



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: May 28, 2009

RE: Acuity Lighting Group / 107 - 27054 - 00037

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

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot12/03/07



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Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

Acuity Lighting Group, Inc.
1615 East Elmore Street
Crawfordsville, Indiana 47933

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

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation, or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

Operation Permit No.: M107-27054-00037	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: May 28, 2009 Expiration Date: May 28, 2019

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 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 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary metal lighting fixture manufacturing source.

Source Address:	1615 East Elmore Street, Crawfordsville, Indiana 47933
Mailing Address:	1615 East Elmore Street, Crawfordsville, Indiana 47933
General Source Phone Number:	765-362-1837
SIC Code:	3645
County Location:	Montgomery
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) Surface coating operations, consisting of the following:
- (1) Spray Coating Operations, consisting of two (2) paint booths identified as "P4" and "P5", constructed in 2005, with a maximum throughput capacity of sixty (60) metal parts per hour, each, equipped with dry filters for particulate control, and exhausting outside the building through stacks P4 and P5, respectively, with a flow rate of 2500 cfm at ambient temperature;
 - (2) Ultraviolet Painting Operations, consisting of two (2) roll coating units collectively identified as "Flange Painting", one (1) constructed in 2004, and one (1) constructed in 2006, with a maximum throughput capacity of two hundred (200) aluminum reflectors per hour, each, using roll coating to apply materials, uncontrolled and exhausting to the inside of the building;
 - (3) Gluing Operations, consisting of two (2) flow coating units collectively identified as "Gluing", one (1) constructed in 2004, and one (1) constructed in 2006, with a maximum throughput capacity of fifty (50) aluminum reflectors per hour, each, using flow coating to apply materials, uncontrolled and exhausting to the inside of the building; and
 - (4) Powder Coating Operations, consisting of one (1) fully enclosed powder paint line comprised of four (4) electrostatic powder coating application booths, three (3) constructed in 1986, and one (1) constructed in 2007, with a maximum throughput capacity of 10,461 square feet of metal parts per hour, each, and a total maximum material usage rate of 347,000 pounds of powder paint per year, combined, equipped with an integral powder coating reclamation system having a control efficiency of 100%, and exhausting to the inside of the building.

- (5) Galvanizing Operations, approved for construction in 2009, consisting of using hand-held aerosol spray cans to coat holes drilled into metal lighting fixtures, a maximum throughput capacity of one (1) unit consisting of twelve (12) holes per hour, and a maximum material usage rate of one tenth (0.10) gallons of coating per unit, uncontrolled and exhausting through a wall vent identified as G1, with a flow rate of 250 cfm at ambient temperature.
- (6) One (1) wave soldering operation, approved for construction in 2009, using lead-free solder, with a maximum throughput capacity of two hundred eighty-five (285) feet of circuit board per hour, and a maximum material usage rate of two ten-thousandths (0.0002) gallons of coating per unit, applied via dip coating, uncontrolled and exhausting through a wall vent with a flow rate of 700 cfm at ambient temperature.

Under 40 CFR 60.90, Subpart EE - New Source Performance Standards for Surface Coating of Metal Furniture, this is considered an affected surface coating operation.

- (b) One (1) anodizing line, constructed in 2004, with a maximum throughput capacity of two thousand (2,000) pounds of parts per hour, and consisting of the following:
 - (1) Three (3) alkaline cleaner tanks, collectively identified as A17, using a cleaner and sodium hydroxide, with a combined maximum usage rate of sixty (60) pounds per hour, uncontrolled and exhausting through Stack A17;
 - (2) One (1) caustic etch tank, identified as A18, using sodium hydroxide and etching materials, with a maximum solution usage rate of forty (40) pounds per hour, equipped with a scrubber, identified as S1, and exhausting through Stack A18;
 - (3) One (1) acid clean tank, identified as A19, using phosphoric acid, maximum acid cleaner, with a maximum usage rate of ten (10) pounds per hour, uncontrolled and exhausting through Stack A19;
 - (4) One (1) Bright Dip tank, identified as A20, using phosphoric acid and nitric acid, with a maximum acid usage rate of five hundred eighty (580) pounds per hour, equipped with a scrubber as a voluntary control, identified as S2, and exhausting to Stack A20;
 - (5) One (1) Desmut tank, identified as A3S, using sulfuric acid and sodium persulfate, with a maximum acid usage rate of twenty (20) pounds per hour, uncontrolled and exhausting through Stack A21;
 - (6) Five (5) sulfuric acid anodizing tanks, collectively identified as A22, with a combined maximum acid usage rate of one hundred (100) pounds per hour, equipped with a scrubber, identified as S3, and exhausting to Stack A22;
 - (7) Three (3) nickel acetate sealing tanks, collectively identified as A23, with a combined maximum material usage rate of six (6.0) pounds per hour, total, uncontrolled and exhausting through Stack A23; and
 - (8) One (1) nickel acetate sealing tank, identified as A24, with a maximum material usage rate of two (2.0) pounds per hour, uncontrolled and exhausting through Stack A24.

Under 40 CFR 63, Subpart WWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, the four (4) nickel acetate sealing tanks are each considered an affected facility.

- (c) Buffing Operations, consisting of fifteen (15) buffing machines, collectively identified as A25, constructed in 2003, with a combined maximum capacity of thirty (30) pounds of buffing compound and two thousand (2,000) pounds of parts per hour, all controlled by a wet scrubber, identified as S4, and exhausting through Stack A25;
- (d) Welding Operations, consisting of seven (7) metal inert gas welding stations, constructed in 1995, with a maximum capacity of one and seven tenths (1.7) pounds of wire per station per hour and a combined total of one thousand five hundred (1,500) pounds of sheet metal per hour;
- (e) Shotblasting Operations, consisting of four (4) entirely enclosed shotblasting units, two (2) using sand and two (2) using glass, constructed in 2005, each equipped with an integral closed loop recycling system, as determined in Notice only Change #107-20286-00037, having no exhaust or air outlet;
- (f) Metal Finishing Operations, consisting of ten (10) Metal Grinding Stations for Deburring and Polishing, collectively identified as GRINDING, with a combined maximum capacity of 2000 pounds of parts per hour, all controlled by a wet scrubber, identified as S4, and exhausting through Stack A25;
- (g) Natural gas-fired combustion sources, with heat input equal to or less than ten (10) million Btu per hour, each, as follows:
 - (1) One (1) natural gas-fired air make-up unit, identified as A1, constructed in 1986, with a maximum heat input capacity of one and nine hundred twenty-five thousandths (1.925) million British thermal units per hour, uncontrolled and exhausting to Stack A1;
 - (2) One (1) natural gas-fired air make-up unit, identified as A2, constructed in 1980, with a maximum heat input capacity of two (2.0) million British thermal units per hour, uncontrolled and exhausting to Stack A2;
 - (3) One (1) natural gas-fired air make-up unit, identified as A3, constructed in 1980, with a maximum heat input capacity of two (2.0) million British thermal units per hour, and uncontrolled exhausting to Stack A3;
 - (4) One (1) pyrolysis cleaning oven, identified as A4, constructed in 2000, with a maximum heat input capacity of ninety-five hundredths (0.95) million British thermal units per hour, a maximum throughput capacity of twenty (20) pounds of metal parts per hour, controlled with an afterburner and exhausting to Stack A4;
 - (5) One (1) water treatment burner, identified as A5, constructed in 1985, with a maximum heat input capacity of two and five tenths (2.5) million British thermal units per hour, uncontrolled and exhausting to Stack A5;
 - (6) One (1) water treatment burner, identified as A6, constructed in 1985, with a maximum heat input capacity of three and eight tenths (3.8) million British thermal units per hour, uncontrolled and exhausting to Stack A6;
 - (7) One (1) bake oven, identified as A7, constructed in 1985, with a maximum heat input capacity of three and five tenths (3.5) million British thermal units per hour, uncontrolled and exhausting to Stack A7;
 - (8) One (1) drying oven, identified as A8, constructed in 1985, with a maximum heat input capacity of two (2.0) million British thermal units per hour, uncontrolled and exhausting to Stack A8;

- (9) One (1) natural gas-fired air makeup unit, identified as A9, constructed in 2002, with a maximum heat input capacity of one and nine hundred forty-four thousandths (1.944) million British thermal units per hour, uncontrolled and exhausting to Stack A9;
 - (10) One (1) natural gas-fired air makeup unit, identified as A10, constructed in 2002, with a maximum heat input capacity of two and nine hundred sixteen thousandths (2.916) million British thermal units per hour, uncontrolled and exhausting to Stack A10;
 - (11) Two (2) natural gas-fired air makeup units, identified as A11 and A12, constructed in 2002, with a maximum heat input capacity of four and five hundred seventy-nine thousandths (4.579) million British thermal units per hour, each, uncontrolled and exhausting to Stacks A11 and A12, respectively;
 - (12) Two (2) natural gas-fired boilers, identified as A13₁ and A13₂, constructed in 2002, with a maximum heat input capacity of three and three hundred sixty thousandths (3.360) million British thermal units per hour, each, uncontrolled and exhausting to Stack A13;
 - (13) Three (3) natural gas-fired anodizing line dryers, identified as A14 through A16, constructed in 2002, with a maximum heat input capacity of fifty-five hundredths (0.55) million British thermal units per hour, each, uncontrolled, with dryers A14 and A15 exhausting to Stack A14 and dryer A16 exhausting to Stack A16;
 - (14) One (1) natural gas-fired air make-up unit, identified as B1, constructed in 2000, with a maximum heat input capacity of one and nine hundred forty-four thousandths (1.944) million British thermal units per hour, uncontrolled and exhausting to Stack B1;
 - (15) One (1) natural gas-fired air make-up unit, identified as B2, constructed in 1979, with a maximum heat input capacity of one and (1.646) million British thermal units per hour, uncontrolled and exhausting to Stack B2; and
 - (16) One (1) natural gas-fired air make-up unit, identified as B3, constructed in 1977, with a maximum heat input capacity of one and five tenths (1.5) million British thermal units per hour, uncontrolled and exhausting to Stack B3.
- (h) Unpaved roads.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

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 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, M107-27054-00037, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

B.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

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

B.5 Severability

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

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

B.7 Duty to Provide Information

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

B.8 Certification

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

B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251
- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) 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.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M107-27054-00037 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.12 Termination of Right to Operate [326 IAC 2-6.1-7(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 one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.13 Permit Renewal [326 IAC 2-6.1-7]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
- (1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.14 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.15 Source Modification Requirement

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

B.16 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.17 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.18 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees due within thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.
- (b) 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.19 Credible Evidence [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 2-6.1-5(a)(1)]

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

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

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 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 forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

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

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

C.7 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 by using ambient air quality modeling pursuant to 326 IAC 1-7-4.

