070-N5	113	10000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN5
0070-N6	114	30000 pounds of thrust	Jet fuel	SN6
0070-N7	115	7000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN7
0070-N8	116	5000 brake horsepower	Jet fuel, Diesel	SN8
0070-N9	117	5000 brake horsepower	Jet fuel, Diesel	SN9
0070-N10	118	5000 brake horsepower	Jet fuel, Diesel	SN10
0070-N11	119	5000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN11
0070-N12	120	7000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN12
0070-N13	121	10000 brake horsepower	Jet fuel, Diesel	SN13
0070-N15	123	5000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN15
0070-N16	140	1500 brake horsepower	Jet fuel	SN16
0070-N17	141	750 brake horsepower	Jet fuel	SN17
0070-N18	142	800 brake horsepower	Jet fuel	SN18
0070-N19	143	750 brake horsepower	Jet fuel	SN19
0070-N20	144	750 brake horsepower	Jet fuel	SN20
0070-N21	145	750 brake horsepower	Jet fuel	SN21
0070-N22	146	1500 brake horsepower	Jet fuel	SN22
0070-N23	147	1500 brake horsepower	Jet fuel	SN23
0070-N24	148	1500 brake horsepower	Jet fuel	SN24
0070-N25	149	650 brake horsepower	Jet fuel	SN25
0070-N27	152	1500 brake horsepower	Jet fuel	SN27
0070-87	133	715 brake horsepower, with maximum fuel flow capacity of 59 gal/hr	Jet fuel	SN24
0070-88	135	715 brake horsepower, with maximum fuel flow capacity of 59 gal/hr	Jet fuel	SN25

SECTION D.5 **FACILITY OPERATION CONDITIONS** (Cont)

Facility Description [326 IAC 2-7-5(15)] (j) (Cont)

Emission Unit ID No.	Engine Test Cell ID No.(s)	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID No.	Emission Unit ID No.
Engine Test Cells Plant 8					
0070-N34	843	10000 brake horsepower	Jet fuel		SN34(A, B)
0070-N35	861	9000 pounds of thrust	Jet fuel, Diesel		SN35
0070-N36	862	6000 brake horsepower	Jet fuel, Diesel		SN36
0070-N37	871	15000 brake horsepower	Jet fuel, Diesel & Natural Gas		SN37(A, B)
0070-N38	872	9000 brake horsepower	Jet fuel, Diesel & Natural Gas		SN38(A, B)
0070-N39	873	9000 brake horsepower	Jet fuel		SN39(A, B, C)
0070-N40	875	5000 brake horsepower	Diesel		SN40
0070-N41	881	10000 pounds of thrust	Jet fuel		SN41(A, B)
0070-N42	882	30000 pounds of thrust	Jet fuel		SN42 (A, B, C, D, E, F)
0070-N43	883	2500 brake horsepower	Jet fuel		SN43(A, B)
0070-N44	884	2000 brake horsepower	Jet fuel		SN44
0070-N45	885	800 brake horsepower	Jet fuel, Diesel		SN45(A, B)
0070-N46	886	30000 pounds of thrust	Jet fuel, Diesel		SN46 (A, B, C, D)
0070-N47	893	500 pounds of thrust	Diesel		SN47
0070-N48	894	350 brake horsepower	Diesel		SN48
0070-N29	821	10 pounds/second air	Jet fuel, Diesel & Natural Gas		SN29 (A, B)
0070-N30	822	50 pounds/second air	Jet fuel, Diesel & Natural Gas		SN30(A, B)
0070-N31	823	60 pounds/second air	Jet fuel, Diesel & Natural Gas		SN31(A, B)

0070-N32	824	120 pounds/second air	Jet fuel, Diesel & Natural Gas	SN32(A, B)
0070-N33	826	25 pounds/second air	Jet fuel, Diesel	SN33(A, B)
0070-N54	8137	10 pounds/second air	Jet fuel, Diesel & Natural Gas	SN54
0070-N54a	8137	12.5 MMBtu/hr	No. 2 Diesel fuel	Not Available
0070-N55	8126	0.5 pounds/second air	Jet fuel, Diesel & Natural Gas	Not Available
0070-N56	8128	1 pounds/second air	Jet fuel, Diesel & Natural Gas	Not Available

(k) One (1) engine test cell, identified as emission unit 00311-83. The engines tested in this test cell have a operating capacity of 10,000 pounds of thrust and are fired with Jet A fuel. A maximum of six engines per day can be tested in this test cell. Emissions from this test cell are exhausted out stack 5-83 and are not controlled. This emission unit was initially constructed prior to 1970 and modified in 1999.

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

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

D.5.1 Particulate Matter Limitations Except Lake County [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Limitations), particulate matter (PM) emissions from emission units 0070-66, 0070-67, 0070-68, 0070-69, 0070-70a, 0070-70b, 0070-70c, 0070-N3 through 0070-N54, 0070-87, 0070-88, and 00311-83 shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.5.2 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-2(a)]

Pursuant to 326 IAC 7-1.1-2(a) (SO_2 Emissions Limitations) the SO_2 emissions from emission units 0070-70c, 0070-N3 through 0070-N54, 00311-83, 0070-87 and 0070-88 shall not exceed five tenths (0.5) pounds per MMBtu heat input, when combusting distillate oil alone or simultaneous with any permitted fuel.

D.5.3 PSD Minor NOx Limit [326 IAC 2-2]

(a) Pursuant to Part 70 Significant Source Modification issued December 28, 1999, the NOx emissions from the Test Cell 00311-83 shall not exceed 0.1409 pounds per gallon or 62 pounds per hour and shall combust less than 567,779 gallons of Jet A fuel per twelve (12) month period with compliance determined at the end of each month. This fuel usage limitation is equivalent to 40 tons of NOx emissions per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

(b) Pursuant to Part 70 Significant Source Modification 097-26350-00311, the NOx emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(1) The NOx emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.40 pounds per gallon of diesel/jet fuel combusted or an emission rate determined from the most recent emissions test.

(2) The NOx emission rate from test cell 824, identified as 0070-N32, shall not exceed 4,284 pounds per million cubic feet (lb/MMCF) of natural gas combusted or an emission rate determined from the most recent emissions test.

(3) The NOx emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 100 pounds per million cubic feet (lb/MMCF).

(4) The combined total NOx emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 40 tons of NOx per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.5.4 PSD Minor PM Limit [326 IAC 2-2]

Pursuant to Part 70 Significant Source Modification 097-26350-00311, the PM emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(a) The PM emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.01 pound per gallon of diesel/jet fuel combusted.

(b) The PM emission rate from test cell 824, identified as 0070-N32, shall not exceed 10.4 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(c) The PM emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 1.9 pounds per million cubic feet (lb/MMCF).

(d) The combined total PM emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 25 tons of PM per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.5.5 PSD Minor PM10 Limit [326 IAC 2-2] and Nonattainment NSR Minor PM2.5 Limit [326 IAC 2-1.1-5]

Pursuant to Part 70 Significant Source Modification 097-26350-00311, the PM10 and PM2.5 emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(a) The PM10 and PM2.5 emission rates from test cell 824, identified as 0070-N32, shall each not exceed 0.01 pounds per gallon of diesel/jet fuel combusted.

(b) The PM10 and PM2.5 emission rates from test cell 824, identified as 0070-N32, shall each not exceed 0.081 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(c) The PM10 and PM2.5 emission rates from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall each not exceed 7.6 pounds per million cubic feet (lb/MMCF).

(d) The combined total PM10 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 15 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(e) The combined total PM2.5 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 10 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 15 tons per year of PM10 and 10 tons per year of PM2.5 and therefore will render the requirements of 326 IAC 2-2 and 326 IAC 2-1.1-5 not applicable.

D.5.6 PSD Minor SO_2 Limit [326 IAC 2-2]

Pursuant to Part 70 Significant Source Modification 097-26350-00311, the SO_2 emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(a) The SO_2 emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.07 pound per gal of diesel/jet fuel combusted.

(b) The SO2 emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.617 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(c) The SO2 emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 0.6 pound per million cubic feet (lb/MMCF).

(d) The combined total SO_2 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 40 tons of SO_2 per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.5.7 PSD Minor CO Limit [326 IAC 2-2]

Pursuant to Part 70 Significant Source Modification 097-26350-00311, the CO emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(a) The CO emission rate from test cell 824, identified as 0070-N32, shall not exceed 1.21 pounds per gallon diesel/jet fuel combusted or an emission rate determined from the most recent emissions test.

(b) The CO emission rate from test cell 824, identified as 0070-N32, shall not exceed 332.9 pounds per million cubic feet (lb/MMCF) of natural gas combusted or an emission rate determined from the most recent emissions test.

(c) The CO emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 84 pounds per million cubic feet (lb/MMCF).

(d) The combined total CO emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 100 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 100 tons of CO per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.5.8 PSD Minor VOC Limit [326 IAC 2-2]

Pursuant to Part 70 Significant Source Modification 097-26350-00311, the VOC emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(a) The VOC emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.21 pounds per gallon diesel/jet fuel combusted or an emission rate determined from the most recent emissions test.

(b) The VOC emission rate from test cell 824, identified as 0070-N32, shall not exceed 123.9 pounds per million cubic feet (lb/MMCF) of natural gas combusted or an emission rate determined from the most recent emissions test.

(c) The VOC emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 5.5 pounds per million cubic feet (lb/MMCF).

(d) The combined total VOC emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 40 tons of VOC per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.5.9 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6:

(a) The VOC emission rate from test cell 824 (0070-N32) shall be limited to 0.21 pounds of VOC per gallon (lb/gal) of diesel/jet fuel combusted or an emission rate determined from the most recent emissions test.

(b) The VOC emissions from test cell 824 (0070-N32), shall not exceed 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits will limit the VOC emissions from test cell 0070-N32 to less than 25 tons per twelve (12) consecutive month period. Therefore, 326 IAC 8-1-6 does not apply.

Compliance Determination Requirements

D.5.10 Sulfur Dioxide Emissions and Sulfur Content

Compliance with Conditions D.5.2 shall be determined utilizing one of the following options:

(a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed five-tenths percent (0.5%) by weight by:

(1) Providing vendor analysis of fuel delivered, if accompanied by a certification;

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the thirteen (13) MMBtu per hour heater, fifty one (51) Engine test stand cells identified as emission units 0070-N3 through 0070-N54, Test Cell 00311-83, and test cells 0070-87 and 0070-88, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

D.5.11 Particulate Emissions (PM), Particulate Emissions less than 10 microns (PM10), Carbon Monoxide (CO), Volatile Organic Compounds (VOC), and Nitrogen Oxides (NO_X) Emissions

(a) Compliance with Condition D.5.3(b) shall be determined by the following equation:

$$E_{NOx} = \Sigma E_{DOS}$$

$$E_{DOS} = ((G_{diesel/jet\ juel} \times A) + (CF_{natural\ gas} \times D) + (C_{SH} \times 100)) / 2000$$

Where:

E_{NOx} = Emissions of NO_x in tons per month

E_{DOS} = Emissions of NOx in tons per month at each different operating scenario
A = 0.40 or emission rate determined from most recent emissions test in pounds per gallon
D = 4,284 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(b) Compliance with Condition D.5.4 shall be determined by the following equation:

$$E_{PM} = ((G_{diesel/jet\ juel} \times 0.01) + (CF_{natural\ gas} \times 10.4) + (C_{SH} \times 1.9)) / 2000$$

Where:
E_{PM} = Emissions of PM in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(c) Compliance with Condition D.5.5(d) shall be determined by the following equation:

$$E_{PM10} = ((G_{diesel/jet\ juel} \times 0.01) + (CF_{natural\ gas} \times .081) + (C_{SH} \times 7.6)) / 2000$$

Where:
E_{PM10} = Emissions of PM10 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(d) Compliance with Condition D.5.5(e) shall be determined by the following equation:

$$E_{PM2.5} = ((G_{diesel/jet\ juel} \times 0.01) + (CF_{natural\ gas} \times .081) + (C_{SH} \times 7.6)) / 2000$$

Where:
$E_{PM2.5}$ = Emissions of PM2.5 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(e) Compliance with Condition D.5.6 shall be determined by the following equation:

$$E_{SO2} = ((G_{diesel/jet\ juel} \times 0.07) + (CF_{natural\ gas} \times 0.617) + (C_{SH} \times 0.6)) / 2000$$

Where:
E_{SO2} = Emissions of SO_2 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(f) Compliance with Condition D.5.7 shall be determined by the following equation:

$E_{CO} = \Sigma E_{DOS}$

$E_{DOS} = ((G_{diesel/jet\ juel} \times C) + (CF_{natural\ gas} \times E) + (C_{SH} \times 84)) / 2000$

Where:

E_{CO} = Emissions of CO in tons per month
E_{DOS} = Emissions of CO in tons per month at each different operating scenario
C = 1.21 or emission rate determined from most recent emissions test in pounds per gallon
E = 332.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32

C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(g) Compliance with Condition D.5.8 shall be determined by the following equation:

$E_{VOC} = \Sigma E_{DOS}$

$E_{DOS} = ((G_{diesel/jet\ juel} \times B) + (CF_{natural\ gas} \times F) + (C_{SH} \times 5.5)) / 2000$

Where:

E_{VOC} = Emissions of VOC in tons per month
E_{DOS} = Emissions of VOC in tons per month at each different operating scenario
B = 0.21 or emission rate determined from most recent emissions test in pounds per gallon
F = 123.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(h) Compliance with Condition D.5.9 shall be determined by the following equation:

$E_{VOC} = \Sigma E_{DOS}$

$E_{DOS} = ((G_{diesel/jet\ juel} \times B) + (CF_{natural\ gas} \times F)) / 2000$

Where:

E_{VOC} = Emissions of VOC in tons per month
E_{DOS} = Emissions of VOC in tons per month at each different operating scenario
B = 0.21 or emission rate determined from most recent emissions test in pounds per gallon
F = 123.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32

D.5.12 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) In order to demostrate compliance with condition D.5.3, D.5.7, D.5.8, and D.5.9 , the Permittee shall perform NOx, CO, and VOC testing for each operating scenario within 60 days after startup but no later than 180 days after initial startup on test cell (0070-N32), when combusting diesel/jet fuel and natural gas (unless the Permittee chooses to use emission factors established in the permit) using methods as approved by the Commissioner.

(b) If utilizing a different size engine other than the one tested in subsection (a), in order to demonstrate compliance with condition D.5.3, D.5.7, D.5.8, and D.5.9 , the Permittee shall perform NOx, CO, and VOC testing for each operating scenario for the new engine within 60 days after startup of the new engine on test cell (0070-N32), when combusting diesel/jet fuel and natural gas (unless the Permittee chooses to use emission factors established in the permit) using methods as approved by the Commissioner.

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

D.5.13 Record Keeping Requirements

(a) To document compliance with condition D.5.3, the Permittee shall maintain records of the amount of Jet A fuel combusted in Test Cell 00311-83 on a monthly basis.

(b) To document compliance with Conditions D.5.2 and D.5.10, the Permittee shall maintain records in accordance with (1) through (6) below:

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

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

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

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

(4) Fuel supplier certifications;

(5) The name of the fuel supplier; and

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

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

(d) To document compliance with Condition D.5.3(b), D.5.4, D.5.5, D.5.6, D.5.7 and D.5.8, the Permittee shall maintain monthly records of the usage of jet fuel, diesel fuel, and natural gas by test cell 824 (0070-N32) for each engine operating scenario tested and the usage of natural gas to the two (2) shack heaters (0070-70A and 0070-70B).

(e) To document compliance with Condition D.5.9, the Permittee shall maintain monthly records of the usage of jet fuel, diesel fuel, and natural gas used by test cell 824 (0070-N32) for each engine operating scenario tested.

(f) To document compliance with Conditions D.5.3(b), D.5.4, D.5.5, D.5.6, D.5.7, D.5.8 and D.5.9, the Permittee shall maintain records of the monthly emissions as required by Conditions D.5.3(b)(4), D.5.4(d), D.5.5(d), D.5.6(d), D.5.7(d), D. 5.8(d), and D.5.9(b).

(g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.14 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.3 through D.5.9 shall be submitted to the addresses listed in Section C - General Reporting Requirements of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the period being reported.

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(l) Chrome plating and anodizing line consisting of seven (7) chromium tanks (six hard chrome electroplating tanks and one anodizing tank), identified as 0070-99, with a common add-on air pollution control device with a maximum cumulative potential rectifier capacity of less than 60 million amp-hr/yr, controlled using a composite mesh pad system, identified as ID 253155, which exhausts out stack 5-99. This facility was installed October 6, 1997 consisting of:

(1) Six (6) hard chrome electroplating tanks 1-11, 1-12, 1-13, 1-14, 1-15, 1-16 and

(2) One (1) anodizing tank 2-20.

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

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

D.6.1 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in Table 1 of 40 CFR Part 63. The Permittee shall comply with the requirements of this condition on and after the compliance date for the tanks.

D.6.2 Applicability of the Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1][40 CFR Part 63, Subpart N]

The provisions of 40 CFR 63, Subpart N - National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, which are incorporated by reference as 326 IAC 20-8-1, apply to the tanks identified as 0070-99.

The Permittee shall comply with the requirements of this condition on and after the compliance date for the tanks. The emission limitations apply during operation, start-up and shutdown. The emission limitations do not apply during periods of malfunction, but the work practice standards that address operation and maintenance and that are required by 40 CFR 63.342(f) must be followed during malfunctions.

D.6.3 Chromium Emissions Limitation [326 IAC 20-8-1][40 CFR 63.342] [40 CFR 63.344]

(a) Pursuant to 40 CFR 63.342(b)(1) the emission limitations in this section apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for affected sources subject to this subpart. The emission limitations do not apply during periods of malfunction, but the work practice standards that address operation and maintenance must be followed during malfunctions.

(b) Pursuant to 40 CFR 63.342(b)(2) If a Permittee is controlling a group of tanks with a common add-on air pollution control device, the emission limitations apply whenever any one affected source is operated.

(c) Pursuant to 40 CFR 63.342(b)(2)(iii) The emission limitation shall be calculated according to Sec. 63.344(e)(4).

(1) Pursuant to 40 CFR 63.344(e)(4) when multiple affected sources performing different types of operations are controlled by a common add-on air pollution control device that may or may not also be controlling emissions from sources not affected by these standards, or if the affected sources controlled by the common add-on air pollution control device perform the same operation but are subject to different emission limitations

(A) Based on the calculations set forth in 63.344(e) and the Notification of Compliance Status dated April 8, 1998, the Permittee shall not allow the concentration of total chromium in the exhaust gas stream discharged to the atmosphere from the control system, identified as 253155, to exceed:

(i) 0.015 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air [6.6×10^{-6} gr/dscf] for the six (6) hard chrome electroplating tanks, identified as 1-11, 1-12, 1-13, 1-14, 1-15, 1-16; and

(ii) 0.010 mg/dscm [4.4×10^{-6} gr/dscf] for the one (1) anodizing tank, identified as, 2-20.

(d) Pursuant to 40 CFR 63.344 (e)(6) these procedures shall be repeated if a tank is added or removed from the control system regardless of whether that tank is a nonaffected source. If the new nonaffected tank replaces an existing nonaffected tank of the same size and is connected to the control system through the same size inlet duct then this procedure does not have to be repeated.

D.6.4 Work Practice Standards [326 IAC 20-8-1][40 CFR 63, Subpart N]

The following work practice standards apply to the seven (7) chromium tanks:

(a) Pursuant to 40 CFR 63.342(f)(1)(i), at all times, including periods of startup, shutdown, malfunction, the Permittee shall operate and maintain the seven (7) chromium tanks, including the composite mesh pad system, identified as ID 253155, and parametric monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP).

(b) Pursuant to 40 CFR 63.342(f)(1)(ii), malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the OMP.

(c) Pursuant to 40 CFR 63.342(f)(1)(iii), these operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.

(d) Pursuant to 40 CFR 63.342(f)(2)(i), determination of whether acceptable operation and maintenance procedures are being used will be based on information available to U.S. EPA, IDEM, OAQ, and OES, which may include, but is not limited to, monitoring results; review of the OMP, procedures, and records; and inspection of the source.

(e) Pursuant to 40 CFR 63.342(f)(2)(ii) and based on the results of a determination made under paragraph (d) of this condition, U.S. EPA, IDEM, OAQ, and OES may require that the Permittee make changes to the OMP. Revisions may be required if U.S. EPA, IDEM, OAQ, and OES, finds that the plan:

(1) Pursuant to 40 CFR 63.342(f)(2)(ii)(A), does not address a malfunction or period of excess emissions that has occurred;

(2) Pursuant to 40 CFR 63.342(f)(2)(ii)(B), fails to provide for the operation of the seven (7) chromium tanks, the air pollution control techniques, or the composite mesh pad system, identified as ID 253155, and parametric monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or

(3) Pursuant to 40 CFR 63.342(f)(2)(ii)(C), does not provide adequate procedures for correcting malfunctioning tanks, air pollution control techniques, or parametric monitoring equipment as quickly as practicable.

D.6.5 Operation and Maintenance Plan [326 IAC 20-8-1][40 CFR 63, Subpart N]

(a) Pursuant to 63.342(f)(3)(i), the Permittee shall prepare an Operation and Maintenance Plan (OMP) to be implemented no later than the startup date of the seven (7) chromium tanks. The plan shall include the following elements:

(1) Pursuant to 40 CFR 63.342(f)(3)(i)(A), the OMP shall specify the operation and maintenance criteria for the seven (7) chromium tanks, the composite mesh pad system, identified as ID 253155, and parametric monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;

(2) Pursuant to 40 CFR 63.342(f)(3)(i)(B), the OMP shall incorporate the work practice standards as identified in Table 1 of 40 CFR 63.342. A summary of work practice standards for the Permittee=s composite mesh-pad system (CMP) from the Table is listed below:

(A) Quarterly visual inspections of the device to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.

(B) Quarterly visual inspection of the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist.

(C) Quarterly visual inspection of the duct work from the tank to the control device to ensure there are no leaks.

(D) Perform washdown of the composite mesh-pads in accordance with manufacturers recommendations.

(3) Pursuant to 40 CFR 63.342(f)(3)(i)(D), the OMP shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur.

(4) Pursuant to 40 CFR 63.342(f)(3)(i)(E), the OMP shall include a systematic procedure for identifying malfunctions of the seven (7) chromium tanks, the composite mesh pad system, identified as ID 253155, and parametric monitoring equipment and for implementing corrective actions to address such malfunctions.

(b) Pursuant to 40 CFR 63.342(f)(3)(ii), if the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the Permittee shall revise the OMP within forty-five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining the seven (7) chromium tanks, the composite mesh pad system, identified as ID 253155, or parametric monitoring equipment during similar malfunction events, and a program for corrective action for such events.

(c) Pursuant to 40 CFR 63.342(f)(3)(iv), if actions taken by the Permittee during periods of malfunction are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with U.S. EPA, IDEM, OAQ, and OES.

(d) Pursuant to 40 CFR 63.342 (f)(3)(v), the Permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the U.S. EPA, IDEM, OAQ, and OES, for the life of the affected source or until the source is no longer subject to the provisions of this subpart. In addition, if the operation and maintenance plan is

revised, the Permittee shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the EPA, IDEM, OAQ, and OES, for a period of five (5) years after each revision to the plan.

(e) Pursuant to 40 CFR 63.342(f)(3)(vi), to satisfy the OMP requirements, the Permittee may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OHSA) plans, or other existing plans as the OMP, provided the alternative plan(s) meet the requirements in 40 CFR 63.342(f)(3).

D.6.6 Monitoring to Demonstrate Continuous Compliance [326 IAC 20-8-1][40 CFR 63, Subpart N]

Pursuant to 40 CFR 63.343(c)(1)(ii) the Permittee shall monitor and record the pressure drop across the composite mesh pad system once each day that any one or all of the seven (7) chromium tanks is in operation. To be in compliance with the standards, the composite mesh pad system pressure drop value shall be operated at 4.0 ∀ 1 inch of water column.

Compliance Determination Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)]

D.6.7 Performance Testing [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)] [40 CFR 63.343(b)(2)] [40 CFR 63.7] [40 CFR 63.344]

(a) Pursuant to 40 CFR 63.343(c)(1)(i), a performance test demonstrating initial compliance was performed on March 11, 1998 for the seven (7) chromium tanks, including the composite mesh pad system, identified as 253155, and parametric monitoring equipment.

During the initial performance test, it was determined that the average pressure drop across the composite mesh pad system was 4.0 inches of water and the average outlet chromium concentration is 0.0037 mg/dscm.

The compliant range was established as a result of an average pressure drop measured over the three test runs of one performance test.

(b) The Permittee is not required to further test the seven (7) chromium tanks, including the composite mesh pad system, identified as 253155, by this permit. However, IDEM or OES may require testing when necessary to determine if the seven (7) chromium tanks, including the composite mesh pad system, identified as 253155, are in compliance. If testing is required by IDEM or OES, compliance with the limits specified in Condition D.6.3 shall be determined by a performance test conducted in accordance with 40 CFR 63.344 and Section C - Performance Testing.

(c) Any change, modification, or reconstruction of the seven (7) chromium tanks, including the composite mesh pad system, identified as 253155, may require additional performance testing conducted in accordance with 40 CFR 63.344 and Section C - Performance Testing.

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

D.6.8 Record Keeping Requirements [326 IAC 2-7-5(3)] [40 CFR 63.346]

Pursuant to 326 IAC 2-7-5(3)(B) and 40 CFR 63.346(a), (b), and (c) the Permittee shall maintain records to document compliance with Conditions D.6.3, D.6.4, D.6.5, and D.6.6 using the forms provided with this permit or their equivalent. These records shall be maintained in accordance with 40 CFR 63.346(c) and Section C - General Record Keeping Requirements of this permit and include a minimum of the following:

(a) Pursuant to 40 CFR 63.346(b)(1), inspection records for the composite mesh pad system, identified as ID 253155, and parametric monitoring equipment to document that the inspection and maintenance required by Conditions D.6.4 and D.6.5 have taken place. The record can take the form of a checklist and should identify the following:

(1) The device inspected;

(2) The date of inspection;

(3) A brief description of the working condition of the device during the inspection, and

(4) Any actions taken to correct deficiencies found during the inspection.

(b) Pursuant to 40 CFR 63.346(b)(2), records of all maintenance performed on the seven (7) chromium tanks, the composite mesh pad system, identified as ID 253155, and parametric monitoring equipment;

(c) Pursuant to 40 CFR 63.346(b)(3), records of the occurrence, duration, and cause (if known) of each malfunction of the seven (7) chromium tanks, the composite mesh pad system, identified as ID 253155, and parametric monitoring equipment;

(d) Pursuant to 40 CFR 63.346(b)(4), records of actions taken during periods of malfunction when such actions are inconsistent with the OMP;

(e) Pursuant to 40 CFR 63.346(b)(5), other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP;

(f) Pursuant to 40 CFR 63.346(b)(6), test reports documenting results of all performance tests;

(g) Pursuant to 40 CFR 63.346(b)(7), all measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance with the special compliance procedures of section 63.344(e);

(h) Pursuant to 40 CFR 63.346(b)(8), records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected;

(i) Pursuant to 40 CFR 63.346(b)(9), the specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;

(j) Pursuant to 40 CFR 63.346(b)(10), the specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;

(k) Pursuant to 40 CFR 63.346(b)(11), the total process operating time of the seven (7) chromium tanks during the reporting period;

(l) Pursuant to 40 CFR 63.346(b)(16), all documentation supporting the notifications and reports required by 40 CFR 63.9 and 40 CFR 63.10 and 40 CFR 63.347(Reporting Requirements).

D.6.9 Reporting Requirements

The notifications and reports required in this section shall be submitted to the US EPA, IDEM, OAQ, and OES using the addresses specified in Section C - General Reporting Requirements of this permit and to the following address:

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

(a) Notifications:

(1) Initial Notifications
The Permittee shall notify U.S. EPA, IDEM, OAQ, and OES in writing that the source is subject to 40 CFR Part 63, Subpart N. The notification shall be submitted no later than one hundred eighty (180) days after the compliance date and shall contain the information listed in 40 CFR 63.347(c)(1).

(2) Pursuant to 40 CFR 63.347(e)(1) & (2) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63, Subpart N.

(A) The NCS shall be submitted to U. S. EPA, IDEM, OAQ, and OES, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).

(B) Pursuant to Agreed Order EPA-5-98-113(a)-IN-8, item No. 19 and 40 CFR 63.347(e)(1) & (2), the NCS for the seven (7) chromium tanks was submitted to U. S. EPA, IDEM, OAQ, and OES April 8, 1998.

(3) Notification of Construction or Reconstruction
Pursuant to 40 CFR 63.345(b)(1), no person may construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it becomes an affected source subject to this subpart (including non-affected tanks defined in 40 CFR 63.344(e)), without submitting a notification of construction or reconstruction to the US EPA, IDEM, OAQ, and OES. The notification shall contain the information pursuant to 40 CFR 63.345(b) paragraphs (2) and (3), as appropriate.

(A) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device (i.e. the addition of duct work to the CMP system).

(B) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct the seven (7) chromium tanks serves as this notification.

(C) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAQ and OES before construction, modification, or reconstruction may commence.

(b) Performance Test Results
Pursuant to 40 CFR 63.344 (e)(6), the permittee shall repeat the compliance demonstration procedures, if a tank is added or removed from the control system regardless of whether that tank is a nonaffected source. If the new nonaffected tank replaces an existing nonaffected tank of the same size and is connected to the control system through the same size inlet duct then this procedure does not have to be repeated.

The Permittee shall document results from future performance tests in a complete test report that contains the information required in 40 CFR 344(a) and (e).

The Permittee shall submit reports of performance test results as part of the Notification of Compliance Status, described in 40 CFR 63.347(e), no later than forty-five (45) days following the completion of the performance test.

(c) Ongoing Compliance Status Report

Pursuant to 40 CFR 63.347(g)(1), the Permittee shall prepare summary reports to document the ongoing compliance status of the seven (7) chromium tanks, the composite mesh pad system, identified as ID 253155, and parametric monitoring equipment using the Ongoing Compliance Status Report form provided with this permit or its equivalent. This report shall contain the information specified in 40 CFR 63.347(g)(3).

Because seven (7) chromium tanks located at a site that is a major source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be completed and submitted according to the following schedule.

(1) This report shall be submitted semiannually on a calendar year basis, unless otherwise directed by the US EPA, IDEM, OAQ, or OES. The report shall be submitted within thirty (30) days after the end of each reporting period (which ends June 30 and December 31 respectively).

(2) Pursuant to 40 CFR 63.347(g)(1)(ii), if the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c) show that the emission limit has been exceeded, quarterly reports shall be submitted.

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted quarterly until a request to reduce reporting frequency in accordance with 40 CFR 63.347(g)(2) is approved.

(3) Pursuant to 40 CFR 63.347(g)(1)(i), U.S. EPA, IDEM, OAQ, or OES may determine on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of this facility.

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: **Insignificant activities**

(a) Storage vessels, containing volatile organic liquid, identified as tank 1 through 6 and 9 through 20 at plant 5 and tanks 1 through 5 at plant 8. Each tank has a capacity greater than 40 cubic meters but less than 75 cubic meters and a construction date after July 23, 1984.

(b) Classified documents incinerator with a maximum rated capacity of 125 pounds per two hour cycle.

(c) The following activities or categories of activities with individual HAP emissions not previously identified which have potential emissions greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP;

(1) Stationary and portable welding, brazing, soldering and cutting operations
(2) Fuel and oil nozzle test stands
(3) Penetrant test
(4) Chemical milling and deoxidizing solution
(5) Air stripper at waste treatment plant
(6) Print shop operations
(7) All plating operations
(8) Powder coating

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

Emission Limitations and Standards [326 IAC 2-7-5(1)] [326 IAC 8-4][326 IAC 12]

D.7.1 Applicability [IAC 12-1-1][40 CFR 60, Subpart Kb]

The emission standards contained in 40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels are applicable to the storage vessels identified as tank 1 through 6 and 9 through 20 at plant 5 and tanks 1 through 5 at plant 8. Tanks 1 through 6 and 9 through 20 at plant 5 and tanks 1 through 5 at plant 8 are specifically regulated by applicability and designation of affected facility 60.110b(a) and (b).

D.7.2 Incinerators [40 CFR 52, Subpart P]

Pursuant to 40 CFR 52, Subpart P, the confidential document incinerator shall:

(a) consist of primary and secondary chambers or the equivalent;

(b) be equipped with a primary burner unless burning wood products;

(c) comply with 326 IAC 5-1 and 326 IAC 2;

(d) be maintained properly as specified by the manufacturer and approved by the commissioner;

(e) be operated according to the manufacturer=s recommendations and only burn waste approved by the commissioner;

(f) comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;

(g) be operated so that emissions of hazardous material including, but not limited to, viable pathogenic

bacteria, dangerous chemicals or gases, or noxious odors are prevented;

(h) not emit particulate matter in excess of three-tenths (0.3) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air.

(i) not create a nuisance or a fire hazard.

If any of the above result, the burning shall be terminated immediately. This condition will remain applicable until the revisions to 326 IAC 4-2 are approved into the SIP and the condition is modified in a subsequent permit action.

D.7.3 Incinerators [326 IAC 4-2]

Pursuant to 326 IAC 4-2, the confidential document incinerator shall:

(a) Consist of primary and secondary chambers or the equivalent;

(b) Be equipped with a primary burner;

(c) Comply with 326 IAC 5-1 and 326 IAC 2;

(d) Be maintained, operated and burn waste in accordance with :

(1) manufacturers specifications; or
(2) an operation and maintenance plan that complies with the following:
(A) be designed to meet the PM emission limitation specified in subsection (a)(5) and include the following: procedures for receiving, handling and charging waste, procedures for incinerator startup and shutdown, procedures for responding to a malfunction, procedures for maintaining proper combustion air supply levels, procedures for operating the incinerator and associated air pollution control systems, procedures for handling ash, and a list of wastes that can be burned in the incinerator.
(B) each incinerator operator shall review the plan before initial implementation of the operation and maintenance plan and annually thereafter.
(C) be readily accessible to incinerator operators.
(D) the owner or operator of the incinerator shall notify the department, in writing, thirty days after the operation and maintenance plan is initially developed pursuant to this section.