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

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

C.9 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 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.13 Instrument Specifications [326 IAC 2-1.1-11]

- (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

C.14 Response to Excursions or Exceedances

- (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; and/or
 - (3) inspection of the control device, associated capture system, and the process.

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

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

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.16 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.17 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later.

C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1): Surface Coating Operations

- (a) Surface coating operations, consisting of the following:
- (1) Spray Coating Operations, consisting of two (2) paint booths identified as "P4" and "P5", constructed in 2005, with a maximum throughput capacity of sixty (60) metal parts per hour, each, equipped with dry filters for particulate control, and exhausting outside the building through stacks P4 and P5, respectively, with a flow rate of 2500 cfm at ambient temperature;
 - (2) Ultraviolet Painting Operations, consisting of two (2) roll coating units collectively identified as "Flange Painting", one (1) constructed in 2004, and one (1) constructed in 2006, with a maximum throughput capacity of two hundred (200) aluminum reflectors per hour, each, using roll coating to apply materials, uncontrolled and exhausting to the inside of the building;
 - (3) Gluing Operations, consisting of two (2) flow coating units collectively identified as "Gluing", one (1) constructed in 2004, and one (1) constructed in 2006, with a maximum throughput capacity of fifty (50) aluminum reflectors per hour, each, using flow coating to apply materials, uncontrolled and exhausting to the inside of the building;
 - (4) Powder Coating Operations, consisting of one (1) fully enclosed powder paint line comprised of four (4) electrostatic powder coating application booths, three (3) constructed in 1986, and one (1) constructed in 2007, with a maximum throughput capacity of 10,461 square feet of metal parts per hour, each, and a total maximum material usage rate of 347,000 pounds of powder paint per year, combined, equipped with an integral powder coating reclamation system having a control efficiency of 100%, and exhausting to the inside of the building.
 - (5) Galvanizing Operations, approved for construction in 2009, consisting of using hand-held aerosol spray cans to coat holes drilled into metal lighting fixtures, a maximum throughput capacity of one (1) unit consisting of twelve (12) holes per hour, and a maximum material usage rate of one tenth (0.10) gallons of coating per unit, uncontrolled and exhausting through a wall vent identified as G1, with a flow rate of 250 cfm at ambient temperature.
 - (6) One (1) wave soldering operation, approved for construction in 2009, using lead-free solder, with a maximum throughput capacity of two hundred eighty-five (285) feet of circuit board per hour, and a maximum material usage rate of two ten-thousandths (0.0002) gallons of coating per unit, applied via dip coating, uncontrolled and exhausting through a wall vent with a flow rate of 700 cfm at ambient temperature.

Under 40 CFR 60.90, Subpart EE - New Source Performance Standards for Surface Coating of Metal Furniture, this is considered an affected surface coating operation.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-2-6]

- (a) Pursuant to 326 IAC 8-2-6(b), the volatile organic compound (VOC) content of the coating(s) utilized in the spray coating operations, consisting of two (2) paint booths

identified as "P4" and "P5", shall not exceed to three (3.0) pounds of VOCs per gallon of coating excluding water and clean-up solvents, as delivered to the coating applicator for prime and topcoat or single coat operations.

D.1.2 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-1(b)(15), spray coating operations that use more than five (5) gallons of coating per day shall implement the work practices and control technologies contained within 6-3-2(d). Therefore, the spray coating operations shall continue to execute the following:
- (1) Particulate from the paint booths, identified as "P4" and "P5", shall be controlled by dry particulate filters, and the Permittee shall operate the control device(s) in accordance with manufacturer's specifications.
 - (2) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (3) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.
- (b) The powder coating reclamation system is considered an integral part of the powder coating operations. Therefore, particulate from the powder coating operations shall be controlled by the dust collector style powder coating reclamation system at all times that the powder paint line, comprised of four (4) electrostatic powder coating application booths, is in operation, and the Permittee shall operate the device in accordance with the manufacturer's specifications.

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the spray coating operations, consisting of two (2) paint booths identified as "P4" and "P5", and the powder coating operations, consisting of one (1) fully enclosed powder paint line comprised of four (4) electrostatic powder coating application booths, and each of their respective control devices.

Compliance Determination Requirements

D.1.4 Volatile Organic Compounds (VOC)[326 IAC 8-1-2] [326 IAC 8-1-4]

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

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Compliance with the VOC content limit in condition D.1.1 shall be determined pursuant to 326 IAC 8-1-2(a)(7), using a volume weighted average of coatings on a daily basis. This volume weighted average shall be determined by the following equation:

$$A = [\sum (c \times U) / \sum U]$$

Where:

A = the volume weighted average in pounds VOC per gallon less water as applied;

C = the VOC content of the coating in pounds VOC per gallon less water as applied; and

U = the usage rate of the coating in gallons per day.

D.1.6 Particulate Control

In order to comply with Condition D.1.2(b), the integral powder coating reclamation system, for particulate control, shall be in operation and control emissions from the powder coating operations, consisting of one (1) fully enclosed powder paint line comprised of four (4) electrostatic powder coating application booths, at all times that the powder paint line is in operation.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.7 Record Keeping Requirements

- (a) To document compliance with condition D.1.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in condition D.1.1.
- (1) The VOC content of each coating material and solvent used less water.
 - (2) The amount of coating material and solvent used on daily basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvent.
 - (3) The volume weighted average VOC content of the coatings used for each day;
 - (4) The daily cleanup solvent usage; and
 - (5) The total VOC usage for each day.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1): Anodizing line

- (b) One (1) anodizing line, constructed in 2004, with a maximum throughput capacity of two thousand (2,000) pounds of parts per hour, and consisting of the following:
- (1) Three (3) alkaline cleaner tanks, collectively identified as A17, using a cleaner and sodium hydroxide, with a combined maximum usage rate of sixty (60) pounds per hour, uncontrolled and exhausting through Stack A17;
 - (2) One (1) caustic etch tank, identified as A18, using sodium hydroxide and etching materials, with a maximum solution usage rate of forty (40) pounds per hour, equipped with a scrubber, identified as S1, and exhausting through Stack A18;
 - (3) One (1) acid clean tank, identified as A19, using phosphoric acid, maximum acid cleaner, with a maximum usage rate of ten (10) pounds per hour, uncontrolled and exhausting through Stack A19;
 - (4) One (1) Bright Dip tank, identified as A20, using phosphoric acid and nitric acid, with a maximum acid usage rate of five hundred eighty (580) pounds per hour, equipped with a scrubber as a voluntary control, identified as S2, and exhausting to Stack A20;
 - (5) One (1) Desmut tank, identified as A3S, using sulfuric acid and sodium persulfate, with a maximum acid usage rate of twenty (20) pounds per hour, uncontrolled and exhausting through Stack A21;
 - (6) Five (5) sulfuric acid anodizing tanks, collectively identified as A22, with a combined maximum acid usage rate of one hundred (100) pounds per hour, equipped with a scrubber, identified as S3, and exhausting to Stack A22;
 - (7) Three (3) nickel acetate sealing tanks, collectively identified as A23, with a combined maximum material usage rate of six (6.0) pounds per hour, total, uncontrolled and exhausting through Stack A23; and
 - (8) One (1) nickel acetate sealing tank, identified as A24, with a maximum material usage rate of two (2.0) pounds per hour, uncontrolled and exhausting through Stack A24.

Under 40 CFR 63, Subpart WWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, the four (4) nickel acetate sealing tanks are each considered an affected facility.

(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 2-6.1-5(a)(1)]

D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the one (1) Bright Dip tank, identified as A20, shall not exceed four and eighty-six hundredths (4.86) pounds per hour when operating at a process weight rate of 2,580 pounds per hour.

The pound per hour limitation was calculated using the following equation:

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

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1)]: Buffing Operations

- (c) Buffing Operations, consisting of fifteen (15) buffing machines, collectively identified as A25, constructed in 2003, with a combined maximum capacity of thirty (30) pounds of buffing compound and two thousand (2,000) pounds of parts per hour, all controlled by a wet scrubber, identified as S4, and exhausting through Stack A25;

(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 2-6.1-5(a)(1)]

D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the fifteen (15) buffing machines, collectively identified as A25, all exhausting to a scrubber (S4), shall not exceed four and fourteen hundredths (4.14) pounds per hour, total combined, when operating a process weight rate of 2,030 pounds of parts and buffing materials per hour.

The pound per hour limitation was calculated using the following equation:

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

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

D.3.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their respective control devices.

Compliance Determination Requirements

D.3.3 Particulate Control

In order to comply with Condition D.3.1, the scrubber (S4) for particulate control shall be in operation and control emissions from the fifteen (15) buffing machines at all times that any of the buffing machines are in operation.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

D.3.4 Visible Emissions Notations

- (a) Visible emission notations of the buffing stack (Stack A25) exhaust shall be performed once per day during normal daylight operations. 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.

D.3.5 Parametric Monitoring

The Permittee shall record the pressure drop across the scrubber used in conjunction with the fifteen (15) buffing machines (A25), and the scrubbing liquor flow rate at least once per day when the buffing machines are in operation. When for any one reading, the pressure drop across the scrubber is below 7.0 inches of water, or the scrubbing liquor flow rate is outside the normal range of 450 and 1,200 gallons per minute, or ranges established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

The instruments used for determining the pressure and flow rate shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.6 Scrubber Failure Detection

In the event that a scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C- Response to Excursions or Exceedances).

Record Keeping and Reporting Requirement

D.3.7 Record Keeping Requirements

- (a) To document compliance with Condition D.3.4, the Permittee shall maintain daily records of the visible emission notations of the buffing operations (Stack A25) stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).
- (b) To document compliance with Condition D.3.5, the Permittee shall maintain daily records of the pressure drop and scrubbing liquor flow rate across the scrubber (S4), controlling the fifteen (15) buffing machines. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. the process did not operate that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1)]: Shotblasting Operations

- (e) Shotblasting Operations, consisting of four (4) entirely enclosed shotblasting units, two (2) using sand and two (2) using glass, constructed in 2005, each equipped with an integral closed loop recycling system, as determined in Notice only Change #107-20286-00037, having no exhaust or air outlet;

(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 2-6.1-5(a)(1)]

D.5.1 Particulate [326 IAC 6-3-2]

The shotblasting, closed loop recycling system is considered an integral part of the shotblasting operations. Therefore, particulate from the shotblasting operations shall be controlled by the integral closed loop recycling system at all times that each of the four (4) entirely enclosed shotblasting units, are in operation, and the Permittee shall operate the device in accordance with the manufacturer's specifications.