(e) Not emit particulate matter in excess of three tenths (0.3) pound of particulate matter per one thousand (1,000) pounds of dry exhaust has under standard conditions corrected to fifty percent (50%) excess air.

(f) The owner or operator of the incinerator must make the manufacturer=s specifications or the operation and maintenance plan available to the department upon request.

If any of the requirements of (a) through (d) above are not met, then the owner or operator shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation. This condition is not federally enforceable.

D.7.4 Carbon Monoxide [40 CFR 52, Subpart P]

Pursuant to 40 CFR 52, Subpart P, the confidential document incinerator shall not cause or allow the discharge of carbon monoxide from refuse incineration or burning equipment, unless the waste gas stream is burned in a direct-flame afterburner.

D.7.5 Carbon Monoxide [326 IAC 9-1]

Pursuant to 326 IAC 9-1-2 (Carbon Monoxide Emission Limits, the incinerator shall not be operated unless the waste gas stream is burned in a direct-flame afterburner or a secondary chamber. This condition is not federally enforceable.

D.7.6 Particulate Matter Emissions [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a) the PM emissions from each facility with the potential to emit particulate matter shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.7.7 Record Keeping Requirements

(a) Pursuant to 40 CFR 60.110(b), the record keeping requirements contained in 40 CFR 60.116(b) and (a) are applicable to the storage vessels identified as tank 1 through 6 and 9 through 20 at plant 5 and tanks 1 through 5 at plant 8. The Permittee is required to:

(1) Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel;
(2) The records required in (1) above, shall be kept for the life of the source.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements.

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(e) Degreasing operations, consisting of:

(5) One (1) stationary enclosed parts cleaning machine, Vacuum Degreaser Model V4-EX, identified as emission unit 24087, receiving approval to construct in 2006, using only Tetrachloroethylene as the solvent, with a cleaning capacity of 1.135 cubic meters, and exhausting inside the building.

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

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

D.8.1 General Provisions Relating to NESHAP [40 CFR Part 63, Subpart A][326 IAC 20-1]

(a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to Emission Unit 24087 as described in this section except when otherwise specified in 40 CFR Part 63, Subpart T.

(b) Pursuant to 40 CFR 63.9, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, IN 46204-2251

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

D.8.2 National Emission Standards for Halogenated Solvent Cleaning [40 CFR 63.460, Subpart T] [326 IAC 20]

Pursuant 40 CFR 63.460, Subpart T (National Emission Standards for Halogenated Solvent Cleaning), the one (1) Stationary Enclosed Parts cleaning machine, Vacuum Degreaser Model V4-EX, identified as emission unit 24087, shall comply with the following:

' 63.460 Applicability and designation of source.

(a) The provisions of this subpart apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses 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. The concentration of these solvents may be determined using EPA test method 18, material safety data sheets, or engineering calculations. Wipe cleaning activities, such as using a rag containing halogenated solvent or a spray cleaner containing halogenated solvent are not covered under the provisions of this subpart.

(b) Except as noted in appendix C (General Provisions Applicability to Subpart T) of this subpart, the provisions of subpart A of this part (General Provisions) apply to owners or operators of any solvent cleaning machine meeting the applicability criteria of paragraph (a) of this section.

(c) Except as provided in paragraph (g) of this section, each solvent cleaning machine subject to this subpart that commences construction or reconstruction after November 29, 1993 shall achieve compliance with the provisions of this subpart immediately upon start-up or by December 2, 1994, whichever is later.

(e) In delegating implementation and enforcement authority to a State under section 112(d) of the Act, the authority contained in paragraph (f) of this section shall be retained by the Administrator and not transferred to a State.

(h) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 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 applicable to area sources.

' 63.461 Definitions.

Unless defined below, all terms used in this subpart are used as defined in the 1990 Clean Air Act, or in subpart A of 40 CFR part 63:

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., State that has been delegated the authority to implement the provisions of this part.)

Air blanket means the layer of air inside the solvent cleaning machine freeboard located above the solvent/air interface. The centerline of the air blanket is equidistant between the sides of the machine.

Air knife system means a device that directs forced air at high pressure, high volume, or a combination of high pressure and high volume, through a small opening directly at the surface of a continuous web part. The purpose of this system is to remove the solvent film from the surfaces of the continuous web part.

Automated parts handling system means a mechanical device that carries all parts and parts baskets at a controlled speed from the initial loading of soiled or wet parts through the removal of the cleaned or dried parts. Automated parts handling systems include, but are not limited to, hoists and conveyors.

Batch cleaning machine means a solvent cleaning machine in which individual parts or a set of parts move through the entire cleaning cycle before new parts are introduced into the solvent cleaning machine. An open-top vapor cleaning machine is a type of batch cleaning machine. A solvent cleaning machine, such as a ferris wheel or a cross-rod degreaser, that clean multiple batch loads simultaneously and are manually loaded are batch cleaning machines.

Carbon adsorber means a bed of activated carbon into which an air-solvent gas-vapor stream is routed and which adsorbs the solvent on the carbon.

Clean liquid solvent means fresh unused solvent, recycled solvent, or used solvent that has been cleaned of soils (e.g., skimmed of oils or sludge and strained of metal chips).

Cleaning capacity means, for a cleaning machine without a solvent/air interface, the maximum volume of parts that can be cleaned at one time. In most cases, the cleaning capacity is equal to the volume (length times width times height) of the cleaning chamber.

Cold cleaning machine means any device or piece of equipment that contains and/or uses liquid solvent, into which parts are placed to remove soils from the surfaces of the parts or to dry the parts. Cleaning machines that contain and use heated, nonboiling solvent to clean the parts are classified as cold cleaning machines.

Combined squeegee and air-knife system means a system consisting of a combination of a squeegee system and an air-knife system within a single enclosure.

Consumption means the amount of halogenated hazardous air pollutant solvent added to the solvent cleaning machine.

Continuous web cleaning machine means a solvent cleaning machine in which parts such as film, coils, wire, and metal strips are cleaned at speeds typically in excess of 11 feet per minute. Parts are generally uncoiled, cleaned such that the same part is simultaneously entering and exiting the solvent application area of the solvent cleaning machine, and then recoiled or cut. For the purposes of this subpart, all continuous web cleaning machines are considered to be a subset of

in-line solvent cleaning machines.

Cover means a lid, top, or portal cover that shields the solvent cleaning machine openings from air disturbances when in place and is designed to be easily opened and closed without disturbing the vapor zone. Air disturbances include, but are not limited to, lip exhausts, ventilation fans, and general room drafts. Types of covers include, but are not limited to, sliding, biparting, and rolltop covers.

Cross-rod solvent cleaning machine means a batch solvent cleaning machine in which parts baskets are suspended from "cross-rods" as they are moved through the machine. In a cross-rod cleaning machine, parts are loaded semi-continuously, and enter and exit the machine from a single portal.

Downtime mode means the time period when a solvent cleaning machine is not cleaning parts and the sump heating coils, if present, are turned off.

Dwell means the technique of holding parts within the freeboard area but above the vapor zone of the solvent cleaning machine. Dwell occurs after cleaning to allow solvent to drain from the parts or parts baskets back into the solvent cleaning machine.

Dwell time means the required minimum length of time that a part must dwell, as determined by '63.465(d).

Emissions means halogenated hazardous air pollutant solvent consumed (i.e., halogenated hazardous air pollutant solvent added to the machine) minus the liquid halogenated hazardous air pollutant solvent removed from the machine and the halogenated hazardous air pollutant solvent removed from the machine in the solid waste.

Existing means any solvent cleaning machine the construction or reconstruction of which was commenced on or before November 29, 1993. A machine, the construction or reconstruction of which was commenced on or before November 29, 1993, but that did not meet the definition of a solvent cleaning machine on December 2, 1994, because it did not use halogenated HAP solvent liquid or vapor covered under this subpart to remove soils, becomes an existing source when it commences to use such liquid or vapor. A solvent cleaning machine moved within a contiguous facility or to another facility under the same ownership, constitutes an existing machine.

Freeboard area means; for a batch cleaning machine, the area within the solvent cleaning machine that extends from the solvent/air interface to the top of the solvent cleaning machine; for an in-line cleaning machine, it is the area within the solvent cleaning machine that extends from the solvent/air interface to the bottom of the entrance or exit opening, whichever is lower.

Freeboard height means; for a batch cleaning machine, the distance from the solvent/air interface, as measured during the idling mode, to the top of the cleaning machine; for an in-line cleaning machine, it is the distance from the solvent/air interface to the bottom of the entrance or exit opening, whichever is lower, as measured during the idling mode.

Freeboard ratio means the ratio of the solvent cleaning machine freeboard height to the smaller interior dimension (length, width, or diameter) of the solvent cleaning machine.

Freeboard refrigeration device (also called a chiller) means a set of secondary coils mounted in the freeboard area that carries a refrigerant or other chilled substance to provide a chilled air blanket above the solvent vapor. A primary condenser capable of meeting the requirements of '63.463(e)(2)(i) is defined as both a freeboard refrigeration device and a primary condenser for the purposes of these standards.
Halogenated hazardous air pollutant solvent or halogenated HAP solvent means 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), and chloroform (CAS No. 67-66-3).

Hoist means a mechanical device that carries the parts basket and the parts to be cleaned from the loading area into the solvent cleaning machine and to the unloading area at a controlled speed. A hoist may be operated by controls or may be programmed to cycle parts through the cleaning cycle automatically.

Idling mode means the time period when a solvent cleaning machine is not actively cleaning parts and the sump heating coils, if present, are turned on.

Idling-mode cover means any cover or solvent cleaning machine design that allows the cover to shield the cleaning

machine openings during the idling mode. A cover that meets this definition can also be used as a working-mode cover if that definition is also met.

Immersion cold cleaning machine means a cold cleaning machine in which the parts are immersed in the solvent when being cleaned. A remote reservoir cold cleaning machine that is also an immersion cold cleaning machine is considered an immersion cold cleaning machine for purposes of this subpart.

In-line cleaning machine or continuous cleaning machine means a solvent cleaning machine that uses an automated parts handling system, typically a conveyor, to automatically provide a continuous supply of parts to be cleaned. These units are fully enclosed except for the conveyor inlet and exit portals. In-line cleaning machines can be either cold or vapor cleaning machines.

Leak-proof coupling means a threaded or other type of coupling that prevents solvents from leaking while filling or draining solvent to and from the solvent cleaning machine.

Lip exhaust means a device installed at the top of the opening of a solvent cleaning machine that draws in air and solvent vapor from the freeboard area and ducts the air and vapor away from the solvent cleaning area.

Monthly reporting period means any calendar month in which the owner or operator of a solvent cleaning machine is required to calculate and report the solvent emissions from each solvent cleaning machine.
New means any solvent cleaning machine the construction or reconstruction of which is commenced after November 29, 1993.

Open-top vapor cleaning machine means a batch solvent cleaning machine that has its upper surface open to the air and boils solvent to create solvent vapor used to clean and/or dry parts.

Part means any object that is cleaned in a solvent cleaning machine. Parts include, but are not limited to, discrete parts, assemblies, sets of parts, and parts cleaned in a continuous web cleaning machine (i.e., continuous sheets of metal, film).

Primary condenser means a series of circumferential cooling coils on a vapor cleaning machine through which a chilled substance is circulated or recirculated to provide continuous condensation of rising solvent vapors and, thereby, create a concentrated solvent vapor zone.

Reduced room draft means decreasing the flow or movement of air across the top of the freeboard area of the solvent cleaning machine to meet the specifications of '63.463(e)(2)(ii). Methods of achieving a reduced room draft include, but are not limited to, redirecting fans and/or air vents to not blow across the cleaning machine, moving the cleaning machine to a corner where there is less room draft, and constructing a partial or complete enclosure around the cleaning machine.

Remote reservoir cold cleaning machine means any device in which liquid solvent is pumped to a sink-like work area that drains solvent back into an enclosed container while parts are being cleaned, allowing no solvent to pool in the work area.

Remote reservoir continuous web cleaning machine means a continuous web cleaning machine in which there is no exposed solvent sump. In these units, the solvent is pumped from an enclosed chamber and is typically applied to the continuous web part through a nozzle or series of nozzles. The solvent then drains from the part and is collected and recycled through the machine, allowing no solvent to pool in the work or cleaning area.

Soils means contaminants that are removed from the parts being cleaned. Soils include, but are not limited to, grease, oils, waxes, metal chips, carbon deposits, fluxes, and tars.

Solvent/air interface means, for a vapor cleaning machine, the location of contact between the concentrated solvent vapor layer and the air. This location of contact is defined as the mid-line height of the primary condenser coils. For a cold cleaning machine, it is the location of contact between the liquid solvent and the air.

Solvent/air interface area means; for a vapor cleaning machine, the surface area of the solvent vapor zone that is exposed to the air; for an in-line cleaning machine, it is the total surface area of all the sumps; for a cold cleaning machine, it is the surface area of the liquid solvent that is exposed to the air.

Solvent cleaning machine means any device or piece of equipment that uses halogenated HAP solvent liquid or vapor to remove soils from the surfaces of materials. Types of solvent cleaning machines include, but are not limited to, batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machines. Buckets, pails, and beakers with capacities of 7.6 liters (2 gallons) or less are not considered solvent cleaning machines.

Solvent vapor zone means; for a vapor cleaning machine, the area that extends from the liquid solvent surface to the level that solvent vapor is condensed. This condensation level is defined as the midline height of the primary condenser coils.

Squeegee system means a system that uses a series of pliable surfaces to remove the solvent film from the surfaces of the continuous web part. These pliable surfaces, called squeegees, are typically made of rubber or plastic media, and need to be periodically replaced to ensure continued proper function.
Sump means the part of a solvent cleaning machine where the liquid solvent is located.

Sump heater coils means the heating system on a cleaning machine that uses steam, electricity, or hot water to heat or boil the liquid solvent.

Superheated part technology means a system that is part of the continuous web process that heats the continuous web part either directly or indirectly to a temperature above the boiling point of the cleaning solvent. This could include a process step, such as a tooling die that heats the part as it is processed, as long as the part remains superheated through the cleaning machine.

Superheated vapor system means a system that heats the solvent vapor, either passively or actively, to a temperature above the solvent's boiling point. Parts are held in the superheated vapor before exiting the machine to evaporate the liquid solvent on them. Hot vapor recycle is an example of a superheated vapor system.

Vapor cleaning machine means a batch or in-line solvent cleaning machine that boils liquid solvent generating solvent vapor that is used as a part of the cleaning or drying cycle.

Water layer means a layer of water that floats above the denser solvent and provides control of solvent emissions. In many cases, the solvent used in batch cold cleaning machines is sold containing the appropriate amount of water to create a water cover.

Working mode means the time period when the solvent cleaning machine is actively cleaning parts.

Working-mode cover means any cover or solvent cleaning machine design that allows the cover to shield the cleaning machine openings from outside air disturbances while parts are being cleaned in the cleaning machine. A cover that is used during the working mode is opened only during parts entry and removal. A cover that meets this definition can also be used as an idling-mode cover if that definition is also met.

' 63.464 Alternative standards.

(a) As an alternative to meeting the requirements in '63.463, each owner or operator of a batch vapor or in-line solvent cleaning machine can elect to comply with the requirements of '63.464. An owner or operator of a solvent cleaning machine who elects to comply with '63.464 shall comply with the requirements specified in either paragraph (a)(1) or (a)(2) of this section.

(2) If the cleaning machine is a batch vapor cleaning machine and does not have a solvent/air interface, the owner or operator shall comply with the requirements specified in paragraphs (a)(2)(i) and (a)(2)(ii) of this section.

(i) Maintain a log of solvent additions and deletions for each solvent cleaning machine.

(ii) Ensure that the emissions from each solvent cleaning machine are equal to or less than the appropriate limits as described in paragraphs (a)(2)(ii)(A) and (a)(2)(ii)(B) of this section.

(A) For cleaning machines with a cleaning capacity, as reported in '63.468(d), that is less than or equal to 2.95 cubic meters, the emission limit shall be determined using table 6 or equation 1. If using table 6, and the cleaning capacity of the cleaning machine falls between two cleaning capacity sizes, then the lower of the two emission limits applies.

(b) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with '63.464(a) shall demonstrate compliance with the applicable 3-month rolling average monthly emission limit on a monthly basis as described in '63.465(b) and (c).

(c) If the applicable 3-month rolling average emission limit is not met, an exceedance has occurred. All exceedances shall be reported as required in '63.468(h).

' 63.465 Test methods.

(b) Except as provided in paragraph (g) of this section for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with '63.464 shall, on the first operating day of every month ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent, and used solvent that has been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions as specified in paragraph (c) of this section. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.

(c) Except as provided in paragraphs (f) and (g) of this section for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with '63.464 shall, on the first operating day of the month, comply with the requirements specified in paragraphs (c)(1) through (3) of this section.

(1) Using the records of all solvent additions and deletions for the previous monthly reporting period required under '63.464(a), determine solvent emissions (Ei) using equation 2 for cleaning machines with a solvent/air interface and equation 3 for cleaning machines without a solvent/air interface:

$$E_i = \frac{SA_i - LSR_i - SSR_i}{AREA_i} \qquad (2)$$

$$E_n = SA_i - LSR_i - SSR_i \qquad (3)$$

where:

Ei=the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i, (kilograms of solvent per square meter of solvent/air interface area per month).

En=the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i, (kilograms of solvent per month).

SAi=the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent monthly reporting period i, (kilograms of solvent per month).

LSRi=the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the most recent monthly reporting period i, (kilograms of solvent per month).

SSRi=the total amount of halogenated HAP solvent removed from the solvent cleaning machine in solid waste, obtained as described in paragraph (c)(2) of this section, during the most recent monthly reporting period i, (kilograms of solvent per month).

AREAi=the solvent/air interface area of the solvent cleaning machine (square meters).

(2) Determine SSRi using the method specified in paragraph (c)(2)(i) or (c)(2)(ii) of this section.

(i) From tests conducted using EPA reference method 25d.

(ii) By engineering calculations included in the compliance report.

(3) Determine the monthly rolling average, EA, for the 3-month period ending with the most recent reporting period using equation 4 for cleaning machines with a solvent/air interface or equation 5 for cleaning machines without a solvent/air interface:

$$EA_i = \frac{\sum_{j=1}^{3} E_i}{3} \qquad (4)$$

$$EA_n = \frac{\sum_{j=1}^{3} E_n}{3} \qquad (5)$$

Where:

EAi=the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods, (kilograms of solvent per square meter of solvent/air interface area per month).

EAn=the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods (kilograms of solvent per month).

Ei=halogenated HAP solvent emissions for each month (j) for the most recent 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area).

En=halogenated HAP solvent emissions for each month (j) for the most recent 3 monthly reporting periods (kilograms of solvent per month).

j=1 = the most recent monthly reporting period.

j=2 = the monthly reporting period immediately prior to j=1.

j=3 = the monthly reporting period immediately prior to j=2.

(e) An owner or operator of a source shall determine their potential to emit from all solvent cleaning operations, using the procedures described in paragraphs (e)(1) through (e)(3) of this section. A facility's total potential to emit is the sum of the HAP emissions from all solvent cleaning operations, plus all HAP emissions from other sources within the facility.

(1) Determine the potential to emit for each individual solvent cleaning using equation 6.

PTEi=HiHWiHSAIi (6),

Where:

PTEi=the potential to emit for solvent cleaning machine i (kilograms of solvent per year).

Hi=hours of operation for solvent cleaning machine i (hours per year).
=8760 hours per year, unless otherwise restricted by a Federally enforceable requirement.

Wi=the working mode uncontrolled emission rate (kilograms per square meter per hour).

=1.95 kilograms per square meter per hour for batch vapor and cold cleaning machines.

=1.12 kilograms per square meter per hour for in-line cleaning machines.

SAIi = solvent/air interface area of solvent cleaning machine i (square meters). Section 63.461 defines the solvent/air interface area for those machines that have a solvent/air interface. Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using the procedure in paragraph (e)(2) of this section.

(2) Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using equation 7.

$SAI=2.20 * (Vol)^{0.6}$ (7)

Where:

SAI=the solvent/air interface area (square meters).

Vol=the cleaning capacity of the solvent cleaning machine (cubic meters).

(3) Sum the PTEi for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

' 63.467 Recordkeeping requirements.

(c) Except as provided in paragraph (e) of this section for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of '63.464 shall maintain records specified in paragraphs (c)(1) through (3) of this section either in electronic or written form for a period of 5 years.

(1) The dates and amounts of solvent that are added to the solvent cleaning machine.

(2) The solvent composition of wastes removed from cleaning machines as determined using the procedure described in '63.465(c)(2).

(3) Calculation sheets showing how monthly emissions and the rolling 3-month average emissions from the solvent cleaning machine were determined, and the results of all calculations.

(d) Each owner or operator of a solvent cleaning machine without a solvent/air interface complying with the provisions of '63.464 shall maintain records on the method used to determine the cleaning capacity of the cleaning machine.

' 63.468 Reporting requirements.

(b) Each owner or operator of a new solvent cleaning machine subject to the provisions of this subpart shall submit an initial notification report to the Administrator. New sources for which construction or reconstruction had commenced and initial startup had not occurred before December 2, 1994, shall submit this report as soon as practicable before startup but no later than January 31, 1995. New sources for which the construction or reconstruction commenced after December 2, 1994, shall submit this report as soon as practicable before the construction or reconstruction is planned to commence. This report shall include all of the information required in '63.5(d)(1) of subpart A (General Provisions), with the revisions and additions in paragraphs (b)(1) through (b)(3) of this section.

(1) The report shall include a brief description of each solvent cleaning machine including machine type (batch vapor, batch cold, vapor in-line, or cold-line), solvent/air interface area, and existing controls.

(2) The report shall include the anticipated compliance approach for each solvent cleaning machine.

(3) In lieu of '63.5(d)(1)(ii)(H) of subpart A of this part, the owner or operator must report an estimate of annual halogenated HAP solvent consumption for each solvent cleaning machine.

(e) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of '63.464 shall submit to the Administrator an initial statement of compliance for each solvent cleaning machine. For existing sources, this report shall be submitted to the Administrator no later than 150 days after the compliance date specified in '63.460(d). For new sources, this report shall be submitted to the Administrator no later than 150 days after startup or May 1, 1995, whichever is later. The statement shall include the information specified in paragraphs (e)(1) through (e)(4) of this section.

(1) The name and address of the solvent cleaning machine owner or operator.

(2) The address of the solvent cleaning machine(s).

(3) The solvent/air interface area for each solvent cleaning machine or, for cleaning machines without a solvent/air

interface, a description of the method used to determine the cleaning capacity and the results.

(4) The results of the first 3-month average emissions calculation.
(g) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of '63.464 shall submit a solvent emission report every year. This solvent emission report shall contain the requirements specified in paragraphs (g)(1) through (g)(4) of this section.

(1) The size and type of each unit subject to this subpart (solvent/air interface area or cleaning capacity).

(2) The average monthly solvent consumption for the solvent cleaning machine in kilograms per month.

(3) The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in '63.465(c).

(4) The reports required under paragraphs (f) and (g) of this section can be combined into a single report for each facility.

(h) Each owner or operator of a batch vapor or in-line solvent cleaning machine shall submit an exceedance report to the Administrator semiannually except when, the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency under paragraph (i) of this section is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the applicable information in paragraphs (h) (1) through (3) of this section.

(1) Information on the actions taken to comply with '63.463 (e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.

(2) If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.

(3) If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

(i) An owner or operator who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the conditions in paragraphs (i)(1) through (i)(3) of this section are met.

(1) The source has demonstrated a full year of compliance without an exceedance.

(2) The owner or operator continues to comply with all relevant recordkeeping and monitoring requirements specified subpart A (General Provisions) and in this subpart.

(3) The Administrator does not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of subpart A (General Provisions).

Table 1. 40 CFR 63, Subpart T Summary of Milestones and Deadlines

Milestone	Deadline
Submit an initial notification [40 CFR.468(b)]	Submitted to OES on July 25, 2006.
Achieve compliance with 40 CFR 63.464 [40 CFR 63.464, 40 CFR 63.460(c)]	Immediately upon start-up.
Submit an initial statement of compliance [40 CFR 63.468(e)]	No later than 150 days after startup.
Submit a solvent emission report [40 CFR 63.468(g)]	Every year after startup.

Submit an exceedance report [40 CFR 63.468(h)]	Semiannually (unless an alternative frequency is determined on a case by base basis by the Administrator) OR Quarterly once an exceedance has occurred until a request to reduce reporting frequency has been approved.

SECTION D.9 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(m) Two (2) rental diesel-fired generators, identified as 0070-89, approved for installation in 2008, each with a maximum rated capacity of 540 HP or less. Any rental generators brought on site shall have a manufactured date prior to April 1, 2006.

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

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

D.9.1 NOx Emissions [326 IAC 2-7-10.5] [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-7-10.5(f)(Part 70 Significant Source Modification) and 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following limits:

(a) The total diesel fuel usage for the rental diesel-fired generators shall be less than 80.0 kilo-gallons (kgal) per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The NOx emissions from each of the diesel-fired engines shall not exceed 4.41 lb/MMBtu.

(c) The Permittee may remove and replace these rental generators 0070-89 with other rental generators at any time without prior approval under 326 IAC 2-7-10.5 and 326 IAC 2-7-12. Subject to the following conditions:

(1) only two (2) generators may be installed and operated under this approval (MSM #097-25777-00311 and SPM #097-25778-00311);

(2) the rated capacity of each generator shall not exceed 540 HP;

(3) the generator shall be diesel-fired only;

(4) each generator brought on site shall have a manufactured date prior to April 1, 2006.

Compliance with these limits will limit the NOx emissions from these generators to less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 2-7-10.5(f)(Part 70 Significant Source Modification) and 326 IAC 2-2 (PSD) are not applicable.

D.9.2 Particulate Matter (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2 (a)(Particulate Matter Limitations Except Lake County), particulate matter (PM) emissions from each of the diesel-fired generators shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

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

D.9.3 Record Keeping Requirements

(a) To document compliance with Condition 9.1(a), the Permittee shall keep monthly records of the total fuel usage at the diesel-fired engines.

(b) The Permittee shall maintain records of the dates of installation and removal of diesel-fired engines as these units are installed and removed.

(c) To document compliance with Condition 9.1(c), the Permittee shall maintain records of the make, model, horsepower rating, the manufacture date, and model year of each rental generator brought onto the site.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

D.9.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.9.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.: T097-7238-00311

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:

9 Annual Compliance Certification Letter

9 Test Result (specify)

9 Report (specify)

9 Notification (specify)

9 Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Phone: 317-233-0178
Fax: 317-233-6865
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE
2700 South Belmont Ave.
Indianapolis Indiana 46221
Phone: 317-327-2234
Fax: 317-327-2274

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: **Rolls Royce Corporation**
Source Address: **2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241**
Mailing Address: **P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420**
Part 70 Permit No.: **T097-7238-00311**

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)

X 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

X 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:

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:

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE

PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS AND LANDFILL GAS FIRED BOILER CERTIFICATION

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.: T097-7238-00311

9 Natural Gas and Landfill Gas Only 9 Alternate Fuel burned From : _____ To:

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature:
Printed Name:
Title/Position:
Phone:
Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF AIR QUALITY, COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES, AIR COMPLIANCE
Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.: T097-7238-00311
Facility: Emission Unit D 0070-01, 02, 03, 04, 58, 59, 62, 63, 64, and 65
Parameter: PM10
Limit: 37,142,800 gal per twelve (12) consecutive month period of No. 4 oil and No.4 oil equivalents
Permittee must submit this page for each 12 consecutive month period in the reporting period.

Month: _____ **Year:** _____

Month	No. 4 Oil Usage (gal/month)	No. 6 Oil Usage (gal/day)	Equivalent No. 4 Oil (gal/month)	Natural Gas Usage MMCF/day	Equivalent No. 4 Oil (gal/month)	No. 2 oil Usage (gal/day)	Equivalent No. 4 Oil Usage (gal/month)	Landfill gas Usage MMCF/day Boiler	Landfill Gas Usage MMCF/day Turbine	Equivalent No. 4 Oil (gal/month)	No. 4 Oil Usage and its equivalent (gal/month)
TOTAL											

9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____ Date: _____

Title / Position: _____ Phone: _____

Signature: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2355 South Tibb Avenue, Indianapolis Indiana
Mailing Address: P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.: T097-7238-00311
Facility: Test Cell 00311-83
Parameter: Jet Fuel Usage
Limit: 567,779 gallons of Jet Fuel per 12 consecutive month period.

YEAR: QUARTER:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 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 DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES, AIR COMPLIANCE
Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.: T097-7238-00311
Facility: Emission Unit ID 0070-01, 02, 03, 04, 58, 62, 63, 64, 65, 71, 76, 79, 80, and 81
Parameter: Oxides of Nitrogen
Limit: 6205 MMCF of natural gas and natural gas equivalents during the last 12 month consecutive period.
Permittee must submit this page for each 12 consecutive month period in the reporting period.

Month	Natural Gas Usage (MMCF/month)					No. 6 oil Usage (gal/month)		No. 4 Oil usage (gal/month)	No. 2 oil usage (gal/month)	Landfill Gas usage (MMCF/month)		Natural Gas Usage and its equivalent
	boilers	Turbine ID Number										
		0070-80	0070-71	0070-76	0070-79					boilers	turbines	
Total												

QUARTER: _____ **YEAR:** _____

9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____ **Date:** _____

Title / Position: _____ **Phone:** _____

Signature: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2355 South Tibb Avenue, Indianapolis, Indiana
Mailing Address: P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.: T097-7238-00311
Facility: Two (2) Rental Diesel-Fired Generators 0070-89
Parameter: Total Diesel Fuel Usage
Limit: Less than 80 kilo-gallons (kgal) per twelve (12) consecutive month period.

YEAR: QUARTER:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 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.

ONGOING COMPLIANCE STATUS REPORT

Applicable Rule : 40 CFR Part 63, Subpart N National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.

Page 1 of 2

1. Plant Identification Number: 97-00311(Old ID 00070)

Owner: Rolls Royce Corporation
Street Address: 2355 S. Tibbs Avenue
City: Indianapolis State: Indiana Zip Code: 46241
Plant Phone Number: (317) 230-3591
Plant Fax Number: (317) 230-6047
Plant Contact: Pravin Patel

2. Operating Hours

Tank ID #	Type of Tank	Applicable emission limit	Type of control technique	Control system ID #	Operating parameter monitored	Acceptable value of the monitored parameter	Total operating time (hours)
1-11	Hard chrome plating	0.015 mg/dscm	Composite meshpad	253155	pressure drop	4 in. w.c. _ 1 in	
1-12	Hard chrome plating	0.015 mg/dscm	Composite meshpad	253155	pressure drop	4 in. w.c. _ 1 in	
1-13	Hard chrome plating	0.015 mg/dscm	Composite meshpad	253155	pressure drop	4 in. w.c. _ 1 in	
1-14	Hard chrome plating	0.015 mg/dscm	Composite meshpad	253155	pressure drop	4 in. w.c. _ 1 in	
1-15	Hard chrome plating	0.015 mg/dscm	Composite meshpad	253155	pressure drop	4 in. w.c. _ 1 in	
1-16	Hard chrome plating	0.015 mg/dscm	Composite meshpad	253155	pressure drop	4 in. w.c. _ 1 in	
2-20	Chrome anodizing	0.010 mg/dscm	Composite meshpad	253155	pressure drop	4 in. w.c. _ 1 in	

3. Identify the beginning and ending dates of the reporting period:

Beginning Ending _____

4. Excess Emissions/Malfunction

Tank ID #	Type of malfunction	Hours of malfunction	Tank Hours of operation during malfunction	% of Total operating time
1-11	None	0	0	0
1-12	None	0	0	0
1-13	None	0	0	0
1-14	None	0	0	0
1-15	None	0	0	0
1-16	None	0	0	0
2-20	None	0	0	0

5. Monitoring Data : Attached

6. During this reporting period, the pressure drop was within the range.

Page 2 of 2

7. Any changes in monitoring, process or controls since the last reporting period : None

8. Responsible official certification :

Name : Title : _____

I certify that the information contained in this report is accurate and true to the best of my knowledge.