D.5.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the shotblasting operations, consisting of four (4) entirely enclosed shotblasting units, two (2) using sand and two (2) using glass, and their respective control device(s).

Compliance Determination Requirements

D.5.3 Particulate Control

In order to comply with Condition D.5.1, the integral closed loop recycling system, for particulate control, shall be in operation and control emissions from the shotblasting operations, consisting of four (4) entirely enclosed shotblasting units, two (2) using sand and two (2) using glass, at all times that each of the four (4) entirely enclosed shotblasting units are in operation.

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1): Natural Gas Combustion facilities

- (g) Natural gas-fired combustion sources, with heat input equal to or less than ten (10) million Btu per hour, each, as follows;
- (4) One (1) pyrolysis cleaning oven, identified as A4, constructed in 2000, with a maximum heat input capacity of ninety-five hundredths (0.95) million British thermal units per hour, a maximum throughput capacity of twenty (20) pounds of metal parts per hour, controlled with an afterburner and exhausting to Stack A4;
 - (12) Two (2) natural gas-fired boilers, identified as A13₁ and A13₂, constructed in 2002, with a maximum heat input capacity of three and three hundred sixty thousandths (3.360) million British thermal units per hour, each, uncontrolled and exhausting to Stack A13;

(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 2-6.1-5(a)(1)]

D.4.1 Particulate [326 IAC 4-2-2]

Pursuant to 326 IAC 4-2-2, the one (1) controlled pyrolysis cleaning oven, identified as A4, which serves as an 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 (Opacity Limitations) and 326 IAC 2 (Permit Review Rules);
- (d) Be maintained properly as specified by the manufacturer and approved by IDEM;
- (e) Be operated according to the manufacturer's recommendation and only burn waste approved by IDEM;
- (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 materials including, but not limited to, viable pathogenic bacteria, dangerous chemical or gases, or noxious odors are prevented;
- (h) Not create a nuisance or a fire hazard; and
- (i) Not emit particulate matter (PM) in excess of 0.5 pounds per 1,000 pounds of dry exhaust gas corrected to fifty percent (50%) excess air.

The operation of the incinerator shall be terminated immediately upon noncompliance with any of the above mentioned requirements.

D.4.2 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the two (2) three and three hundred sixty thousandths (3.360) MMBtu/hr

boilers, identified as A13₁ and A13₂, shall not exceed six tenths (0.6) pounds per MMBtu heat input, each.

D.4.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their respective control devices.

SECTION E.1 FACILITY OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1)]: Surface Coating Operations

- (a) Surface coating operations, consisting of:
- (1) Spray Coating Operations, consisting of two (2) paint booths identified as "P4" and "P5", constructed in 2005, with a maximum throughput capacity of sixty (60) metal parts per hour, each, equipped with dry filters for particulate control, and exhausting outside the building through stacks P4 and P5, respectively, with a flow rate of 2500 cfm at ambient temperature;
 - (2) Ultraviolet Painting Operations, consisting of two (2) roll coating units collectively identified as "Flange Painting", one (1) constructed in 2004, and one (1) constructed in 2006, with a maximum throughput capacity of two hundred (200) aluminum reflectors per hour, each, using roll coating to apply materials, uncontrolled and exhausting to the inside of the building;
 - (3) Gluing Operations, consisting of two (2) flow coating units collectively identified as "Gluing", one (1) constructed in 2004, and one (1) constructed in 2006, with a maximum throughput capacity of fifty (50) aluminum reflectors per hour, each, using flow coating to apply materials, uncontrolled and exhausting to the inside of the building;
 - (4) Powder Coating Operations, consisting of one (1) fully enclosed powder paint line comprised of four (4) electrostatic powder coating application booths, three (3) constructed in 1986, and one (1) constructed in 2007, with a maximum throughput capacity of 10,461 square feet of metal parts per hour, each, and a total maximum material usage rate of 347,000 pounds of powder paint per year, combined, equipped with an integral powder coating reclamation system having a control efficiency of 100%, and exhausting to the inside of the building.
 - (5) Galvanizing Operations, approved for construction in 2009, consisting of using hand-held aerosol spray cans to coat holes drilled into metal lighting fixtures, a maximum throughput capacity of one (1) unit consisting of twelve (12) holes per hour, and a maximum material usage rate of one tenth (0.10) gallons of coating per unit, uncontrolled and exhausting through a wall vent identified as G1, with a flow rate of 250 cfm at ambient temperature.
 - (6) One (1) wave soldering operation, approved for construction in 2009, using lead-free solder, with a maximum throughput capacity of two hundred eighty-five (285) feet of circuit board per hour, and a maximum material usage rate of two ten-thousandths (0.0002) gallons of coating per unit, applied via dip coating, uncontrolled and exhausting through a wall vent with a flow rate of 700 cfm at ambient temperature.

Under 40 CFR 60.90, Subpart EE - New Source Performance Standards for Surface Coating of Metal Furniture, this is considered an affected surface coating operation.

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

New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)]

E.1.1 NSPS Subpart EE Requirements - Standards of Performance for Surface Coating of Metal Furniture [40 CFR Part 60, Subpart EE] [326 IAC 12-1]

Pursuant to CFR Part 60, Subpart EE, the affected facility to which the provisions of this subpart apply is each metal furniture surface coating operation in which organic coatings are applied, on

which construction, modification, or reconstruction is commenced after November 28, 1980.

The Surface Coating Operations, including; the spray coating operations, consisting of two (2) paint booths identified as "p4" and "p5", ultraviolet painting operations, consisting of two (2) roll coating units collectively identified as "flange painting", gluing operations, consisting of two (2) flow coating units collectively identified as "gluing", powder coating operations, consisting of one (1) fully enclosed powder paint line comprised of four (4) electrostatic powder coating application booths, and galvanizing operations, applied via hand-held aerosol spray cans, combined, use more than 3,842 liters (1,014.95 gallons) of coatings (as applied) per year, and are therefore subject to the following portions of Subpart EE:

- (1) § 60.310(a), (b)
- (2) § 60.311
- (3) § 60.312
- (4) § 60.313(a), (b) & (c)(1)
- (5) § 60.315(a)(1) & (2), (b), & (d)
- (6) § 60.316

Nonapplicable portions of the NSPS will not be included in the permit.

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the surface coating operations, except as otherwise specified in 40 CFR 60, Subpart EE.

SECTION E.2 FACILITY OPERATION CONDITIONS

Emissions Unit Description [326 IAC 2-6.1-5(a)(1): Anodizing line

(b) One (1) anodizing line, constructed in 2004, with a maximum throughput capacity of two thousand (2,000) pounds of parts per hour, and consisting of the following:

...

(7) Three (3) nickel acetate sealing tanks, collectively identified as A23, with a combined maximum material usage rate of six (6.0) pounds per hour, total, uncontrolled and exhausting through Stack A23; and

(8) One (1) nickel acetate sealing tank, identified as A24, with a maximum material usage rate of two (2.0) pounds per hour, uncontrolled and exhausting through Stack A24.

Under 40 CFR 63, Subpart WWWWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, the four (4) nickel acetate sealing tanks are each considered an affected facility.

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

E.2.1 National Emission Standards for Hazardous Air Pollutants (NESHAPs): Area Source Standards for Plating and Polishing Operations [40 CFR 63, Subpart WWWWWW] [326 IAC 20]

The Permittee, that owns or operates a plating and polishing facility, as defined in 40 CFR 63.11504, that is an area source of plating and polishing metal hazardous air pollutant (HAP) emissions, as defined in 40 CFR 63.11511, shall comply with the following provisions of 40 CFR Part 63, Subpart WWWWWW (included as Attachment B of this permit), with a compliance date of July 1, 2010:

- (1) § 63.11504(a)(1)(iii), (a)(2), (a)(3);
- (2) § 63.11505(a)(1), (b), (e);
- (3) § 63.11506(a);
- (4) § 63.11507(g);
- (5) § 63.11508(a), (b), (c)(7), (d)(1), (d)(2), (d)(8)
- (6) § 63.11509(a), (b), (c)(6), (c)(7), (d), (e), (f)
- (7) § 63.11510
- (8) § 63.11511
- (9) § 63.11512

Nonapplicable portions of the NESHAP are not included in the permit.

The requirements of 40 CFR 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 63, Subpart WWWWWW.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

MINOR SOURCE OPERATING PERMIT (MSOP) CERTIFICATION

Source Name: Acuity Lighting Group, Inc.
Source Address: 1615 East Elmore Street, Crawfordsville, Indiana 47933
Mailing Address: 1615 East Elmore Street, Crawfordsville, Indiana 47933
MSOP No.: M107-27054-00037

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)_____
- Report (specify)_____
- Notification (specify)_____
- Affidavit (specify)_____
- Other (specify)_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Acuity Lighting Group, Inc.
Address:	1615 East Elmore Street
City:	Crawfordsville, Indiana 47933
Phone #:	765-362-1837
MSOP #:	M107-27054-00037

I hereby certify that Acuity Lighting Group, Inc. is :

still in operation.

I hereby certify that Acuity Lighting Group, Inc. is :

no longer in operation.

in compliance with the requirements of MSOP M107-27054-00037.

not in compliance with the requirements of MSOP M107-27054-00037.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER: (317) 233-6865**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

ATTACHMENT A

40 CFR 60, SUBPART EE—STANDARDS OF PERFORMANCE FOR SURFACE COATING OF METAL FURNITURE

Source: 47 FR 49287, Oct. 29, 1982, unless otherwise noted.

§ 60.310 Applicability and designation of affected facility.

- (a) The affected facility to which the provisions of this subpart apply is each metal furniture surface coating operation in which organic coatings are applied.
- (b) This subpart applies to each affected facility identified in paragraph (a) of this section on which construction, modification, or reconstruction is commenced after November 28, 1980.
- (c) Any owner or operator of a metal furniture surface coating operation that uses less than 3,842 liters of coating (as applied) per year and keeps purchase or inventory records or other data necessary to substantiate annual coating usage shall be exempt from all other provisions of this subpart. These records shall be maintained at the source for a period of at least 2 years.

[47 FR 49287, Oct. 29, 1982, as amended at 50 FR 18248, Apr. 30, 1985]

§ 60.311 Definitions and symbols.

- (a) All terms used in this subpart not defined below are given the meaning in the Act and in subpart A of this part.

Bake oven means a device which uses heat to dry or cure coatings.