_____ _____
(Signature of responsible official) (Date)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name:	Rolls Royce Corporation
Source Address:	2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address:	P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.:	T097-7238-00311
Facility:	Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter:	Particulate Emissions (PM)
Limit:	The combined total PM emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{PM} = ((G_{diesel/jet\ juel} \times 0.01) + (CF_{natural\ gas} \times 10.4) + (C_{SH} \times 1.9)) / 2000$$

Where:

E_{PM} = Emissions of PM in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	PM emissions (Tons This Month)	PM emissions (Tons Previous 11 Months)	PM emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name:	Rolls Royce Corporation
Source Address:	2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address:	P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.:	T097-7238-00311
Facility:	Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter:	Particulate Emissions less 10 microns (PM10)
Limit:	The combined total PM10 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall each be less than 10 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{PM10} = ((G_{diesel/jet\ juel} \times 0.01) + (CF_{natural\ gas} \times .081) + (C_{SH} \times 7.6)) / 2000$$

Where:

E_{PM10} = Emissions of PM10 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	PM10 emissions (Tons This Month)	PM10 emissions (Tons Previous 11 Months)	PM10 emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter: Particulate Emission less than 2.5 Microns (PM2.5)
Limit: The combined total PM2.5 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall each be less than 10 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{PM2.5} = ((G_{diesel/jet\ juel} \times 0.01) + (CF_{natural\ gas} \times .081) + (C_{SH} \times 7.6)) / 2000$$

Where:

$E_{PM2.5}$ = Emissions of PM2.5 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	PM2.5 emissions (Tons This Month)	PM2.5 emissions (Tons Previous 11 Months)	PM2.5 emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter: Nitrogen Oxide (NOx)
Limit: The combined total NOx emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{NOx} = \Sigma E_{DOS}$$

$$E_{DOS} = ((G_{diesel/jet\ juel} \times A) + (CF_{natural\ gas} \times D) + (C_{SH} \times 100)) / 2000$$

Where:

E_{NOx} = Emissions of NO_x in tons per month
E_{DOS} = Emissions of NOx in tons per month at each different operating scenario
A = 0.40 or emission rate determined from most recent emissions test in pounds per gallon
D = 4,284 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	NOx emissions (Tons This Month)	NOx emissions (Tons Previous 11 Months)	NOx emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter: Sulfur Dioxide (SO_2)
Limit: The combined total SO_2 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{SO2} = ((G_{diesel/jet\ juel} \times 0.07) + (CF_{natural\ gas} \times 0.617) + (C_{SH} \times 0.6)) / 2000$$

Where:

E_{SO2} = Emissions of SO_2 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	SO_2 emissions (Tons This Month)	SO_2 emissions (Tons Previous 11 Months)	SO_2 emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter: Carbon Monoxide (CO)
Limit: The combined total CO emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 100 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{CO} = \Sigma E_{DOS}$$

$$E_{DOS} = ((G_{diesel/jet\ juel} \times C) + (CF_{natural\ gas} \times E) + (C_{SH} \times 84)) / 2000$$

Where:

E_{CO} = Emissions of CO in tons per month
E_{DOS} = Emissions of CO in tons per month at each different operating scenario
C = 1.21 or emission rate determined from most recent emissions test in pounds per gallon
E = 332.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	CO emissions (Tons This Month)	CO emissions (Tons Previous 11 Months)	CO emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter: Volatile Organic Compounds (VOC)
Limit: The combined total VOC emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$E_{VOC} = \Sigma E_{DOS}$

$E_{DOS} = ((G_{diesel/jet\ juel} \times B) + (CF_{natural\ gas} \times F) + (C_{SH} \times 5.5)) / 2000$

Where:

E_{VOC} = Emissions of VOC in tons per month
E_{DOS} = Emissions of VOC in tons per month at each different operating scenario
B = 0.21 or emission rate determined from most recent emissions test in pounds per gallon
F = 123.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	VOC emissions (Tons This Month)	VOC emissions (Tons Previous 11 Months)	VOC emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32
Parameter: Volatile Organic Compounds (VOC)
Limit: The combined total VOC emissions from test cell 824, identified as 0070-N32 shall be less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$E_{VOC} = \Sigma E_{DOS}$

$E_{DOS} = ((G_{diesel/jet\ juel} \times B) + (CF_{natural\ gas} \times F)) / 2000$

Where:

E_{VOC} = Emissions of VOC in tons per month
E_{DOS} = Emissions of VOC in tons per month at each different operating scenario
B = 0.21 or emission rate determined from most recent emissions test in pounds per gallon
F = 123.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	VOC emissions (Tons This Month)	VOC emissions (Tons Previous 11 Months)	VOC emissions (12 Month Total in 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 DATA SECTION
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
AIR COMPLIANCE

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: **Rolls Royce Corporation**
Source Address: **2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241**
Mailing Address: **P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420**
Part 70 Permit No.: **T097-7238-00311**

Months: _____ to _____ Year: _____

This report shall be submitted semi-annually based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do 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 ANo deviations occurred this reporting period@.
9 **NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.**
9 **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:

Page 2 of 2

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: _____

Attach a signed certification to complete this report.

Attachment A

The following state rule have been adopted by reference by the Indianapolis Air Pollutant Control Board and are enforceable by Indianapolis Office of Environmental Services (OES) using local enforcement procedures.

(1) 326 IAC 1-1-1 through 1-1-3 and 1-1-5;
(2) 326 IAC 1-2-1 through 1-2-91 (In addition, the IAPCB has adopted several local definitions);
(3) 326 IAC 1-3-1 through 1-3-4;
(4) 326 IAC 1-4-1 (The IAPCB added to the adoption by reference a citation to 61 FR 58482 (November 15, 1996));
(5) 326 IAC 1-5-1 through 1-5-5;
(6) 326 IAC 1-6-1 through 1-6-6;
(7) 326 IAC 1-7-1 through 1-7-5
(8) 326 IAC 2-3-1 through 2-3-5;
(9) 326 IAC 2-4-1 through 2-4-6;
(10) 326 IAC 2-6-1 through 2-6-4;
(11) 326 IAC 2-7-1 through 2-7-18, 2-7-20 through 2-7-25;
(12) 326 IAC 2-8-1 through 2-8-15, 2-8-17 through 2-8-10;
(13) 326 IAC 2-9-1 through 2-9-14;
(14) 326 IAC 2-10-1 through 2-10-5 (The IAPCB adoption adds the language Astate or local@ immediately after the word Afederal@ in 326 IAC 2-10-1);
(15) 326 IAC 2-11-1, 2-11-3 and 2-11-4 (The IAPCB adoption adds the language Afederal, state or local@ immediately after the word Aby@ in 326 IAC 2-11-1);
(16) 326 IAC 3-1.1-1 through 3-1.1-5;
(17) 326 IAC 3-2.1-1 through 3-2.1-5;
(18) 326 IAC 3-3-1 through 3-3-5;
(19) 326 IAC 4-2-1 through 4-2-2;
(20) 326 IAC 5-1-1 (a), (b) and c) (5), 5-1-2 (1), (2)(A), (2)c) (4), 5-1-3 through 5-1-5, 5-1-7;
(21) 326 IAC 7-1.1-1 and 7-1.1-2;
(22) 326 IAC 7-2-1;
(23) 326 IAC 7-3-1 and 7-3-2;
(24) 326 IAC 7-4-2(28) through (31) (Instead of adopting by reference 7-4-2(1) through (27), the IAPCB regulation substitutes the same requirements listed in a format in which the companies are alphabetized and emission points known to no longer exist have been deleted);
(25) 326 IAC 8-1-0.5 except (b), 8-1-1 through 8-1-2, 8-1-3 except c), (g) and (i), 8-1-5 through 8-1-12;
(26) 326 IAC 8-2-1 through 8-2-12 (The IAPCB adoption by reference of 8-2- 5 adds additional language specific to Zimmer Paper Products, Incorporated as subpart c);
(27) 326 IAC 8-3-1 through 8-3-7;
(28) 326 IAC 8-4-1 through 8-4-5, 8-4-6 (a)(6), (a)(8) and (a)(14) and 8-4-6(b)(1), (b)(3) and 8-4-6c) (In place of 8-4-6(b)(2), which was not adopted, the IAPCB adopted language requiring a pressure relief valve set to release at no less than four and eight-tenths (4.8) Kilo Pascals (seven-tenths (0.7) pounds per square inch)), 8-4-7 except (e), 8-4-8 and 8-4-9;
(29) 326 IAC 8-5-1 through 8-5-4, 8-5-5 except (a)(3) and (d)(3);
(30) 326 IAC 8-6-1 and 8-6-2;
(31) 326 IAC 9-1-1 and 9-1-2;
(32) 326 IAC 11-1-1 through 11-1-2;
(33) 326 IAC 11-2-1 through 11-2-3;
(34) 326 IAC 11-3-1 through 11-3-6;
(35) 326 IAC 14-1-1 through 14-1-4;Attachment A continued

(36) 326 IAC 14-2-1 except 40 CFR 61.145;
(37) 326 IAC 14-3-1;
(38) 326 IAC 14-4-1;
(39) 326 IAC 14-5-1;
(40) 326 IAC 14-6-1;
(41) 326 IAC 14-7-1;
(42) 326 IAC 14-8-1 through 14-8-5;
(43) 326 IAC 15-1-1, 15-1-2(a)(1), (a)(2) and (a)(8), 15-1-3 and 15-1-4;

(44) 326 IAC 20-1-1 through 20-1-4 (In 20-1-3(b)(2) the adoption states that Apermitting authority@ means the commissioner of IDEM or the administrator of OES, whichever is applicable);
(45) 326 IAC 20-2-1;
(46) 326 IAC 20-3-1;
(47) 326 IAC 20-4-1;
(48) 326 IAC 20-5-1;
(49) 326 IAC 20-6-1;
(50) 326 IAC 20-7-1;
(51) 326 IAC 20-8-1;
(52) 326 IAC 20-9-1;
(53) 326 IAC 20-14-1;
(54) 326 IAC 20-15-1;
(55) 326 IAC 20-16-1;
(56) 326 IAC 20-17-1;
(57) 326 IAC 20-18-1;
(58) 326 IAC 20-19-1;
(59) 326 IAC 20-20-1;
(60) 326 IAC 20-21-1;
(61) 326 IAC 21-1-1 (The adoption states that Aor the administrator of OES@ is added in (b));
(62) 326 IAC 22-1-1 (The adoption states that Aor the administrator of OES@ is added in (b)).

Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services

Addendum to the Technical Support Document for a Part 70 Significant Source Modification and Significant Permit Modification

Source Name:	**Rolls Royce Corporation**
Source Location:	**2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241**
County:	**Marion**
SIC Code:	**3724**
Operation Permit No.:	**T097-7238-00311**
Operation Permit Issuance Date:	**August 15, 2003**
Significant Source Modification No.:	**097-26350-00311**
Significant Permit Modification No.:	**097-26377-00311**
Permit Reviewer:	**Anh-tuan Nguyen**

On July 18, 2008, the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that Rolls Royce Corporation had applied for a Significant Source Modification and Significant Permit Modification to a Part 70 Operating Permit to relating to the modification of an existing test cell (824) and two existing shack heaters. The notice also stated that OAQ and OES proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

No comments were received during the public notice period. Upon further review, the OAQ and OES have decided to make the following revisions to the Significant Source Modification and Significant Permit Modification to a Part 70 Operating Permit. The TSD will remain as it originally appeared when published. Changes to the permit or technical support material that occur after the permit has published for public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Bolded language has been added and the language with strikeout has been deleted. The Table of Contents has been modified to reflect these changes.

IDEM, OAQ and OES Change 1:

Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. On May 8th, 2008, U.S. EPA promulgated specific New Source Review rules for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Therefore, direct PM2.5 and SO_2 emissions were reviewed pursuant to the requirements of Non-attainment New Source Review, 326 IAC 2-1.1-5. This existing source is a major stationary source, under Non-attainment New Source Review (326 IAC 2-1.1-5), because the potential to emit of PM2.5 and SO_2 are each greater than 100 tons per year. Rolls Royce Corporation has agreed to limit the PM2.5 emissions from this modification to make the requirements of 326 IAC 2-1.1-5 not applicable. However, the potential to emit of PM2.5 must be included in the

Potential to Emit table (assuming PM2.5 emissions are equivalent to PM10 emissions). The table is revised in this Addendum as follows:

	Potential to Emit (ton/yr)						
Process / Emission Unit	PM	PM10	**PM2.5**	SO_2	VOC	CO	NO_X
Test Cell 824 / 0070-N32	166.00	166.00	**166.00**	763.00	4626.00	2479.00	14056.00
Two (2) shack heaters / 0070-70A & 0070-70B	1.50	5.99	**5.99**	0.47	78.84	4.34	66.23
Total for the Modification	167.50	171.99	**171.99**	763.47	4704.84	2483.34	14122.23
Limited Total for Modification	< 25	< 15	**< 10**	< 40	< 40	< 100	< 40
Significant Level	25	15	**10**	40	40	100	40

IDEM, OAQ and OES Change 2:

Assuming PM2.5 emissions are equivalent to PM10 emissions, the unrestricted PM2.5 emissions from this modification is greater than one hundred (100) tons per year. Limiting PM2.5 emissions from this modification to less than 10 tons per year will make the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable for PM2.5 and still make the requirements of 326 IAC 2-2 (PSD) not applicable for PM10. As a result, conditions D.5.5 and D.5.11 have been revised and a new PM2.5 quaterly report has been added as follows:

D.5.5 PSD Minor PM10 Limit [326 IAC 2-2] **and Nonattainment NSR Minor PM2.5 Limit [326 IAC 2-1.1-5]**

Pursuant to Part 70 Significant Source Modification 097-26350-00311, the PM10 **and PM2.5** emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(a) The PM10 **and PM2.5** emission rate**s** from test cell 824, identified as 0070-N32, shall **each** not exceed 0.01 pounds per gallon of diesel/jet fuel combusted.

(b) The PM10 **and PM2.5** emission rate**s** from test cell 824, identified as 0070-N32, shall **each** not exceed 0.081 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(c) The PM10 **and PM2.5** emission rate**s** from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall **each** not exceed 7.6 pounds per million cubic feet (lb/MMCF).

(d) The combined total PM10 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 15 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(e) The combined total PM2.5 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 10 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 15 tons **per year** of PM10 **and 10 tons per year of PM2.5** ~~per year~~ and therefore will render the requirements of 326 IAC 2-2 **and 326 IAC 2-1.1-5** not applicable.

D.5.11 Particulate Emissions (PM), Particulate Emissions less than 10 microns (PM10), **Particulate Emissions less than 2.5 microns (PM2.5),** Carbon Monoxide (CO), Volatile Organic Compounds (VOC), and Nitrogen Oxides (NO_X) Emissions

...

(c) Compliance with Condition D.5.5**(d)** shall be determined by the following equation:

$E_{PM10} = ((G_{diesel/jet\ juel} \text{ X } 0.01) + (CF_{natural\ gas} \text{ X } .081) + (C_{SH} \text{ x } 7.6)) / 2000$

Where:

E_{PM10} = Emissions of PM10 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(d) Compliance with Condition D.5.5(e) shall be determined by the following equation:

$\mathbf{E_{PM2.5} = ((G_{diesel/jet\ juel} \text{ X } 0.01) + (CF_{natural\ gas} \text{ X } .081) + (C_{SH} \text{ x } 7.6)) / 2000}$

Where:

$E_{PM2.5}$ = Emissions of PM2.5 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(~~d~~ **e**) Compliance with Condition D.5.6 shall be determined by the following equation:

$E_{SO2} = ((G_{diesel/jet\ juel} \text{ X } 0.07) + (CF_{natural\ gas} \text{ X } 0.617) + (C_{SH} \text{ x } 0.6)) / 2000$

Where:

E_{SO2} = Emissions of SO_2 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(~~e~~ **f**) Compliance with Condition D.5.7 shall be determined by the following equation:

$E_{CO} = \Sigma E_{DOS}$

$E_{DOS} = ((G_{diesel/jet\ juel} \text{ X } C) + (CF_{natural\ gas} \text{ X } E) + (C_{SH} \text{ x } 84)) / 2000$

Where:

E_{CO} = Emissions of CO in tons per month
E_{DOS} = Emissions of CO in tons per month at each different operating scenario
C = 1.21 or emission rate determined from most recent emissions test in pounds per gallon

E = 332.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(~~f~~ **g**) Compliance with Condition D.5.8 shall be determined by the following equation:

$E_{VOC} = \Sigma E_{DOS}$

$E_{DOS} = ((G_{diesel/jet\ juel} \times B) + (CF_{natural\ gas} \times F) + (C_{SH} \times 5.5)) / 2000$

Where:
E_{VOC} = Emissions of VOC in tons per month
E_{DOS} = Emissions of VOC in tons per month at each different operating scenario
B = 0.21 or emission rate determined from most recent emissions test in pounds per gallon
F = 123.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(~~g~~ **h**) Compliance with Condition D.5.9 shall be determined by the following equation:

$E_{VOC} = \Sigma E_{DOS}$

$E_{DOS} = ((G_{diesel/jet\ juel} \times B) + (CF_{natural\ gas} \times F)) / 2000$

Where:
E_{VOC} = Emissions of VOC in tons per month
E_{DOS} = Emissions of VOC in tons per month at each different operating scenario
B = 0.21 or emission rate determined from most recent emissions test in pounds per gallon
F = 123.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and

OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter: Particulate Emission less than 2.5 Microns (PM2.5)
Limit: The combined total PM2.5 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall each be less than 10 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{PM2.5} = ((G_{diesel/jet\ juel} \times 0.01) + (CF_{natural\ gas} \times .081) + (C_{SH} \times 7.6)) / 2000$$

Where:

$E_{PM2.5}$ = Emissions of PM2.5 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ **Year:** _____

Month	Column 1	Column 2	Column 1 + Column 2
	PM2.5 emissions (Tons This Month)	PM2.5 emissions (Tons Previous 11 Months)	PM2.5 emissions (12 Month Total in 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
and
City of Indianapolis Office of Environmental Services

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

Source Description and Location

Source Name:	Rolls Royce Corporation
Source Location:	2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
County:	Marion
SIC Code:	3724
Operation Permit No.:	T097-7238-00311
Operation Permit Issuance Date:	August 15, 2003
Significant Source Modification No.:	097-26350-00311
Significant Permit Modification No.:	097-26377-00311
Permit Reviewer:	Anh-tuan Nguyen

Source Definition

Rolls Royce Corporation consists of two (2) plants:

(a) Plant 8 is located at 2001 South Tibbs Avenue, Indianapolis, Indiana 46241; and

(b) Plant 5 is located at 2355 South Tibbs Avenue, Indianapolis, Indiana 46241.

Since the two (2) plants are located on contiguous properties, have the same SIC code and are under common control of the same entity, they are considered one (1) source, as defined by 326 IAC 2-7-1(22). This determination was made during the issuance of the Part 70 Permit 097-7238-00311 in 2003 and has not been changed in this permitting approval.

Existing Approvals

The source was issued Part 70 Operating Permit No. T097-7238-00311 on August 13, 2003. The source has since received the following approvals:

(a) First Significant Source Modification 097-17981-00311, issued October 3, 2003;

(b) First Significant Permit Modification 097-17398-00311, issued October 17, 2003;

(c) Review Request 097-19632-00311, issued July 26, 2004;

(d) First Administrative Amendment 097-19823-00311, issued December 6, 2004;

(e) Second Administrative Amendment 097-21307-00311, issued June 15, 2005;

(f) Third Administrative Amendment 097-22677-00311, issued June 29, 2006;

(g) First Minor Source Modification 097-23458-00311, issued August 10, 2006,

(h) Second Significant Permit Modification 097-23459-00311, issued October 12, 2006;

(i) Second Significant Source Modification 097-23886-00311, issued December 13, 2007;

(j) Third Significant Permit Modification 097-24074-00311, issued January 29, 2008; and

(k) First Minor Permit Modification: 097-25778-00311, issued April 28, 2008.

A Part 70 Operating Permit Renewal (T097-25529-00311) application was submitted on November 21, 2007. At this time this application is still under review.

County Attainment Status

The source is located in Marion County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
O_3	Attainment effective November 8, 2007, for the 8-hour ozone standard.[1]
PM10	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Attainment effective July 10, 2000, for the part of Franklin Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is not designated.
[1]Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour designation was revoked effective June 15, 2005. Basic Nonattainment effective April 5, 2005 for PM2.5.	

(a) Ozone Standards

(1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(2) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

(3) 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. Marion 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
Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5.

(c) Other Criteria Pollutants
Marion County has been classified as attainment or unclassifiable in Indiana for PM10, CO, NO_2, PM, Pb and SO_2. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Since a portion of this source is classified as fossil fuel boilers with a total more than 250 MMBtu/hour heat input, that portion of the source is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, fugitive emissions are not counted toward the determination of PSD applicability except for the portion of the source described below.

Since emission units 0070-58, 0070-59, 0070-62, 0070-63, 0070-64, and 0070-65 are one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3 or 326 IAC 2-1.1-5, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability for these types of units only.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	**Emissions** (ton/yr)
PM	greater than 250
PM10	greater than 250
SO_2	greater than 250
VOC	greater than 250
CO	greater than 250
NO_X	greater than 250

(a) This existing source consists of a manufacturing and testing source for aerospace engines. Based on the PSD guidance for "nesting activities", the boilers identified as emission units 0070-58, 0070-59, 0070-62, 0070-63, 0070-64, and 0070-65 will be nested for PSD applicability determination.

(1) The entire source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(2) The fossil fuel boilers at this source are considered one of the 28 source categories and is considered "nested" within a non-listed source. The potential to emit of the fossil fuel boilers at this source is greater than 100 tons per year. Therefore, this existing nested source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(b) This existing source is a major stationary source, under nonattainment new source review rules (326 IAC 2-1.1-5) since PM10 (a surrogate for PM2.5) is emitted at a rate of 100 tons per year or more.

(c) These emissions are based upon the calculations generated for the Part 70 Operating Permit No. 097-7238-00311 issued August 13, 2003.

The table below summarizes the potential to emit HAPs for the entire source after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (tons/year)
Individual HAP	greater than 10
Total HAP	greater than 25

This existing source is a major source of HAPs, as defined in 40 CFR 63.41, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2006 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	38.8
PM10	40
SO_2	223
VOC	38.6
CO	59.7
NO_x	165.4
HAPs	Not reported

Description of Proposed Modification

The Indiana Department of Environmental Management, Office of Air Quality (OAQ) and City of Indianapolis Office of Environmental Services (OES) have reviewed a modification application, submitted by Rolls Royce Corporation on March 26, 2008 relating to the modification of an existing test cell (824) and two existing shack heaters.

Rolls Royce Corporation is proposing to modify test cell 824 in Plant 8 to accommodate a different engine. In order to accommodate the different engine, Rolls Royce must make the test cell larger. The fuel and air delivery system will remain the same. The maximum test cell capacity will increase from 90 pounds of air per second to 120 pounds of air per second. In addition, Rolls Royce Corporation is proposing to convert two (2) of the three (3) American Shack Heaters from burning distillate oil to natural gas. The modification to test cell 824 and the Shack Heaters are considered the same project because the Shack Heaters provide a support function to test cell 824

The following is a list of the modified emission units:

(i) Three (3) American Shack Heaters consisting of:

(1) Two (2) heaters, identified as 0070-70A and 0070-70B, with a maximum heat input capacity of 90 million British thermal units per hour each, modified in 2008 to burn natural gas, and exhausting to stacks 8-6A and 8-6B, respectively; and

(2) One (1) natural gas or distillate fired heater, identified as 0070-70C, with a maximum heat input capacity of 90 million British thermal units per hour, and exhausting to stack 8-6C.

(j) Fifty (50) Engine test stand cells identified below. These test stand cells are used to test engines manufactured at the source. The engines tested are fueled by either Jet fuel, Diesel Oil #2, or Natural Gas. All test stand cells were constructed prior to 1977, except test stand cells Emission Unit ID 0070-87 and 0070-88 that received approval to construct in 2007. Test cell 0070-N32 (824) was approved for modification in 2008.

Engine Test Cells - Plant 5				
Emission Unit ID No.	Engine Test Cell ID	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID
0070-N3	109	5000 brake horsepower	Jet fuel, Diesel	SN3
0070-N4	111	10000 pounds of thrust	Jet fuel	SN4
0070-N5	113	10000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN5
0070-N6	114	30000 pounds of thrust	Jet fuel	SN6
0070-N7	115	7000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN7
0070-N8	116	5000 brake horsepower	Jet fuel, Diesel	SN8
0070-N9	117	5000 brake horsepower	Jet fuel, Diesel	SN9
0070-N10	118	5000 brake horsepower	Jet fuel, Diesel	SN10
0070-N11	119	5000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN11
0070-N12	120	7000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN12
0070-N13	121	10000 brake horsepower	Jet fuel, Diesel	SN13
0070-N15	123	5000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN15
0070-N16	140	1500 brake horsepower	Jet fuel	SN16
0070-N17	141	750 brake horsepower	Jet fuel	SN17
0070-N18	142	800 brake horsepower	Jet fuel	SN18
0070-N19	143	750 brake horsepower	Jet fuel	SN19
0070-N20	144	750 brake horsepower	Jet fuel	SN20
0070-N21	145	750 brake horsepower	Jet fuel	SN21
0070-N22	146	1500 brake horsepower	Jet fuel	SN22
0070-N23	147	1500 brake horsepower	Jet fuel	SN23
0070-N24	148	1500 brake horsepower	Jet fuel	SN24

Engine Test Cells - Plant 5				
Emission Unit ID No.	Engine Test Cell ID	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID
0070-N25	149	650 brake horsepower	Jet fuel	SN25
0070-N27	152	1500 brake horsepower	Jet fuel	SN27
0070-87	133	715 brake horsepower, with maximum fuel flow capacity of 59 gal/hr	Jet fuel	S87
0070-88	135	715 brake horsepower, with maximum fuel flow capacity of 59 gal/hr	Jet fuel	S88

Engine Test Cells - Plant 8				
Emission Unit ID	Engine Test Cell	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID
0070-N34	843	10000 brake horsepower	Jet fuel	SN34(A,B)
0070-N35	861	9000 pounds of thrust	Jet fuel, Diesel	SN35
0070-N36	862	6000 brake horsepower	Jet fuel, Diesel	SN36
0070-N37	871	15000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN37(A,B)
0070-N38	872	9000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN38(A,B)
0070-N39	873	9000 brake horsepower	Jet fuel	SN39(A,B,C)
0070-N40	875	5000 brake horsepower	Diesel	SN40
0070-N41	881	10000 pounds of thrust	Jet fuel	SN41(A,B)
0070-N42	882	30000 pounds of thrust	Jet fuel	SN42(A,B,C,D,E,F)
0070-N43	883	2500 brake horsepower	Jet fuel	SN43(A,B)
0070-N44	884	2000 brake horsepower	Jet fuel	SN44
0070-N45	885	800 brake horsepower	Jet fuel, Diesel	SN45(A,B)
0070-N46	886	30000 pounds of thrust	Jet fuel, Diesel	SN46(A,B,C,D)
0070-N47	893	500 pounds of thrust	Diesel	SN47
0070-N48	894	350 brake horsepower	Diesel	SN48
0070-N29	821	10 pounds/second air	Jet fuel, Diesel & Natural Gas	SN29(A,B)
0070-N30	822	50 pounds/second air	Jet fuel, Diesel & Natural Gas	SN30(A,B)
0070-N31	823	60 pounds/second air	Jet fuel, Diesel & Natural Gas	SN31(A,B)
0070-N32	824	120 pounds/second air	Jet fuel, Diesel & Natural Gas	SN32(A,B)

0070-N33	826	25 pounds/second air	Jet fuel, Diesel	SN33(A,B)
0070-54	8137	10 pounds/second air	Jet fuel, Diesel & Natural Gas	SN54
0070-N54a	8137	12.5 MMBtu/hr	No. 2 Diesel fuel	Not Available
0070-N55	8126	0.5 pounds/second air	Jet fuel, Diesel & Natural Gas	Not Available
0070-N56	8128	1 pounds/second air	Jet fuel, Diesel & Natural Gas	Not Available

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations. HAP emissions were not calculated for test cell 824 because test cell 824 is currently subject National Emission Standards for Hazardous Air Pollutants (NESHAP) for Engine test cells/stands, 40 CFR 63, Subpart PPPPP. This modification will not change the applicability of the NESHAP.

PTE of the Modification

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

PTE Before Controls of the Modification	
Pollutant	**Potential To Emit** (ton/yr)
PM	167.50
PM10	171.99
SO_2	763.47
VOC	2483.34
CO	14122.23
NO_X	4707.84

This source modification is subject to 326 IAC 2-7-10.5(f)(4) because the potential to emit of PM, PM10, SO_2, NOx, and VOC is greater than twenty five (25) tons per year and the potential to emit of CO is greater than one hundred (100) tons per year. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification SPM 097-26377-00311 issued pursuant to 326 IAC 2-7-12(d), because the modification requires significant changes in existing monitoring Part 70 permit terms and conditions and involves a case-by-case determination of an emission limitation (PSD minor limit).

Permit Level Determination – PSD

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 source modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential to Emit (ton/yr)					
Process / Emission Unit	**PM**	**PM10**	**SO_2**	**VOC**	**CO**	**NO_X**
Test Cell 824 / 0070-N32	166.00	166.00	763.00	4626.00	2479.00	14056.00
Two (2) shack heaters / 0070-70A & 0070-70B	1.50	5.99	0.47	78.84	4.34	66.23
Total for the Modification	167.50	171.99	763.47	4704.84	2483.34	14122.23
Limited Total for Modification	**< 25**	**< 15**	**< 40**	**< 40**	**< 100**	**< 40**
Significant Level	25	15	40	40	100	40

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Marion County has been designated as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled "Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas" authored by Steve Page, Director of OAQPS, until EPA promulgates the PM2.5 major NSR regulations, states should assume that a major stationary source's PM10 emissions represent PM2.5 emissions. IDEM will use the PM10 nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM2.5 NAAQS. A significant emissions increase would be a potential emissions increase of fifteen (15) tons per year of PM10. Rolls Royce Corporation has limited the potential to emit of PM10 from the modification to less than fifteen (15) tons per year. Therefore, assuming that PM10 emissions represent PM2.5 emissions, 326 IAC 2-1.1-5 does not apply for PM2.5.

Since this source is considered a major PSD source and the unrestricted potential to emit of this modification is greater than twenty-five (25) tons of PM per year, fifteen (15) tons of PM10 per year, forty (40) tons of VOC per year, forty (40) tons of NOx per year, forty (40) tons of SO_2 per year, and one hundred (100) tons of CO per year, this source has elected to limit the potential to emit of this modification as follows:

(a) The PM and PM10 emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.01 pounds per gallon of diesel/jet fuel combusted.

(b) The PM emission rate from test cell 824, identified as 0070-N32, shall not exceed 10.4 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(c) The PM emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 1.9 pounds per million cubic feet (lb/MMCF).

(d) The PM10 emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.081 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(e) The PM10 emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 7.6 pounds per million cubic feet (lb/MMCF).

(f) The NOx emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.40 pounds per gallon of diesel/jet fuel combusted or an emission rate determined from the most recent stack test.

(g) The NOx emission rate from test cell 824, identified as 0070-N32, shall not exceed 4,284 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(h) The NOx emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 100 pounds per million cubic feet (lb/MMCF).

(i) The SO_2 emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.07 pounds per gallon of diesel/jet fuel combusted.

(j) The SO_2 emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.617 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(k) The SO_2 emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 0.6 pound per million cubic feet (lb/MMCF).

(l) The VOC emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.21 pounds per gallon of diesel/jet fuel combusted or an emission rate determined from the most recent stack test.

(m) The VOC emission rate from test cell 824, identified as 0070-N32, shall not exceed 123.9 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(n) The VOC emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 5.5 pounds per million cubic feet (lb/MMCF).

(o) The CO emission rate from test cell 824, identified as 0070-N32, shall not exceed 1.21 pounds per gallon of diesel/jet fuel combusted or an emission rate determined from the most recent stack test.

(p) The CO emission rate from test cell 824, identified as 0070-N32, shall not exceed 332.9 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(q) The CO emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 84 pounds per million cubic feet (lb/MMCF).

(r) The combined total PM emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(s) The combined total PM10 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 15 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(t) The combined total NOx emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(u) The combined total SO_2 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(v) The combined total VOC emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(w) The combined total CO emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 100 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than twenty-five (25) tons of PM per year, less than fifteen (15) tons of PM10 per year, less than 40 tons of NOx per year, less than 40 tons of SO_2 per year, less than 40 tons of VOC per year and less than 100 tons of CO per year, and therefore will render the requirements of 326 IAC 2-2 not applicable.

The emission rates listed above were taken from AP-42, Chapter 3.2.1 (Rev. 4/73) for the test cell 824 when combusting diesel/jet fuel, AP-42, Chapter 3.2, Supplement F (August 2000) for test cell 824 when combusting natural gas, and AP-42, Chapter 1.4, Supplement D (July 1998) for the shack heaters when combusting natural gas.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

NSPS:

(a) There are no changes to New Source Performance Standard (NSPS)(326 IAC 12 and 40 CFR Part 60) applicability due to this proposed modification.

NESHAP:

(b) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Engine Test Cells / Stands (40 CFR 63.9280, Subpart PPPPP), which is incorporated by reference as 326 IAC 20-75. Test cell 0070-N32 (824) is a part of the existing affected source. The applicant states in the application that this modification to test cell 0070-N32 (824) does not meet the definition of Reconstruction under 40 CFR 63.2 because the fixed capital cost of the new components does not exceed 50 percent of the fixed capital cost that would be required to construct a comparable new source. Therefore, there are no changes to NESHAP, Subpart PPPPP applicability due to this modification. The source remains an existing affected source.

(c) The requirements of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63.6580, Subpart ZZZZ are not included in the permit because the provisions of the subpart do not apply to engines being tested at a test cell/stand.

(d) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

(1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The emission units being modified through this permitting action do not utilize control devices and are therefore not subject to 40 CFR Part 64 CAM.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 (PSD)
PSD applicability is discussed under the Permit Level Determination – PSD section.

326 IAC 2-4.1 (New Source Toxic Control)
This source is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Engine Test Cells / Stands (40 CFR 63.92.80, Subpart PPPPP). Therefore, the requirements of 326 IAC 2-4.1 (New Source Toxics Control) are not applicable to this source.

326 IAC 5-1 (Opacity Limitations)
This source is located in the part of Marion Couny specified in 326 IAC 5-1-1(c)(5). 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 the permit:

(a) Opacity shall not exceed an average of thirty percent (30%) 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.

326 IAC 6.5-1-2 (Particulate Matter Limitations Except Lake County)
This source is located in Marion county. Rolls Royce Corporation is listed in 326 IAC 6.5-6-33, but the shack heaters (0070-70A and 0070-70B) and the test cell (0070-N32) are not specifically identified.

The potential to emit PM from this source is greater than one hundred (100) tons per year. Therefore, the PM emissions from the shack heaters (0070-70A and 0070-70B) and the test cell (0070-N32) shall not exceed 0.03 grain per dry standard cubic foot (gr/dscf), pursuant to 326 IAC 6.5-1-2(a).