Dip coating means a method of applying coatings in which the part is submerged in a tank filled with the coatings.

Electrodeposition (EDP) means a method of applying coatings in which the part is submerged in a tank filled with the coatings and in which an electrical potential is used to enhance deposition of the coatings on the part.

Electrostatic spray application means a spray application method that uses an electrical potential to increase the transfer efficiency of the coatings.

Flash-off area means the portion of a surface coating operation between the coating application area and bake oven.

Flow coating means a method of applying coatings in which the part is carried through a chamber containing numerous nozzles which direct unatomized streams of coatings from many different angles onto the surface of the part.

Organic coating means any coating used in a surface coating operation, including dilution solvents, from which volatile organic compound emissions occur during the application or the curing process. For the purpose of this regulation, powder coatings are not included in this definition.

Powder coating means any surface coating which is applied as a dry powder and is fused into a continuous coating film through the use of heat.

Spray application means a method of applying coatings by atomizing and directing the atomized spray toward the part to be coated.

Surface coating operation means the system on a metal furniture surface coating line used to apply and dry or cure an organic coating on the surface of the metal furniture part or product. The surface coating operation may be a prime coat or a top coat operation and includes the coating application station(s), flash-off area, and curing oven.

Transfer efficiency means the ratio of the amount of coating solids deposited onto the surface of a part or product to the total amount of coating solids used.

VOC content means the proportion of a coating that is volatile organic compounds (VOC's), expressed as kilograms of VOC's per liter of coating solids.

VOC emissions means the mass of volatile organic compounds (VOC's), expressed as kilograms of VOC's per liter of applied coating solids, emitted from a metal furniture surface coating operation.

(b) All symbols used in this subpart not defined below are given the meaning in the Act and in subpart A of this part.

Ca = the VOC concentration in each gas stream leaving the control device and entering the atmosphere (parts per million by volume, as carbon)

Cb = the VOC concentration in each gas stream entering the control device (parts per million by volume, as carbon)

Cf = the VOC concentration in each gas stream emitted directly to the atmosphere (parts per million by volume, as carbon)

Dc = density of each coating, as received (kilograms per liter)

Dd = density of each diluent VOC-solvent (kilograms per liter)

Dr = density of VOC-solvent recovered by an emission control device (kilograms per liter)

E = VOC destruction efficiency of the control device (fraction)

F = the proportion of total VOC's emitted by an affected facility that enters the control device (fraction)

G = the volume-weighted average mass of VOC's in coatings consumed in a calendar month per unit volume of coating solids applied (kilograms per liter)

Lc = the volume of each coating consumed, as received (liters)

Ld = the volume of each diluent VOC-solvent added to coatings (liters)

Lr = the volume of VOC-solvent recovered by an emission control device (liters)

Ls = the volume of coating solids consumed (liters)

Md = the mass of diluent VOC-solvent consumed (kilograms)

Mo = the mass of VOC's in coatings consumed, as received (kilograms)

Mr = the mass of VOC's recovered by an emission control device (kilograms)

N = the volume weighted average mass of VOC emissions to the atmosphere per unit volume of coating solids applied (kilograms per liter)

Qa = the volumetric flow rate of each gas stream leaving the control device and entering the atmosphere (dry standard cubic meters per hour)

Qb = the volumetric flow rate of each gas stream entering the control device (dry standard cubic meters per hour)

Qf = the volumetric flow rate of each gas stream emitted directly to the atmosphere (dry standard cubic meters per hour)

R = the overall VOC emission reduction achieved for an affected facility (fraction)

T = the transfer efficiency (fraction)

Vs = the proportion of solids in each coating (or input stream), as received (fraction by volume)

Wo = the proportion of VOC's in each coating (or input stream), as received (fraction by weight)

§ 60.312 Standard for volatile organic compounds (VOC).

- (a) On and after the date on which the initial performance test required to be conducted by §60.8(a) is completed, no owner or operator subject to the provisions of this subpart shall cause the discharge into the atmosphere of VOC emissions from any metal furniture surface coating operation in excess of 0.90 kilogram of VOC per liter of coating solids applied.

§ 60.313 Performance tests and compliance provisions.

- (a) Section 60.8(d) and (f) do not apply to the performance test procedures required by this subpart.
- (b) The owner or operator of an affected facility shall conduct an initial performance test as required under §60.8(a) and thereafter a performance test each calendar month for each affected facility according to the procedures in this section.
- (c) The owner or operator shall use the following procedures for determining monthly volume-weighted average emissions of VOC's in kilograms per liter of coating solids applied (G).
- (1) An owner or operator shall use the following procedures for any affected facility which does not use a capture system and control device to comply with the emissions limit specified under §60.312. The owner or operator shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating or by an analysis of each coating, as received, using Method 24. The Administrator may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine the VOC content of coatings using Method 24. The owner or operator shall determine the volume of coating and the mass of VOC-solvent used for thinning purposes from company records on a monthly basis. If a common coating distribution system serves more than one affected facility or serves both affected and existing facilities, the owner or operator shall estimate the volume of coating used at each facility by using the average dry weight of coating and the surface area coated by each affected and existing facility or by other procedures acceptable to the Administrator.
- (i) Calculate the volume-weighted average of the total mass of VOC's consumed per unit volume of coating solids applied (G) during each calendar month for each affected facility, except as provided under §60.313(c)(2) and (c)(3). Each monthly calculation is considered a performance test. Except as provided in paragraph (c)(1)(iv) of this section, the volume-weighted average of the total mass of VOC's consumed per unit volume of coating solids applied (G) each calendar month will be determined by the following procedures.

- (A) Calculate the mass of VOC's used ($M_o + M_d$) during each calendar month for each affected facility by the following equation:

$$M_o + M_d = \sum_{i=1}^n L_{ci} D_{ci} W_{oi} + \sum_{j=1}^m L_{dj} D_{dj}$$

* ($\sum L_{dj} D_{dj}$) will be 0 if no VOC solvent is added to the coatings, as received.)

Where: **n** is the number of different coatings used during the calendar month; and
m is the number of different diluent VOC-solvents used during the calendar month.

- (B) Calculate the total volume of coating solids used (L_s) in each calendar month for each affected facility by the following equation:

$$L_s = \sum_{i=1}^n L_{ci} V_{si}$$

Where: **n** is the number of different coatings used during the calendar month.

Select the appropriate transfer efficiency from table 1. If the owner or operator can demonstrate to the satisfaction of the Administrator that transfer efficiencies other than those shown are appropriate, the Administrator will approve their use on a case-by-case basis. Transfer efficiency values for application methods not listed below shall be determined by the Administrator on a case-by-case basis. An owner or operator must submit sufficient data for the Administrator to judge the accuracy of the transfer efficiency claims.

Table 1—Transfer Efficiencies

Application methods	Transfer efficiency (T)
Air atomized spray	0.25
Airless spray	0.25
Manual electrostatic spray	0.60
Non-rotational automatic electrostatic spray	0.70
Rotating head electrostatic spray (manual and automatic)	0.80
Dip coat and flow coat	0.90
Electrodeposition	0.95

Where more than one application method is used within a single surface coating operation, the owner or operator shall determine the composition and volume of each coating, applied by each method through a means acceptable to the Administrator, and compute the weighted average transfer efficiency by the following equation:

$$T = \frac{\sum_{i=1}^n L_{cik} V_{sik} T_k}{\sum_{k=1}^p L_s}$$

Where: **n** is the number of coatings used; and
p is the number of application methods used.

- (C) Calculate the volume-weighted average mass of VOC's consumed per unit volume of coating solids applied (G) during the calendar month for each affected facility by the following equation:

$$G = \frac{M_o + M_d}{L_s T}$$

- (ii) Calculate the volume-weighted average of VOC emissions to the atmosphere (N) during the calendar month for each affected facility by the following equation:

$$N = G$$

- (iii) Where the volume-weighted average mass of VOC discharged to the atmosphere per unit volume of coating solids applied (N) is less than or equal to 0.90 kilogram per liter, the affected facility is in compliance.

- (iv) If each individual coating used by an affected facility has a VOC content, as received, which when divided by the lowest transfer efficiency at which the coating is applied, results in a value equal to or less than 0.90 kilogram per liter, the affected facility is in compliance provided no VOC's are added to the coatings during distribution or application.

- (2) An owner or operator shall use the following procedures for any affected facility that uses a capture system and a control device that destroys VOC's (e.g., incinerator) to comply with the emission limit specified under §60.312.

- (i) Determine the overall reduction efficiency (R) for the capture system and control device. For the initial performance test the overall reduction efficiency (R) shall be determined as prescribed in paragraphs (c)(2)(i) (A), (B), and (C) of this section. In subsequent months, the owner or operator may use the most recently determined overall reduction efficiency (R) for the performance test providing control device and capture system operating conditions have not changed. The procedure in, paragraphs (c)(2)(i) (A), (B), and (C), of this section, shall be repeated when directed by the Administrator or when the owner or operator elects to operate the control device or capture system at conditions different from the initial performance test.

- (A) Determine the fraction (F) of total VOC's emitted by an affected facility that enters the control device using the following equation:

$$F = \frac{\sum_{i=1}^n C_{ni} Q_{be}}{\sum_{i=1}^n C_{ni} Q_{be} + \sum_{i=1}^n C_{ni} Q_n}$$

Where: **n** is the number of gas streams entering the control device and
m is the number of gas streams emitted directly to the atmosphere.

- (B) Determine the destruction efficiency of the control device (E) using values of the volumetric flow rate of each of the gas streams and the VOC content (as carbon) of each of the gas streams in and out of the device by the following equation:

$$E = \frac{\sum_{i=1}^n Q_{in} C_{in} - \sum_{j=1}^m Q_{out} C_{out}}{\sum_{i=1}^n Q_{in} C_{in}}$$

Where: **n** is the number of gas streams entering the control device, and
m is the number of gas streams leaving the control device and entering the atmosphere.