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The shack heaters (0070-70A and 0070-70B) and the test cell (0070-N32) are not considered indirect heating units. Therefore, 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating) does not apply.

326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)
The natural gas fired shack heaters (0070-70A and 0070-70B), each with a maximum capacity of 90 MMBtu/hr heat input, combined have a potential to emit sulfur dioxide less than twenty-five (25) tons per year and less than ten (10) pounds per hour. The SO_2 potential emissions when using an AP-42 emission factor of 0.6 lb/mmcf is equal to 0.5 tons per year. Therefore, 326 IAC 7-1.1-1 no longer applies to the natural gas fired shack heaters (0070-70A and 0070-70B).

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
This rule applies to new facilities constructed after January 1, 1980 with the potential to emit of VOC of 25 tons per year or more. The source has indicated that potential to emit from the test cell (0070-N32) will produce potential VOC emissions more than 25 tons.

The following limits shall apply to test cell (0070-N32), in order to render 326 IAC 8-1-6 not applicable:

(a) The VOC emission rate from test cell (0070-N32) shall be limited to 0.21 pounds of VOC per gallon (lb/gal) of diesel/jet fuel combusted or an emission rate determined from the most recent stack test.

(b) The VOC emissions from test cell (0070-N32), shall not exceed 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) Compliance with this limit shall be determined by the following equation:

E_{VOC} = (($G_{diesel/jet\ juel}$ X B) + ($CF_{natural\ gas}$ X 123.9)) / 2000

Where:

E_{VOC} = Emissions of VOC in tons per month
B = 0.21 or emission factor determined from stack test in pounds per gallon
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32

Compliance with these limits will limit the VOC emissions from test cell (0070-N32) to less than 25 tons per twelve (12) consecutive month period. Therefore, 326 IAC 8-1-6 does not apply.

The natural gas fired shack heaters (0070-70A and 0070-70B), each with a maximum capacity of 90 MMBtu/hr heat input, have a potential to emit VOC less than twenty-five (25) tons per year. The VOC potential emissions when using an AP-42 emission factor of 5.5 lb/mmcf is equal to 4.2 tons per year. Therefore, 326 IAC 8-1-6 does not apply to the shack heaters (0070-70A and 0070-70B).

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The Compliance Determination Requirements applicable to this modification are as follows:

PM, PM10, SO2, NOx, CO and VOC

Compliance with the PM, PM10, SO_2, NO_x, VOC and CO emissions limits shall be determined by the following equations:

E_{PM} = (($G_{diesel/jet\ juel}$ X 0.01) + ($CF_{natural\ gas}$ X 10.4) + (C_{SH} x 1.9)) / 2000

Where:

E_{PM} = Emissions of PM in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

E_{PM10} = (($G_{diesel/jet\ juel}$ X 0.01) + ($CF_{natural\ gas}$ X .081) + (C_{SH} x 7.6)) / 2000

Where:

E_{PM10} = Emissions of PM10 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell

0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

$E_{SO2} = ((G_{diesel/jet\ juel} \times 0.07) + (CF_{natural\ gas} \times 0.617) + (C_{SH} \times 0.6)) / 2000$

Where:
E_{SO2} = Emissions of SO_2 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

$E_{NOx} = ((G_{diesel/jet\ juel} \times A) + (CF_{natural\ gas} \times 4{,}284) + (C_{SH} \times 100)) / 2000$

Where:
E_{NOx} = Emissions of NO_x in tons per month
A = 0.40 or emission factor determined from stack test in pounds per gallon
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

$E_{VOC} = ((G_{diesel/jet\ juel} \times B) + (CF_{natural\ gas} \times 123.9) + (C_{SH} \times 5.5)) / 2000$

Where:
E_{VOC} = Emissions of VOC in tons per month
B = 0.21 or emission factor determined from stack test in pounds per gallon
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

$E_{VOC} = ((G_{diesel/jet\ juel} \times B) + (CF_{natural\ gas} \times 123.9)) / 2000$

Where:
E_{VOC} = Emissions of VOC in tons per month
B = 0.21 or emission factor determined from stack test in pounds per gallon
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32

$E_{CO} = ((G_{diesel/jet\ juel} \times C) + (CF_{natural\ gas} \times 332.9) + (C_{SH} \times 84)) / 2000$

Where:
E_{CO} = Emissions of CO in tons per month
C = 1.21 or emission factor determined from stack test in pounds per gallon
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

The testing requirements applicable to this proposed revision are as follows:

Summary of Testing Requirements				
Emission Unit	**Control Device**	**Timeframe for Testing**	**Pollutant**	**Frequency of Testing**
test cell 00070-N32	NA	within 60 days after startup but no later than 180 days after initial startup	NOx	Initial Validation
			CO	
			VOC	

The source has indicated that will accept the AP-42 PM, PM10, and SO2 emissions limits. Therefore, no testing requirements are necessary for PM, PM10 and SO2.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T097-7238-00311. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

(a) The number of engine test cells was incorrectly listed in condition A.2 at fifty five (55). The correct number is listed in the facility description in Section D.5 at fifty (50). Condition A.2 has been revised to reflect the correct number.

Since the two (2) American Shack Heaters (0070-70A and 0070-70B) no longer burn fuel oil and the potential to emit of SO_2 is less than 25 tons per year, 326 IAC 7-1.1-2(a) no longer applies to the two shack heaters. Condition D.5.2 has been revised to remove the 326 IAC 7-1.1-2 applicability for the two (2) shack heaters.

In order to incorporate the other changes from this modification, condition A.2 and Section D.5 has been revised as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

...

(i) Three (3) American Shack Heaters, identified as emission unit 0070-70, exhausting out stacks identified 8-6 A through C consisting of:

(1) Two **(2) natural gas fired** ~~of the~~ **heaters, identified as 0070-70A and 0070-70B,** ~~are capable of being fired with distillate oil only and have~~ **having** a maximum heating put capacity of ~~93.4~~ **90.0** million British thermal units per hour each; and

(2) One **(1)** ~~of the~~ heater, **identified as 0070-70C,** ~~is~~ capable of being fired with either natural gas or distillate fuel and has a maximum heat input capacity of 90 million British thermal units per hour.

(j) Fifty ~~five (55)~~ **(50)** Engine test stand cells identified below. These test stand cells are used to test engines manufactured at the source. The engines tested are fueled by either Jet fuel, Diesel Oil #2, or Natural Gas. All test stand cells were constructed prior to 1977, except test stand cells Emission Unit ID 0070-87 and 0070-88 that received approval to construct in 2007. **Test cell 0070-N32 (824) approved for modification in 2008.**

...

Engine Test Cells - Plant 8				
Emission Unit ID	Engine Test Cell	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID
0070-N34	843	10000 brake horsepower	Jet fuel	SN34(A,B)
0070-N35	861	9000 pounds of thrust	Jet fuel, Diesel	SN35
0070-N36	862	6000 brake horsepower	Jet fuel, Diesel	SN36
0070-N37	871	15000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN37(A,B)
0070-N38	872	9000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN38(A,B)
0070-N39	873	9000 brake horsepower	Jet fuel	SN39(A,B,C)
0070-N40	875	5000 brake horsepower	Diesel	SN40
0070-N41	881	10000 pounds of thrust	Jet fuel	SN41(A,B)
0070-N42	882	30000 pounds of thrust	Jet fuel	SN42(A,B,C,D,E,F)
0070-N43	883	2500 brake horsepower	Jet fuel	SN43(A,B)
0070-N44	884	2000 brake horsepower	Jet fuel	SN44
0070-N45	885	800 brake horsepower	Jet fuel, Diesel	SN45(A,B)
0070-N46	886	30000 pounds of thrust	Jet fuel, Diesel	SN46(A,B,C,D)
0070-N47	893	500 pounds of thrust	Diesel	SN47
0070-N48	894	350 brake horsepower	Diesel	SN48
0070-N29	821	10 pounds/second air	Jet fuel, Diesel & Natural Gas	SN29(A,B)
0070-N30	822	50 pounds/second air	Jet fuel, Diesel & Natural Gas	SN30(A,B)
0070-N31	823	60 pounds/second air	Jet fuel, Diesel & Natural Gas	SN31(A,B)
0070-N32	824	~~90~~ **120** pounds/second air	Jet fuel, Diesel & Natural Gas	SN32(A,B)

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(h) Jet fueled turbine engines, constructed in 1955, identified as follows:

(1) Two (2) emission units identified as 0070-66, with a maximum operating capacity of 107 million British thermal units per hour each, exhausting out stacks identified as 8-11A and 8-11B;

(2) Twelve (12) emission units identified as 0070-67, with a maximum operating capacity of 27.2 million British thermal units per hour each, exhausting out stacks identified 8-13A through M respectively.

(3) Ten (10) emission units identified as 0070-68, with a maximum operating capacity of 27.2 million British thermal units per hour each, exhausting out stacks identified as 8-12A through J.

(4) Four (4) emission units identified as 0070-69, with a maximum operating capacity of 27.2 million British thermal per hour units each, exhausting out stacks identified as 8-14A through D.

(i) Three (3) American Shack Heaters, identified as emission unit 0070-70, exhausting out stacks identified 8-6A through C consisting of:

(1) Two **(2) natural gas fired** ~~of the~~ **heaters, identified as 0070-70A and 0070-70B,** ~~are capable of being fired with distillate oil only and have~~ **having** a maximum heating put capacity of ~~93.4~~ **90.0** million British thermal units per hour each; and

(2) One **(1)** ~~of the~~ heater, **identified as 0070-70C,** ~~is~~ capable of being fired with either natural gas or distillate fuel and has a maximum heat input capacity of 90 million British thermal units per hour.

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

Facility Description [326 IAC 2-7-5(15)]

(j) Fifty (50) Engine Test Stand Cells identified below. These test stand cells are used to test engines manufactured at the source. The engines tested are fueled by either Jet fuel, Diesel #2 or Natural Gas. All test stand cells except 0070-87 and 0070-88 were constructed prior to 1977; test stand cells 0070-87 and 0070-88 received approval to construct in 2007. **Test cell 0070-N32 (824) approved for modification in 2008.**

Emission Unit ID No.(s)	Engine Test Cell ID No.(s)	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID No.
Engine Test Cells - Plant 5				
0070-N3	109	5000 brake horsepower	Jet fuel, Diesel	SN3
0070-N4	111	10000 pounds of thrust	Jet fuel	SN4

SECTION D.5 FACILITY OPERATION CONDITIONS (Cont)

Facility Description [326 IAC 2-7-5(15)] (j) (Cont)

Emission Unit ID No.	Engine Test Cell ID No.(s)	Maximum Test Cell Capacity	Type of Fuels Used	Stack ID No.	Emission Unit ID No.
Engine Test Cells Plant 8					
0070-N34	843	10000 brake horsepower	Jet fuel		SN34(A, B)
0070-N35	861	9000 pounds of thrust	Jet fuel, Diesel		SN35

0070-N36	862	6000 brake horsepower	Jet fuel, Diesel	SN36
0070-N37	871	15000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN37(A, B)
0070-N38	872	9000 brake horsepower	Jet fuel, Diesel & Natural Gas	SN38(A, B)
0070-N39	873	9000 brake horsepower	Jet fuel	SN39(A, B, C)
0070-N40	875	5000 brake horsepower	Diesel	SN40
0070-N41	881	10000 pounds of thrust	Jet fuel	SN41(A, B)
0070-N42	882	30000 pounds of thrust	Jet fuel	SN42 (A, B, C, D, E, F)
0070-N43	883	2500 brake horsepower	Jet fuel	SN43(A, B)
0070-N44	884	2000 brake horsepower	Jet fuel	SN44
0070-N45	885	800 brake horsepower	Jet fuel, Diesel	SN45(A, B)
0070-N46	886	30000 pounds of thrust	Jet fuel, Diesel	SN46 (A, B, C, D)
0070-N47	893	500 pounds of thrust	Diesel	SN47
0070-N48	894	350 brake horsepower	Diesel	SN48
0070-N29	821	10 pounds/second air	Jet fuel, Diesel & Natural Gas	SN29 (A, B)
0070-N30	822	50 pounds/second air	Jet fuel, Diesel & Natural Gas	SN30(A, B)
0070-N31	823	60 pounds/second air	Jet fuel, Diesel & Natural Gas	SN31(A, B)
0070-N32	824	~~90~~ **120** pounds/second air	Jet fuel, Diesel & Natural Gas	SN32(A, B)

...

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

D.5.2 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-2(a)]

Pursuant to 326 IAC 7-1.1-2(a) (SO_2 Emissions Limitations) the SO_2 emissions from emission units ~~0070-70a, 0070-70b,~~ 0070-70c, 0070-N3 through 0070-N54, 00311-83, 0070-87 and 0070-88 shall not exceed five tenths (0.5) pounds per MMBtu heat input, when combusting distillate oil alone or simultaneous with any permitted fuel.

D.5.3 PSD Minor NOx Limit [326 IAC 2-2] ~~[40 CFR 52.21]~~

(a) Pursuant to Part 70 Significant Source Modification issued December 28, 1999, the NOx emissions from the Test Cell 00311-83 shall not exceed 0.1409 pounds per gallon or 62 pounds per hour and shall combust less than 567,779 gallons of Jet A fuel per twelve (12) month period with compliance determined at the end of each month. This fuel usage limitation is equivalent to 40 tons of NOx emissions per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) ~~and 40 CFR 52.21~~ not applicable.

(b) Pursuant to Part 70 Significant Source Modification 097-26350-00311, the NOx emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(1) The NOx emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.40 pounds per gallon of diesel/jet fuel combusted or an emission rate determined from the most recent emissions test.

(2) The NOx emission rate from test cell 824, identified as 0070-N32, shall not exceed 4,284 pounds per million cubic feet (lb/MMCF) of natural gas combusted or an emission rate determined from the most recent emissions test.

(3) The NOx emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 100 pounds per million cubic feet (lb/MMCF).

(4) The combined total NOx emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 40 tons of NOx per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.5.4 PSD Minor PM Limit [326 IAC 2-2]

Pursuant to Part 70 Significant Source Modification 097-26350-00311, the PM emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(a) The PM emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.01 pound per gallon of diesel/jet fuel combusted.

(b) The PM emission rate from test cell 824, identified as 0070-N32, shall not exceed 10.4 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(c) The PM emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 1.9 pounds per million cubic feet (lb/MMCF).

(d) The combined total PM emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 25 tons of PM per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.5.5 PSD Minor PM10 Limit [326 IAC 2-2]

Pursuant to Part 70 Significant Source Modification 097-26350-00311, the PM10 emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(a) The PM10 emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.01 pounds per gallon of diesel/jet fuel combusted.

(b) The PM10 emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.081 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(c) The PM10 emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 7.6 pounds per million cubic feet (lb/MMCF).

(d) The combined total PM10 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 15 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 15 tons of PM10 per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.5.6 PSD Minor SO_2 Limit [326 IAC 2-2]

Pursuant to Part 70 Significant Source Modification 097-26350-00311, the SO_2 emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(a) The SO_2 emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.07 pound per gal of diesel/jet fuel combusted.

(b) The SO_2 emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.617 pounds per million cubic feet (lb/MMCF) of natural gas combusted.

(c) The SO_2 emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 0.6 pound per million cubic feet (lb/MMCF).

(d) The combined total SO_2 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 40 tons of SO_2 per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.5.7 PSD Minor CO Limit [326 IAC 2-2]

Pursuant to Part 70 Significant Source Modification 097-26350-00311, the CO emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(a) The CO emission rate from test cell 824, identified as 0070-N32, shall not exceed 1.21 pounds per gallon diesel/jet fuel combusted or an emission rate determined from the most recent emissions test.

(b) The CO emission rate from test cell 824, identified as 0070-N32, shall not exceed 332.9 pounds per million cubic feet (lb/MMCF) of natural gas combusted or an emission rate determined from the most recent emissions test.

(c) The CO emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 84 pounds per million cubic feet (lb/MMCF).

(d) The combined total CO emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 100 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 100 tons of CO per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.5.8 PSD Minor VOC Limit [326 IAC 2-2]

Pursuant to Part 70 Significant Source Modification 097-26350-00311, the VOC emissions from the test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B) shall be limited to:

(a) The VOC emission rate from test cell 824, identified as 0070-N32, shall not exceed 0.21 pounds per gallon diesel/jet fuel combusted or an emission rate determined from the most recent emissions test.

(b) The VOC emission rate from test cell 824, identified as 0070-N32, shall not exceed 123.9 pounds per million cubic feet (lb/MMCF) of natural gas combusted or an emission rate determined from the most recent emissions test.

(c) The VOC emission rate from the two natural gas shack heaters, identified as 0070-70A and 0070-70B, shall not exceed 5.5 pounds per million cubic feet (lb/MMCF).

(d) The combined total VOC emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than 40 tons of VOC per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.5.9 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6:

(a) The VOC emission rate from test cell 824 (0070-N32) shall be limited to 0.21 pounds of VOC per gallon (lb/gal) of diesel/jet fuel combusted or an emission rate determined from the most recent emissions test.

(b) The VOC emissions from test cell 824 (0070-N32), shall not exceed 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limits will limit the VOC emissions from test cell 0070-N32 to less than 25 tons per twelve (12) consecutive month period. Therefore, 326 IAC 8-1-6 does not apply.

Compliance Determination Requirements

D.5.4 **10** Sulfur Dioxide Emissions and Sulfur Content

Compliance with Conditions D.5.2 shall be determined utilizing one of the following options:

(a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed five-tenths percent (0.5%) by weight by:

(1) Providing vendor analysis of fuel delivered, if accompanied by a certification;

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the thirteen (13) MMBtu per hour heater, fifty one (51) Engine test stand cells identified as emission units 0070-N3 through 0070-N54, Test Cell 00311-83, and test cells 0070-87 and 0070-88, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

D.5.11 Particulate Emissions (PM), Particulate Emissions less than 10 microns (PM10), Carbon Monoxide (CO), Volatile Organic Compounds (VOC), and Nitrogen Oxides (NO_X) Emissions

(a) Compliance with Condition D.5.3(b) shall be determined by the following equation:

$$E_{NOx} = \Sigma E_{DOS}$$

$$E_{DOS} = ((G_{diesel/jet\ juel} \times A) + (CF_{natural\ gas} \times D) + (C_{SH} \times 100)) / 2000$$

Where:

E_{NOx} = Emissions of NO_x in tons per month
E_{DOS} = Emissions of NOx in tons per month at each different operating scenario
A = 0.40 or emission rate determined from most recent emissions test in pounds per gallon
D = 4,284 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(b) Compliance with Condition D.5.4 shall be determined by the following equation:

$$E_{PM} = ((G_{diesel/jet\ juel} \times 0.01) + (CF_{natural\ gas} \times 10.4) + (C_{SH} \times 1.9)) / 2000$$

Where:

E_{PM} = Emissions of PM in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(c) Compliance with Condition D.5.5 shall be determined by the following equation:

$$E_{PM10} = ((G_{diesel/jet\ juel} \times 0.01) + (CF_{natural\ gas} \times .081) + (C_{SH} \times 7.6)) / 2000$$

Where:

E_{PM10} = Emissions of PM10 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(d) Compliance with Condition D.5.6 shall be determined by the following equation:

$$E_{SO2} = ((G_{diesel/jet\ juel} \times 0.07) + (CF_{natural\ gas} \times 0.617) + (C_{SH} \times 0.6)) / 2000$$

Where:

E_{SO2} = Emissions of SO_2 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(e) Compliance with Condition D.5.7 shall be determined by the following equation:

$$E_{CO} = \Sigma\ E_{DOS}$$

$$E_{DOS} = ((G_{diesel/jet\ juel} \times C) + (CF_{natural\ gas} \times E) + (C_{SH} \times 84)) / 2000$$

Where:

E_{CO} = Emissions of CO in tons per month
E_{DOS} = Emissions of CO in tons per month at each different operating scenario
C = 1.21 or emission rate determined from most recent emissions test in pounds per gallon
E = 332.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(f) Compliance with Condition D.5.8 shall be determined by the following equation:

$E_{VOC} = \Sigma E_{DOS}$

$E_{DOS} = ((G_{diesel/jet\ juel} \times B) + (CF_{natural\ gas} \times F) + (C_{SH} \times 5.5)) / 2000$

Where:

E_{VOC} = Emissions of VOC in tons per month
E_{DOS} = Emissions of VOC in tons per month at each different operating scenario
B = 0.21 or emission rate determined from most recent emissions test in pounds per gallon
F = 123.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

(g) Compliance with Condition D.5.9 shall be determined by the following equation:

$E_{VOC} = \Sigma E_{DOS}$

$E_{DOS} = ((G_{diesel/jet\ juel} \times B) + (CF_{natural\ gas} \times F)) / 2000$

Where:

E_{VOC} = Emissions of VOC in tons per month
E_{DOS} = Emissions of VOC in tons per month at each different operating scenario
B = 0.21 or emission rate determined from most recent emissions test in pounds per gallon
F = 123.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32

D.5.12 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with condition D.5.3, D.5.7, D.5.8, and D.5.9 , the Permittee shall perform NOx, CO, and VOC testing for each operating scenario within 60 days after startup but no later than 180 days after initial startup on test cell (0070-N32), when combusting diesel/jet fuel and natural gas (unless the Permittee chooses to use emission factors established in the permit) using methods as approved by the Commissioner.

(b) If utilizing a different size engine other than the one tested in subsection (a), in order to demonstrate compliance with condition D.5.3, D.5.7, D.5.8, and D.5.9 , the Permittee shall perform NOx, CO, and VOC testing for each operating scenario for the new engine within 60 days after startup of the new engine on test cell (0070-N32), when combusting diesel/jet fuel and natural gas (unless the Permittee chooses to use emission factors established in the permit) using methods as approved by the Commissioner.

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

D.5.~~5~~ **13** Record Keeping Requirements

(a) To document compliance with condition D.5.3, the Permittee shall maintain records of the amount of Jet A fuel combusted in Test Cell 00311-83 on a monthly basis.

(b) To document compliance with Conditions D.5.2 and D.5.~~4~~ **10**, the Permittee shall maintain records in accordance with (1) through (6) below:

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

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

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

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

(4) Fuel supplier certifications;

(5) The name of the fuel supplier; and

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

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

(d) To document compliance with Condition D.5.3(b), D.5.4, D.5.5, D.5.6, D.5.7 and D.5.8, the Permittee shall maintain monthly records of the usage of jet fuel, diesel fuel, and natural gas by test cell 824 (0070-N32) for each engine operating scenario tested and the usage of natural gas to the two (2) shack heaters (0070-70A and 0070-70B).

(e) To document compliance with Condition D.5.9, the Permittee shall maintain monthly records of the usage of jet fuel, diesel fuel, and natural gas used by test cell 824 (0070-N32) for each engine operating scenario tested.

(f) To document compliance with Conditions D.5.3(b), D.5.4, D.5.5, D.5.6, D.5.7, D.5.8 and D.5.9, the Permittee shall maintain records of the monthly emissions as required by Conditions D.5.3(b)(4), D.5.4(d), D.5.5(d), D.5.6(d), D.5.7(d), D. 5.8(d), and D.5.9(b).

~~(d)~~ **(g)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.~~6~~ **14** Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.3 **through D.5.9** shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the period being reported.

(b) Due to this modification, new quarterly reports have been added for PM, PM10, SO2, NOx, CO and VOC as follows:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter: Particulate Emissions (PM)
Limit: The combined total PM emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{PM} = ((G_{diesel/jet\ juel} \times 0.01) + (CF_{natural\ gas} \times 10.4) + (C_{SH} \times 1.9)) / 2000$$

Where:

E_{PM} = Emissions of PM in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	PM emissions (Tons This Month)	PM emissions (Tons Previous 11 Months)	PM emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter: Particulate Emissions less 10 microns (PM10)
Limit: The combined total PM10 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 15 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{PM10} = ((G_{diesel/jet\ juel} \times 0.01) + (CF_{natural\ gas} \times .081) + (C_{SH} \times 7.6)) / 2000$$

Where:

E_{PM10} = Emissions of PM10 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	PM10 emissions (Tons This Month)	PM10 emissions (Tons Previous 11 Months)	PM10 emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter: Nitrogen Oxide (NOx)
Limit: The combined total NOx emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{NOx} = \Sigma E_{DOS}$$

$$E_{DOS} = ((G_{diesel/jet\ juel} \times A) + (CF_{natural\ gas} \times D) + (C_{SH} \times 100)) / 2000$$

Where:

E_{NOx} = Emissions of NO_x in tons per month
E_{DOS} = Emissions of NOx in tons per month at each different operating scenario
A = 0.40 or emission rate determined from most recent emissions test in pounds per gallon
D = 4,284 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ **Year:** _____

Month	Column 1	Column 2	Column 1 + Column 2
	NOx emissions (Tons This Month)	NOx emissions (Tons Previous 11 Months)	NOx emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter: Sulfur Dioxide (SO_2)
Limit: The combined total SO_2 emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{SO2} = ((G_{diesel/jet\ juel} \times 0.07) + (CF_{natural\ gas} \times 0.617) + (C_{SH} \times 0.6)) / 2000$$

Where:
E_{SO2} = Emissions of SO_2 in tons per month
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used each month in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used each month in test cell 070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	SO_2 emissions (Tons This Month)	SO_2 emissions (Tons Previous 11 Months)	SO_2 emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter: Carbon Monoxide (CO)
Limit: The combined total CO emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 100 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{CO} = \Sigma E_{DOS}$$

$$E_{DOS} = ((G_{diesel/jet\ juel} \times C) + (CF_{natural\ gas} \times E) + (C_{SH} \times 84)) / 2000$$

Where:

E_{CO} = Emissions of CO in tons per month
E_{DOS} = Emissions of CO in tons per month at each different operating scenario
C = 1.21 or emission rate determined from most recent emissions test in pounds per gallon
E = 332.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	CO emissions (Tons This Month)	CO emissions (Tons Previous 11 Months)	CO emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32 and the two (2) natural gas shack heaters (0070-70A and 0070-70B)
Parameter: Volatile Organic Compounds (VOC)
Limit: The combined total VOC emissions from test cell 824 and the two natural gas shack heaters, identified as Emission Units 0070-N32, 0070-70A, and 0070-70B, shall be less than 40 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{VOC} = \Sigma E_{DOS}$$

$$E_{DOS} = ((G_{diesel/jet\ juel} \times B) + (CF_{natural\ gas} \times F) + (C_{SH} \times 5.5)) / 2000$$

Where:

E_{VOC} = Emissions of VOC in tons per month
E_{DOS} = Emissions of VOC in tons per month at each different operating scenario
B = 0.21 or emission rate determined from most recent emissions test in pounds per gallon
F = 123.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-N32
C_{SH} = million cubic feet of natural gas used in stack heaters 0070-70A and 0070-70B

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	VOC emissions (Tons This Month)	VOC emissions (Tons Previous 11 Months)	VOC emissions (12 Month Total in 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 DATA SECTION
and
OFFICE OF ENVIRONMENTAL SERVICES

Part 70 Quarterly Report

Source Name: Rolls Royce Corporation
Source Address: 2001 and 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Mailing Address: 2355 S. Tibbs Avenue, Indianapolis, IN 46241
Part 70 Permit No.: T097-7238-00311
Facility: Test cell 0070-N32
Parameter: Volatile Organic Compounds (VOC)
Limit: The combined total VOC emissions from test cell 824, identified as 0070-N32 shall be less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month calculated using the following equation:

$$E_{VOC} = \Sigma E_{DOS}$$

$$E_{DOS} = ((G_{diesel/jet\ juel} \times B) + (CF_{natural\ gas} \times F)) / 2000$$

Where:

E_{VOC} = Emissions of VOC in tons per month
E_{DOS} = Emissions of VOC in tons per month at each different operating scenario
B = 0.21 or emission rate determined from most recent emissions test in pounds per gallon
F = 123.9 or emission rate determined from most recent emissions test in pounds per million cubic feet
$G_{diesel/jet\ juel}$ = gallons of diesel/jet fuel used per operating scenario in test cell 0070-N32
$CF_{natural\ gas}$ = million cubic feet of natural gas used per operating scenario in test cell 0070-

N32

Month: _____ Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	VOC emissions (Tons This Month)	VOC emissions (Tons Previous 11 Months)	VOC emissions (12 Month Total in 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.

(c) Condition A.1 has been revised to correctly identify the source status of the source and the mailing address for the source has also been revised throughout the permit as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a manufacturing and testing source for aerospace engines.

Source Address:	Plant 8 - 2001 South Tibbs Ave., Indianapolis, Indiana 46241 Plant 5 - 2355 South Tibbs Ave., Indianapolis, Indiana 46241
Mailing Address:	~~P.O. Box 420 (N-23), Indianapolis, Indiana 46206-0420~~ **2355 South Tibbs Ave., Indianapolis, Indiana 46241**
Phone Number:	317-230-4141
SIC Code:	3724
County Location:	Marion
County Status:	Nonattainment for PM-2.5 Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD, and Nonattainment NSR Major Source, Section 112 of the Clean Air Act ~~Not 1 of 28 Source Categories~~ **Nested Source with fossil fuel fired boilers (or combinations thereof) totaling more than two hundred fifty million (250,000,000) British thermal units per hour heat input, as 1 of 28 Source Categories**

(d) On January 22, 2008 U.S. EPA promulgated a rule to address the remand, by the U.S. Court of Appeals for the District of Columbia on June 25, 2005, of the reasonable

possibility provisions of the December 31, 2002 major NSR reform rule. IDEM has agreed, with U.S. EPA, to interpret "reasonable possibility" in 326 IAC 2-2 and 326 IAC 2-3 consistent with the January 22, 2008 U.S. EPA rule. To implement this interpretation, IDEM and OES is revising Section C - General Record Keeping Requirements and Section C - General Reporting Requirements.

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

...

(c) If there is **a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A), 40 CFR 51.165 (a)(6)(vi)(B), 40 CFR 51.166 (r)(6)(vi)(a), and/or 40 CFR 51.166 (r)(6)(vi)(b)) that** a "project" (as defined in 326 IAC 2-2-1(qq)) and/or 326 IAC 2-1-3(ll)) at an existing emissions unit, other than projects at a source with a Plant-wide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) **may result in significant emissions increase** and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or IAC 2-3-1(mm)), the Permittee shall comply with the following:

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

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165 (a)(6)(vi)(A) and/or 40 CFR 51.166 (r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

~~(2)~~ **(1)** Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

~~(3)~~ **(2)** Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

...

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

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

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

(g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

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

(2) The annual emissions calculated in accordance with ~~(c)(2) and (3)~~ **(d)(1) and (2)** in Section C- General Record Keeping Requirements.

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

(4) Any other information that the Permittee deems fit to include in this report,

Reports required in this part shall be submitted to:

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

and

Office of Environmental Services
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

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

Conclusion and Recommendation

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 097-26350-00311 and Significant Permit Modification No. 097-26377-00311, respectively. The staff recommends to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

Appendix A: Emissions Calculations

Test Cell 824 (Emission Unit 0070-N32)

Company Name: Rolls Royce Corporation
Address City IN Zip: 2001 and 2355 S Tibbs Ave., Indianapolis Indiana 46241
Permit Number: 097-26350-00311
Reviewer: A. Nguyen
Date: May-08

Fuel Flow	17,989	lb/hr
	2,645	gal/hr
Density	6.8	lb/gal

	Emission Factor (g/kg)	lb/gal
Nox	58.71	0.399
CO	178.4	1.213
VOC	31.46	0.214
PM/PM10	2.11	0.014
SO2	*	0.07

Pollutant	Emission lb/gal fuel	PTE (tpy)
Nox	0.40	**4,626**
CO	1.21	**14,056**
VOC	0.21	**2,479**
PM/PM10	0.01	**166**
SO2	0.07	**763**

Methodology
Emission factors for PM, PM10, Nox, CO, SO2, and VOC were obtained from AP-42, Section 3.2.1 (Rev. 4/73) using the highest rate of emission for the pollutant from the commercial/military jet engines listed in AP-42.
Emission Factor (lb pollutant/gallon fuel) = AP42 emission factor (gram pollutant/kg fuel) * 0.4536 kg fuel/lb fuel * lb pollutant/453.6 g pollutant) * 6.8 lb fuel/gallo
SO2 Emissions (tpy) = Fuel flow (lb/hr) * Fuel Sulfur Content (wt% (0.5%)) * MW ratio of S to SO2 (62.088/32.064) * 8760 hrs/yr) * ton/2000 lbs
SO2 Emission Factor = 763 tons SO2/year * year/8760 hr * hr/2645 gal * 2000 lb/ton = 0.07 lb/gal
PTE (tpy) = emission factor (lb/gal) x fuel flow (gal/hr) x 8760 hrs/year x 1 ton/2000 lbs

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

American Shack Heaters

Company Name: **Rolls Royce Corporation**
Address City IN Zip: **2001 and 2355 S Tibbs Ave., Indianapolis Indiana 46241**
Permit Number: **097-26350-00311**
Reviewer: **A. Nguyen**
Two 90.0 MMBtu/hr American Shack Heaters **Date:** **May-08**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
180.0	1576.8

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	1.5	6.0	0.5	78.8	4.3	66.2

*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

	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	1.656E-03	9.461E-04	5.913E-02	1.419E+00	2.681E-03

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.942E-04	8.672E-04	1.104E-03	2.996E-04	1.656E-03

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

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-0
(SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations

Potential to Emit of the Modification

Company Name: Rolls Royce Corporation
Address City IN Zip: 2001 and 2355 S Tibbs Ave., Indianapolis Indiana 46241
Permit Number: 097-26350-00311
Reviewer: A. Nguyen
Date: May-08

Emission Unit	PM	PM10	SO2	NOx	VOC	CO
Test Cell 824	166.00	166.00	763.00	4626.00	2479.00	14056.00
Two (2) Shack Heaters	1.50	5.99	0.47	78.84	4.34	66.23
Total	**167.50**	**171.99**	**763.47**	**4704.84**	**2483.34**	**14122.23**