- (C) Determine overall reduction efficiency (R) using the following equation:

$$R=EF$$

- (ii) Calculate the volume-weighted average of the total mass of VOC's per unit volume of coating solids applied (G) during each calendar month for each affected facility using equations in paragraphs (c)(1)(i) (A), (B), and (C) of this section.
- (iii) Calculate the volume-weighted average of VOC emissions to the atmosphere (N) during each calendar month by the following equation:
- $$N=G(1-R)$$
- (iv) If the volume-weighted average mass of VOC's emitted to the atmosphere for each calendar month (N) is less than or equal to 0.90 kilogram per liter of coating solids applied, the affected facility is in compliance. Each monthly calculation is a performance test.
- (3) An owner or operator shall use the following procedure for any affected facility which uses a control device that recovers the VOC's (e.g., carbon adsorber) to comply with the applicable emission limit specified under §60.312.
- (i) Calculate the total mass of VOC's consumed (Mo+Md) and the volume-weighted average of the total mass of VOC's per unit volume of coating solids applied (G) during each calendar month for each affected facility using equations in paragraph (c)(1)(i) (A), (B), and (C) of this section.
- (ii) Calculate the total mass of VOC's recovered (Mr) during each calendar month using the following equation:
- $$Mr=LrDr$$
- (iii) Calculate overall reduction efficiency of the control device (R) for each calendar month for each affected facility using the following equation:

$$R = \frac{M_r}{M_o + M_d}$$

- (iv) Calculate the volume-weighted average mass of VOC's emitted to the atmosphere (N) for each calendar month for each affected facility using equation in paragraph (c)(2)(iii) of this section.
- (v) If the weighted average mass of VOC's emitted to the atmosphere for each calendar month (N) is less than or equal to 0.90 kilogram per liter of coating solids applied, the affected facility is in compliance. Each monthly calculation is a performance test.

[47 FR 49287, Oct. 29, 1982, as amended at 65 FR 61759, Oct. 17, 2000]

§ 60.314 Monitoring of emissions and operations.

- (a) The owner or operator of an affected facility which uses a capture system and an incinerator to comply with the emission limits specified under §60.312 shall install, calibrate, maintain, and operate temperature measurement devices according to the following procedures:
 - (1) Where thermal incineration is used, a temperature measurement device shall be installed in the firebox. Where catalytic incineration is used, a temperature measurement device shall be installed in the gas stream immediately before and after the catalyst bed.
 - (2) Each temperature measurement device shall be installed, calibrated, and maintained according to the manufacturer's specifications. The device shall have an accuracy of the greater of 0.75 percent of the temperature being measured expressed in degrees Celsius or ± 2.5 °C.
 - (3) Each temperature measurement device shall be equipped with a recording device so that a permanent continuous record is produced.
- (b) The owner or operator of an affected facility which uses a capture system and a solvent recovery system to comply with the emission limits specified under §60.312 shall install the equipment necessary to determine the total volume of VOC-solvent recovered daily.

§ 60.315 Reporting and recordkeeping requirements.

- (a) The reporting requirements of §60.8(a) apply only to the initial performance test. Each owner or operator subject to the provisions of this subpart shall include the following data in the report of the initial performance test required under §60.8(a):
 - (1) Except as provided in paragraph (a)(2) of this section, the volume-weighted average mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) for a period of one calendar month from each affected facility.
 - (2) For each affected facility where compliance is determined under the provisions of §60.313(c)(1)(iv), a list of the coatings used during a period of one calendar month, the VOC content of each coating calculated from data determined using Method 24 or supplied by the manufacturer of the coating, and the minimum transfer efficiency of any coating application equipment used during the month.
 - (3) For each affected facility where compliance is achieved through the use of an incineration system, the following additional information will be reported:

- (i) The proportion of total VOC's emitted that enters the control device (F),
 - (ii) The VOC reduction efficiency of the control device (E),
 - (iii) The average combustion temperature (or the average temperature upstream and downstream of the catalyst bed), and
 - (iv) A description of the method used to establish the amount of VOC's captured and sent to the incinerator.
- (4) For each affected facility where compliance is achieved through the use of a solvent recovery system, the following additional information will be reported:
 - (i) The volume of VOC-solvent recovered (Lr), and
 - (ii) The overall VOC emission reduction achieved (R).
- (b) Following the initial performance test, the owner or operator of an affected facility shall identify, record, and submit a written report to the Administrator every calendar quarter of each instance in which the volume-weighted average of the total mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under §60.312. If no such instances have occurred during a particular quarter, a report stating this shall be submitted to the Administrator semiannually.
- (c) Following the initial performance test, the owner or operator of an affected facility shall identify, record, and submit at the frequency specified in §60.7(c) the following:
 - (1) Where compliance with §60.312 is achieved through the use of thermal incineration, each 3-hour period when metal furniture is being coated during which the average temperature of the device was more than 28 °C below the average temperature of the device during the most recent performance test at which destruction efficiency was determined as specified under §60.313.
 - (2) Where compliance with §60.312 is achieved through the use of catalytic incineration, each 3-hour period when metal furniture is being coated during which the average temperature of the device immediately before the catalyst bed is more than 28 °C below the average temperature of the device immediately before the catalyst bed during the most recent performance test at which destruction efficiency was determined as specified under §60.313. Additionally, when metal furniture is being coated, all 3-hour periods during which the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference across the catalyst bed during the most recent performance test at which destruction efficiency was determined as specified under §60.313 will be recorded.
 - (3) For thermal and catalytic incinerators, if no such periods as described in paragraphs (c)(1) and (c)(2) of this section occur, the owner or operator shall state this in the report.
- (d) Each owner or operator subject to the provisions of this subpart shall maintain at the source, for a period of at least 2 years, records of all data and calculations used to determine VOC emissions from each affected facility. Where compliance is achieved through the use of thermal incineration, each owner or operator shall maintain, at the source, daily records of the incinerator combustion chamber temperature. If catalytic incineration is used, the owner or operator shall maintain at the source daily records of the gas temperature, both upstream and downstream of the incinerator catalyst bed. Where compliance is achieved through the use of a solvent recovery system, the owner or operator shall maintain at the source daily records of the amount of solvent recovered by the system for each affected facility.

[47 FR 49287, Oct. 29, 1982, as amended at 55 FR 51383, Dec. 13, 1990; 65 FR 61759, Oct. 17, 2000]

§ 60.316 Test methods and procedures.

- (a) The reference methods in appendix A to this part except as provided under §60.8(b) shall be used to determine compliance with §60.312 as follows:
 - (1) Method 24, or coating manufacturer's formulation data, for use in the determination of VOC content of each batch of coating as applied to the surface of the metal parts. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern.
 - (2) Method 25 for the measurement of VOC concentration.
 - (3) Method 1 for sample and velocity traverses.
 - (4) Method 2 for velocity and volumetric flow rate.
 - (5) Method 3 for gas analysis.
 - (6) Method 4 for stack gas moisture.
- (b) For Method 24, the coating sample must be at least a 1 liter sample in a 1 liter container taken at a point where the sample will be representative of the coating material as applied to the surface of the metal part.
- (c) For Method 25, the minimum sampling time for each of 3 runs is 60 minutes and the minimum sample volume is 0.003 dry standard cubic meters except that shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Administrator.
- (d) The Administrator will approve testing of representative stacks on a case-by-case basis if the owner or operator can demonstrate to the satisfaction of the Administrator that testing of representative stacks yields results comparable to those that would be obtained by testing all stacks.

Reference

The US EPA Electronic Code of Federal Regulations - 40 CFR 60, Subpart EE: Standards of Performance for Surface Coating of Metal Furniture web address:
<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=185bdc165a6c68b9a1df1bc3fa8e658c&rgn=div6&view=text&node=40:60.1.1.1.47.idno=40>

ATTACHMENT B

40 CFR 63, Subpart WWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations

Source.: 73 FR 37741, July 1, 2008, unless otherwise noted.

Applicability and Compliance Dates

§ 63.11504. Am I subject to this subpart?

- (a) You are subject to this subpart if you own or operate a plating and polishing facility that is an area source of hazardous air pollutant (HAP) emissions and meets the criteria specified in paragraphs (a)(1) through (3) of this section.
- (1) A plating and polishing facility is a plant site that is engaged in one or more of the processes listed in paragraphs (a)(1)(i) through (vi) of this section.
- (i) Electroplating other than chromium electroplating (i.e., non-chromium electroplating).
 - (ii) Electroless or non-electrolytic plating.
 - (iii) Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.
 - (iv) Dry mechanical polishing of finished metals and formed products after plating.
 - (v) Electroforming.
 - (vi) Electropolishing.
- (2) An area source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that does not have the potential to emit any single HAP at a rate of 9.07 megagrams per year (Mg/yr) (10 tons per year (tpy)) or more and any combination of HAP at a rate of 22.68 Mg/yr (25 tpy) or more.
- (3) Your plating and polishing facility uses or has emissions of compounds of one or more plating and polishing metal HAP, which means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, as defined in §63.11511, "What definitions apply to this subpart?" With the exception of lead, plating and polishing metal HAP also include any of these metals in the elemental form.
- (b) [Reserved]

§ 63.11505. What parts of my plant does this subpart cover?

- (a) This subpart applies to each new or existing affected source, as specified in paragraphs (a)(1) through (3) of this section, at all times. A new source is defined in §63.11511, "What definitions apply to this subpart?"
- (1) Each tank that contains one or more of the plating and polishing metal HAP, as defined in §63.11511, "What definitions apply to this subpart?", and is used for non-chromium electroplating; electroforming; electropolishing; electroless plating or other non-electrolytic metal coating operations, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

- (2) Each thermal spraying operation that applies one or more of the plating and polishing metal HAP, as defined in §63.11511, “What definitions apply to this subpart?”
- (3) Each dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP, as defined in §63.11511, “What definitions apply to this subpart?”
- (b) An affected source is existing if you commenced construction or reconstruction of the affected source on or before March 14, 2008.
- (c) An affected source is new if you commenced construction or reconstruction of the affected source after March 14, 2008.
- (d) This subpart does not apply to any of the process units or operations described in paragraphs (d)(1) through (6) of this section.
 - (1) Process units that are subject to the requirements of 40 CFR part 63, subpart N (National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks).
 - (2) Research and development process units, as defined in §63.11511, “What definitions apply to this subpart?”
 - (3) Process units that are used strictly for educational purposes.
 - (4) Thermal spraying conducted to repair surfaces.
 - (5) Dry mechanical polishing conducted to restore the original finish to a surface to apply to restoring the original finish.
 - (6) Any plating or polishing process that does not use any material that contains cadmium, chromium, lead, or nickel in amounts of 0.1 percent or more by weight, or that contains manganese in amounts of 1.0 percent or more by weight, as reported on the Material Safety Data Sheet for the material.
- (e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, “Title V,” provided you are not otherwise required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

§ 63.11506. What are my compliance dates?

- (a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than July 1, 2010.
- (b) If you own or operate a new affected source for which the initial startup date is on or before July 1, 2008, you must achieve compliance with the provisions of this subpart no later than July 1, 2008.
- (c) If you own or operate a new affected source for which the initial startup date is after July 1, 2008, you must achieve compliance with the provisions of this subpart upon initial startup of your affected source.

Standards and Compliance Requirements

§ 63.11507. *What are my standards and management practices?*

- (a) If you own or operate an affected new or existing non-cyanide electroplating, electroforming, or electropolishing tank (hereafter referred to as an “electrolytic” process tank, as defined in §63.11511, “What definitions apply to this subpart?”) that contains one or more of the plating and polishing metal HAP and operates at a pH of less than 12, you must comply with the requirements in paragraph (a)(1), (2), or (3) of this section, and implement the applicable management practices in paragraph (g) of this section, as practicable.
- (1) You must use a wetting agent/fume suppressant, as defined in §63.11511, “What definitions apply to this subpart?”, in the bath of the affected tank according to paragraphs (a)(1)(i) through (iii) of this section.
- (i) You must initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for the specific type of electrolytic process.
- (ii) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank.
- (iii) If a wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressants to the tank to comply with this rule.
- (2) You must capture and exhaust emissions from the affected tank to any one of the following emission control devices: composite mesh pad, packed bed scrubber, or mesh pad mist eliminator, according to paragraphs (a)(2)(i) and (ii) of this section.
- (i) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.
- (ii) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (3) You must cover the tank surface according to paragraph (a)(3)(i) or (ii) of this section.
- (i) For batch electrolytic process tanks, as defined in §63.11511, “What definitions apply to this subpart?”, you must use a tank cover, as defined in §63.11511, over all of the effective surface area of the tank for at least 95 percent of the electrolytic process operating time.
- (ii) For continuous electrolytic process tanks, as defined in §63.11511, “What definitions apply to this subpart?”, you must cover at least 75 percent of the surface of the tank, as defined in §63.11511, whenever the electrolytic process tank is in operation.
- (b) If you own or operate an affected new or existing “flash” or short-term electroplating tank, as defined in §63.11511, “What definitions apply to this subpart?”, that uses or emits one or more of the plating and polishing metal HAP, you must comply with the requirements specified in paragraph (b)(1) or (b)(2), and implement the applicable management practices in paragraph (g) of this section, as practicable.

- (1) You must limit short-term or “flash” electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
 - (2) You must use a tank cover, as defined in §63.11511, “What definitions apply to this subpart?”, for at least 95 percent of the plating time.
- (c) If you own or operate an affected new or existing process tank that is used both for short-term electroplating and for electrolytic processing of longer duration (i.e., processing that does not meet the definition of short-term or flash electroplating) and contains one or more of the plating and polishing metal HAP, you must meet the requirements specified in paragraph (a) or (b) of this section, whichever apply to the process operation, and implement the applicable management practices in paragraph (g) of this section, as practicable.
- (d) If you own or operate an affected new or existing electroplating tank that uses cyanide in the plating bath, operates at pH greater than or equal to 12, and contains one or more of the plating and polishing metal HAP, you must comply with the requirements in paragraphs (d)(1) and (2) of this section:
- (1) You must measure and record the pH of the tank upon start-up. No additional pH measurements are required.
 - (2) You must implement the applicable management practices in paragraph (g) of this section, as practicable.
- (e) If you own or operate an affected new or existing dry mechanical polishing equipment that emits one or more of the plating and polishing metal HAP, you must operate a capture system that captures particulate matter (PM) emissions from the dry mechanical polishing process and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter, according to paragraphs (e)(1) and (2) of this section.
- (1) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.
 - (2) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (f) If you own or operate an affected thermal spraying operation that applies one or more of the plating and polishing metal HAP, you must meet the applicable requirements specified in paragraphs (f)(1) through (3) of this section, and the applicable management practices in paragraph (g) of this section.
- (1) For existing permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a water curtain, fabric filter, or HEPA filter, according to paragraphs (f)(1)(i) and (ii) of this section.
 - (i) You must operate all capture and control devices according to the manufacturer's specifications and instructions.
 - (ii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
 - (2) For new permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a fabric or HEPA filter, according to paragraphs (f)(2)(i) and (ii) of this section.

- (i) You must operate all capture and control devices according to the manufacturer's specifications and instructions.
 - (ii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (3) For temporary thermal spraying operations, as defined in §63.11511 "What definitions apply to this subpart?", you must meet the applicable requirements specified in paragraphs (f)(3)(i) and (ii) of this section.
 - (i) You must document the amount of time the thermal spraying occurs each day, and where it is conducted.
 - (ii) You must implement the applicable management practices specified in paragraph (g) of this section, as practicable.
- (g) If you own or operate an affected new or existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAP, you must implement the applicable management practices in paragraphs (g)(1) through (12) of this section, as practicable.
 - (1) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.
 - (2) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.
 - (3) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.
 - (4) Use tank covers, if already owned and available at the facility, whenever practicable.
 - (5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).
 - (6) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.
 - (7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.
 - (8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.
 - (9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.
 - (10) Minimize spills and overflow of tanks, as practicable.
 - (11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.
 - (12) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

§ 63.11508. What are my compliance requirements?

- (a) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with §63.11509(b) of “What are my notification, reporting, and recordkeeping requirements?”
- (b) You must be in compliance with the applicable management practices and equipment standards in this subpart at all times.
- (c) To demonstrate initial compliance, you must satisfy the requirements specified in paragraphs (c)(1) through (11) of this section.
 - (1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), “What are my standards and management practices?”, and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(1)(i) through (iv) of this section.
 - (i) You must add wetting agent/fume suppressant to the bath of each affected tank according to manufacturer's specifications and instructions.
 - (ii) You must state in your Notification of Compliance Status that you add wetting agent/fume suppressant to the bath according to manufacturer's specifications and instructions.
 - (iii) You must implement the applicable management practices specified in §63.11507(g), “What are my standards and management practices?”, as practicable.
 - (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), “What are my standards and management practices?”, as practicable.
 - (2) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), “What are my standards and management practices?”, and you use a control system, as defined in §63.11511, “What definitions apply to this subpart?”, to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(2)(i) through (v) of this section.
 - (i) You must install a control system designed to capture emissions from the affected tank and exhaust them to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator.
 - (ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.
 - (iii) You must implement the applicable management practices specified in §63.11507(g), “What are my standards and management practices?”, as practicable.
 - (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), “What are my standards and management practices?”, as practicable.

- (v) You must follow the manufacturer's specifications and operating instructions for the control systems at all times.
- (3) If you own or operate an affected batch electrolytic process tank, as defined in §63.11511, "What definitions apply to this subpart?", that contains one or more of the plating and polishing metal HAP and which is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a tank cover, as defined in §63.11511, to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(3)(i) through (iv) of this section.
- (i) You must install a tank cover on the affected tank.
 - (ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.
 - (iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
 - (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (4) If you own or operate an affected continuous electrolytic process tank, as defined in §63.11511, "What definitions apply to this subpart?", that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you cover the tank surface to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(4)(i) through (iv) of this section.
- (i) You must cover at least 75 percent of the surface area of the affected tank.
 - (ii) You must state in your Notification of Compliance Status that you operate the tank with the surface cover in place whenever the continuous electrolytic process is in operation.
 - (iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
 - (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time of the affected tank, you must demonstrate initial compliance according to paragraphs (c)(5)(i) through (iii) of this section.

- (i) You must state in your Notification of Compliance Status that you limit short-term or flash electroplating to no more than 1 cumulative hour per day, or 3 cumulative minutes per hour of plating time.
 - (ii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
 - (iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (6) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must demonstrate initial compliance according to paragraphs (c)(6)(i) through (iv) of this section.
- (i) You must install a tank cover on the affected tank.
 - (ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the plating time.
 - (iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
 - (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (7) If you own or operate an affected tank that contains one or more of the plating and polishing metal HAP, uses cyanide in the bath, and is subject to the management practices specified in §63.11507(d), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(7)(i) through (iii) of this section.
- (i) You must report in your Notification of Compliance Status the pH of the bath solution that was measured at start-up, according to the requirements of §63.11507(d)(1).
 - (ii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
 - (iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.
- (8) If you own or operate an affected dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(e), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(8)(i) through (iii) of this section.

- (i) You must install a control system that is designed to capture PM emissions from the polishing operation and exhaust them to a cartridge, fabric, or HEPA filter.
 - (ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.
 - (iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (9) If you own or operate an existing affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(f)(1), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(9)(i) through (iii) of this section.
 - (i) You must install a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a water curtain, fabric filter, or HEPA filter.
 - (ii) You must state in your Notification of Compliance Status that you have installed and are operating the control system according to the manufacturer's specifications and instructions.
 - (iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (10) If you own or operate a new affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(f)(2), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(10)(i) through (iii) of this section.
 - (i) You must install and operate a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a fabric or HEPA filter.
 - (ii) You must state in your Notification of Compliance Status that you have installed and operate the control system according to the manufacturer's specifications and instructions.
 - (iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (11) If you own or operate an affected temporary thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(f)(3), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(11)(i) and (ii) of this section.
 - (i) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
 - (ii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.

- (d) To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, you must satisfy the requirements specified in paragraphs (d)(1) through (8) of this section.
- (1) You must always operate and maintain your affected source, including air pollution control equipment.
 - (2) You must prepare an annual compliance certification according to the requirements specified in §63.11509(c), "Notification, Reporting, and Recordkeeping," and keep it in a readily-accessible location for inspector review.
 - (3) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate continuous compliance according to paragraphs (d)(3)(i) through (iii) of this section.
 - (i) You must record that you have added the wetting agent/fume suppressant to the tank bath in the original make-up of the tank.
 - (ii) For tanks where the wetting agent/fume suppressant is a separate purchased ingredient from the other tank additives, you must demonstrate continuous compliance according to paragraphs (d)(3)(ii) (A) and (B) this section.
 - (A) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank.
 - (B) You must record each addition of wetting agent/fume suppressant to the tank bath.
 - (iii) You must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.
 - (4) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a control system to comply with this subpart; an affected dry mechanical polishing operation that is subject to §63.11507(e); or an affected thermal spraying operation that is subject to §63.11507(f)(1) or (2), you must demonstrate continuous compliance according to paragraphs (d)(4)(i) through (v) of this section.
 - (i) You must operate and maintain the control system according to the manufacturer's specifications and instructions.
 - (ii) Following any malfunction or failure of the capture or control devices to operate properly, you must take immediate corrective action to return the equipment to normal operation according to the manufacturer's specifications and operating instructions.
 - (iii) You must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.

- (iv) You must record the results of all control system inspections, deviations from proper operation, and any corrective action taken.
 - (v) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time for the affected tank, you must demonstrate continuous compliance according to paragraphs (d)(5)(i) through (iii) of this section.
- (i) You must limit short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
 - (ii) You must record the times that the affected tank is operated each day.
 - (iii) You must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
- (6) If you own or operate an affected batch electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements of §63.11507(a), "What are my standards and management practices?", or a flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), and you comply by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(6)(i) through (iii) of this section.
- (i) You must operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.
 - (ii) You must record the times that the tank is operated and the times that the tank is covered on a daily basis.
 - (iii) You must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.
- (7) If you own or operate an affected continuous electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you cover your tanks to comply with this subpart, you must demonstrate continuous compliance according to paragraphs (d)(7)(i) and (ii) of this section.
- (i) You must operate the tank with at least 75 percent of the surface covered during all periods of electrolytic process operation.
 - (ii) You must state in your annual certification that you have operated the tank with 75 percent of the surface covered during all periods of electrolytic process operation.
- (8) If you own or operate an affected tank or other operation that is subject to the management practices specified in §63.11507(g), "What are my standards and management practices?", you must demonstrate continuous compliance according to paragraphs (d)(8)(i) and (ii) of this section.

- (i) You must implement the applicable management practices during all times that the affected tank or process is in operation.
- (ii) You must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

§ 63.11509. What are my notification, reporting, and recordkeeping requirements?

- (a) If you own or operate an affected source, as defined in §63.11505(a), “What parts of my plant does this subpart cover?”, you must submit an Initial Notification in accordance with paragraphs (a)(1) through (4) of this section by the dates specified.
 - (1) The Initial Notification must include the information specified in §63.9(b)(2)(i) through (iv) of the General Provisions of this part.
 - (2) The Initial Notification must include a description of the compliance method (e.g. , use of wetting agent/fume suppressant) for each affected source.
 - (3) If you start up your affected source on or before July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after July 1, 2008.
 - (4) If you start up your new affected source after July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.
- (b) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with paragraphs (b)(1) and (2) of this section.
 - (1) The Notification of Compliance Status must be submitted before the close of business on the compliance date specified in §63.11506, “What are my compliance dates?”
 - (2) The Notification of Compliance Status must include the items specified in paragraphs (b)(2)(i) through (iv) of this section.
 - (i) List of affected sources and the plating and polishing metal HAP used in, or emitted by, those sources.
 - (ii) Methods used to comply with the applicable management practices and equipment standards.
 - (iii) Description of the capture and emission control systems used to comply with the applicable equipment standards.
 - (iv) Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements.
- (c) If you own or operate an affected source, you must prepare an annual certification of compliance report according to paragraphs (c)(1) through (7) of this section. These reports do not need to be submitted unless a deviation from the requirements of this subpart has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report.
 - (1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that is subject to the requirements in §63.11507(a)(1), “What are my standards and management practices?”, you must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer’s specifications and instructions.

- (2) If you own or operate any one of the affected sources listed in paragraphs (c)(2)(i) through (iii) of this section, you must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.
 - (i) Electroplating, electroforming, or electropolishing tank that is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a control system to comply with this subpart;
 - (ii) Dry mechanical polishing operation that is subject to §63.11507(e); or
 - (iii) Permanent thermal spraying operation that is subject to §63.11507(f)(1) or (2).
 - (3) If you own or operate an affected flash or short-term electroplating tank that is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time of the affected tank, you must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
 - (4) If you own or operate an affected batch electrolytic process tank that is subject to the requirements of §63.11507(a) or a flash or short-term electroplating tank that is subject to the requirements in §63.11507(b), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.
 - (5) If you own or operate an affected continuous electrolytic process tank that is subject to the requirements of §63.11507(a), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must state in your annual certification that you have covered at least 75 percent of the surface area of the tank during all periods of electrolytic process operation.
 - (6) If you own or operate an affected tank that is subject to the management practices specified in §63.11507(g), "What are my standards and management practices?", you must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.
 - (7) Each annual compliance report must be prepared no later than January 31 of the year immediately following the reporting period and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period.
- (d) If you own or operate an affected source, and any deviations from the compliance requirements specified in this subpart occurred during the year, you must report the deviations, along with the corrective action taken, and submit this report to the delegated authority.
- (e) You must keep the records specified in paragraphs (e)(1) through (3) of this section.
- (1) A copy of any Initial Notification and Notification of Compliance Status that you submitted and all documentation supporting those notifications.
 - (2) The records specified in §63.10(b)(2)(i) through (iii) and (xiv) of the General Provisions of this part.

- (3) The records required to show continuous compliance with each management practice and equipment standard that applies to you, as specified in §63.11508(d), "What are my compliance requirements?"
- (f) You must keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1) of the General Provisions to part 63. You may keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.11510. What General Provisions apply to this subpart?

If you own or operate a new or existing affected source, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 1 of this subpart.

§ 63.11511. What definitions apply to this subpart?

Terms used in this subpart are defined in this section.

Batch electrolytic process tank means a tank used for an electrolytic process in which a part or group of parts, typically mounted on racks or placed in barrels, is placed in the tank and immersed in an electrolytic process solution as a single unit (i.e., as a batch) for a predetermined period of time, during which none of the parts are removed from the tank and no other parts are added to the tank, and after which the part or parts are removed from the tank as a unit.

Bath means the liquid contents of a tank that is used for electroplating, electroforming, electropolishing, or other metal coating processes at a plating and polishing facility.

Capture system means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device, as part of a complete control system. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

Cartridge filter means a type of control device that uses perforated metal cartridges containing a pleated paper or non-woven fibrous filter media to remove PM from a gas stream by sieving and other mechanisms. Cartridge filters can be designed with single use cartridges, which are removed and disposed after reaching capacity, or continuous use cartridges, which typically are cleaned by means of a pulse-jet mechanism.

Composite mesh pad means a type of control device similar to a mesh pad mist eliminator except that the device is designed with multiple pads in series that are woven with layers of material with varying fiber diameters, which produce a coalescing effect on the droplets or PM that impinge upon the pads.

Continuous electrolytic process tank means a tank that uses an electrolytic process and in which a continuous metal strip or other type of continuous substrate is fed into and removed from the tank continuously. This process is also called reel-to-reel electrolytic plating.

Control device means equipment that is part of a control system that collects and/or reduces the quantity of a pollutant that is emitted to the air. The control device receives emissions that are transported from the process by the capture system.

Control system means the combination of a capture system and a control device. The capture system is designed to collect and transport air emissions from the affected source to the control device. The overall control efficiency of any control system is a combination of the ability of the system to capture the air emissions (*i.e.* , the capture efficiency) and the control device efficiency. Consequently, it is important to achieve good capture to ensure good overall control efficiency. Capture devices that are known to provide high capture efficiencies include hoods, enclosures, or any other duct intake devices with ductwork, dampers, manifolds, plenums, or fans.

Cyanide plating means plating processes performed in tanks that use cyanide as a major bath ingredient and that operate at pH of 12 or more, and use or emit any of the plating and polishing metal HAP, as defined in this section. Electroplating and electroforming are performed with or without cyanide. The cyanide in the bath works to dissolve the HAP metal added as a cyanide compound (e.g., cadmium cyanide) and creates free cyanide in solution, which helps to corrode the anode. These tanks are self-regulating to a pH of 12 due to the caustic nature of the cyanide bath chemistry. The cyanide in the bath is a major bath constituent and not an additive; however, the self-regulating chemistry of the bath causes the bath to act as if wetting agents/fume suppressants are being used and to ensure an optimum plating process. All cyanide plating baths at pH greater than or equal to 12 have cyanide-metal complexes in solution. The metal HAP to be plated is not emitted because it is either bound in the metal-cyanide complex or reduced at the cathode to elemental metal, and plated onto the immersed parts. Cyanide baths are not intentionally operated at pH less 12 since unfavorable plating conditions would occur in the tank, among other negative effects.

Deviation means any instance in which an affected source or an owner or operator of such an affected source:

- (1) Fails to meet any requirement or obligation established by this rule including, but not limited to, any equipment standard (including emissions and operating limits), management practice, or operation and maintenance requirement;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this rule and that is included in the operating permit for any affected facility required to obtain such a permit; or
- (3) Fails to meet any equipment standard (including emission and operating limits), management standard, or operation and maintenance requirement in this rule during startup, shutdown, or malfunction.

Dry mechanical polishing means a process used for removing defects from and smoothing the surface of finished metals and formed products after plating with any of the plating and polishing metal HAP, as defined in this section, using hard-faced abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles.

Electroforming means an electrolytic process using or emitting any of the plating and polishing metal HAP, as defined in this section, that is used for fabricating metal parts. This process is essentially the same as electroplating except that the plated substrate (mandrel) is removed, leaving only the metal plate. In electroforming, the metal plate is self-supporting and generally thicker than in electroplating.

Electroless plating means a non-electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Electroless plating is also called non-electrolytic plating. Examples include, but are not limited to, chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

Electrolytic plating processes means electroplating and electroforming that use or emit any of the plating and polishing metal HAP, as defined in this section, where metallic ions in a plating bath or solution are reduced to form a metal coating on the surface of parts and products using electrical energy.

Electroplating means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metal ions in solution are reduced onto the surface of the work piece (the cathode) via an electrical current. The metal ions in the solution are usually replenished by the dissolution of metal from solid metal anodes fabricated of the same metal being plated, or by direct replenishment of the solution with metal salts or oxides; electroplating is also called electrolytic plating.

Electropolishing means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a work piece is attached to an anode immersed in a bath, and the metal substrate is dissolved electrolytically, thereby removing the surface contaminant; electropolishing is also called electrolytic polishing.

Fabric filter means a type of control device used for collecting PM by filtering a process exhaust stream through a filter or filter media. A fabric filter is also known as a baghouse.

Flash electroplating means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or no more than 1 cumulative hour per day.

General Provisions of this part (40 CFR part 63, subpart A) means the section of the Code of Federal Regulations (CFR) that addresses air pollution rules that apply to all HAP sources addressed in part 63, which includes the National Emission Standards for Hazardous Air Pollutants (NESHAP).

HAP means hazardous air pollutant as defined from the list of 188 chemicals and compounds specified in the CAA Amendments of 1990; HAP are also called "air toxics." The five plating and polishing metal HAP, as defined in this section, are on this list of 188 chemicals.

High efficiency particulate air (HEPA) filter means a type of control device that uses a filter composed of a mat of randomly arranged fibers and is designed to remove at least 99.97 percent of airborne particles that are 0.3 micrometers or larger in diameter.

Mesh pad mist eliminator means a type of control device, consisting of layers of interlocked filaments densely packed between two supporting grids that remove liquid droplets and PM from the gas stream through inertial impaction and direct interception.

Metal coating operation means any process performed either in a tank that contains liquids or as part of a spraying operation that applies one or more plating and polishing metal HAP, as defined in this section, to parts and products used in manufacturing. These processes include but are not limited to: Non-chromium electroplating; electroforming; electropolishing; other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.

New source means any affected source for which you commenced construction or reconstruction after March 14, 2008.

Non-cyanide electrolytic plating and electropolishing processes means electroplating, electroforming, and electropolishing that uses or emits any of the plating and polishing metal HAP, as defined in this section, performed without cyanide in the tank. These processes do not use cyanide in the tank and operate at pH values less than 12. These processes use electricity and add or remove metals such as metal HAP from parts and products used in manufacturing. Both electroplating and electroforming can be performed with cyanide as well.

Non-electrolytic plating means a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Non-electrolytic plating is also called electroless plating. Examples include chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

Packed-bed scrubber means a type of control device that includes a single or double packed bed that contains packing media on which PM and droplets impinge and are removed from the gas stream. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.

Plating and polishing facility means a facility engaged in one or more of the following processes that uses or emits any of the plating and polishing metal HAP, as defined in this section: Electroplating processes other than chromium electroplating (i.e., non-chromium electroplating); electroless plating; other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; thermal spraying; and the dry mechanical polishing of finished metals and formed products after plating.

Plating and polishing metal HAP means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form, with the exception of lead. Any material that does not contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight, and does not contain manganese in amounts greater than or equal to 1.0 percent by weight, as reported on the Material Safety Data Sheet for the material, is not considered to be a plating and polishing metal HAP.

Plating and polishing process tanks means any tank in which a process is performed at an affected plating and polishing facility that uses or has the potential to emit any of the plating and polishing metal HAP, as defined in this section. The processes performed in plating and polishing tanks include the following: Electroplating processes other than chromium electroplating (i.e., non-chromium electroplating) performed in a tank; electroless plating; and non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and electropolishing. This term does not include tanks containing solutions that are used to rinse or wash parts prior to placing the parts in a plating and polishing process tank, or subsequent to removing the parts from a plating and polishing process tank. This term also does not include thermal spraying or dry polishing with machines.

PM means solid or particulate matter that is emitted into the air.

Research and development process unit means any process unit that is used for conducting research and development for new processes and products and is not used to manufacture products for commercial sale, except in a *de minimis* manner.

Short-term plating means an electroplating process that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or 1 hour cumulative per day.

Tank cover for batch process units means a solid structure made of an impervious material that is designed to cover the entire open surface of a tank or process unit that is used for plating or other metal coating processes.

Tank cover for continuous process units, means a solid structure or combination of structures, made of an impervious material that is designed to cover at least 75 percent of the open surface of the tank or process unit that is used for continuous plating or other continuous metal coating processes.

Temporary thermal spraying means a thermal spraying operation that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that lasts no more than 1 hour in duration during any one day and is conducted in situ. Thermal spraying that is conducted in a dedicated thermal spray booth or structure is not considered to be temporary thermal spraying.

Thermal spraying (also referred to as metal spraying or flame spraying) is a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a metallic coating is applied by projecting molten or semi-molten metal particles onto a substrate. Commonly-used thermal spraying methods include high velocity oxy-fuel (HVOF) spraying, flame spraying, electric arc spraying, plasma arc spraying, and detonation gun spraying.

Water curtain means a type of control device that draws the exhaust stream through a continuous curtain of moving water to scrub out suspended PM.

Wetting agent/fume suppressant means any chemical agent that reduces or suppresses fumes or mists from a plating and polishing tank by reducing the surface tension of the tank bath.

§ 63.11512. Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by EPA or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.
- (c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.
 - (1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g), of the General Provisions of this part.
 - (2) Approval of an alternative opacity emissions standard under §63.6(h)(9), of the General Provisions of this part.
 - (3) Approval of a major change to test methods under §63.7(e)(2)(ii) and (f), of the General Provisions of this part. A “major change to test method” is defined in §63.90.
 - (4) Approval of a major change to monitoring under §63.8(f), of the General Provisions of this part. A “major change to monitoring” is defined in §63.90.
 - (5) Approval of a major change to recordkeeping and reporting under §63.10(f), of the General Provisions of this part. A “major change to recordkeeping/reporting” is defined in §63.90.

§ 63.11513. [Reserved]

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Table 1 to Subpart WWWW of Part 63: Applicability of General Provisions to Plating and Polishing Area Sources

As required in §63.11510, “What General Provisions apply to this subpart?”, you must meet each requirement in the following table that applies to you.

Citation	Subject
63.1	Applicability.
63.2	Definitions.
63.3	Units and abbreviations.
63.4	Prohibited activities.
63.6(a), (b)(1)–(b)(5), (c)(1), (c)(2), (c)(5), (j)	Compliance with standards and maintenance requirements.
63.10(a), (b)(1), (b)(2)(i)–(iii),(xiv), (b)(3), (d)(1), (f)	Recordkeeping and reporting.
63.12	State authority and delegations.
63.13	Addresses of State air pollution control agencies and EPA regional offices.
63.14	Incorporation by reference.
63.15	Availability of information and confidentiality.

¹Section 63.11505(e), “What parts of my plant does this subpart cover?”, exempts affected sources from the obligation to obtain title V operating permits.

Reference

The US EPA Electronic Code of Federal Regulations - 40 CFR 63, Subpart WWWW: National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations web address: <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=e9a08c3e4308b9d8938e9529efbc6b50&rqn=div6&view=text&node=40:14.0.1.1.1.32&idno=40>

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a Minor Source Operating Permit (MSOP) Renewal

Source Background and Description

Source Name: Acuity Lighting Group, Inc.
Source Location: 1615 East Elmore Street, Crawfordsville, Indiana 47933
County: Montgomery
SIC Code: 3645
Permit Renewal No.: M107-27054-00037
Permit Reviewer: Hannah L. Desrosiers

On April 27, 2009, the Office of Air Quality (OAQ) had a notice published in The Journal Review, Crawfordsville, Indiana, stating that Acuity Lighting Group, Inc. had applied for a MSOP Renewal to continue operation of their existing stationary metal lighting fixture manufacturing source. The notice also stated that the OAQ proposed to issue a MSOP Renewal 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.

Comments and Responses

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

On April 27, 2009, Willis Mack Overton, of Astbury Environmental Engineering, Inc., consultant for Acuity Lighting Group, Inc., submitted comments to IDEM, OAQ on the draft MSOP Renewal.

Comment 1:

Relating to condition A.2(f), Emission Units and Pollution Control Equipment Summary, the source has determined that the each grinder is controlled by the same scrubber controlling the buffing operations, which is operating at 5,000 acfm, about double what was originally thought. Additionally, as noted in the description for the buffing operations, these controlled emissions exhaust through Stack A25.

Response to Comment 1:

IDEM agrees with the recommended changes, since the information provided by the source is intended to clarify the emissions unit description for the grinding units and does not change any rule applicabilities or the potential to emit calculations submitted for public review. The permit has been revised as follows:

(f) ~~Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to three one hundredths (0.03) grains per actual cubic foot and a gas flow rate less than or equal to four thousand (4,000) actual cubic feet per minute, including the following:~~

(1) ~~Deburring; and~~

(2) ~~Polishing.~~

Metal Finishing Operations, consisting of ten (10) Metal Grinding Stations for Deburring and Polishing, collectively identified as GRINDING, with a combined maximum capacity of 2000 pounds of parts per hour, all controlled by a wet scrubber, identified as S4, and exhausting through Stack A25;

No other comments were received during for Acuity Lighting Group, Inc.'s MSOP Renewal public comment period.

Additional Changes

IDEM, OAQ has decided to make additional revisions to the permit as described below, with deleted language as ~~strikeouts~~ and new language **bolded**.

- (a) In conditions A.2, page 7 of 64 of the permit, and D.3, page 25 of 64 of the permit, a typographic error has been corrected in the emission unit description for the buffing operations, as follows:
- (c) Buffing Operations, consisting of fifteen (15) buffing machines, collectively identified as A25, constructed in 2003, with a combined maximum capacity of thirty (30) pounds of buffing compound and two thousand (2,000) pounds of parts per hour, all **controlled by** ~~exhausting to~~ a **wet** scrubber, identified as S4, and exhausting through Stack A25;

No other changes have been made to the permit.

IDEM Contact

- (a) Questions regarding this proposed MSOP Renewal can be directed to Ms. Hannah Desrosiers at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5374 or toll free at 1-800-451-6027 extension 4-5374.
- (b) A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	Acuity Lighting Group, Inc.
Source Location:	1615 East Elmore Street, Crawfordsville, Indiana 47933
County:	Montgomery
SIC Code:	3645
Permit Renewal No.:	M107-27054-00037
Permit Reviewer:	Hannah L. Desrosiers

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Acuity Lighting Group, Inc. relating to the operation of a stationary metal lighting fixture manufacturing source.

History

On September 30, 2008, Acuity Lighting Group, Inc. submitted an application to the OAQ requesting to renew its operating permit. Acuity Lighting Group, Inc. was issued a Minor Source Operating Permit (M107-17896-00037) on December 31, 2003.

Permitted Emission Units and Pollution Control Equipment

- (a) Surface coating operations, consisting of the following:
- (1) Spray Coating Operations, consisting of two (2) paint booths identified as "P4" and "P5", constructed in 2005, with a maximum throughput capacity of sixty (60) metal parts per hour, each, equipped with dry filters for particulate control, and exhausting outside the building through stacks P4 and P5, respectively, with a flow rate of 2500 cfm at ambient temperature;
 - (2) Ultraviolet Painting Operations, consisting of two (2) roll coating units collectively identified as "Flange Painting", one (1) constructed in 2004, and one (1) constructed in 2006, with a maximum throughput capacity of two hundred (200) aluminum reflectors per hour, each, using roll coating to apply materials, uncontrolled and exhausting to the inside of the building;
 - (3) Gluing Operations, consisting of two (2) flow coating units collectively identified as "Gluing", one (1) constructed in 2004, and one (1) constructed in 2006, with a maximum throughput capacity of fifty (50) aluminum reflectors per hour, each, using flow coating to apply materials, uncontrolled and exhausting to the inside of the building;
 - (4) Powder Coating Operations, consisting of one (1) fully enclosed powder paint line comprised of four (4) electrostatic powder coating application booths, three (3) constructed in 1986, and one (1) constructed in 2007, with a maximum throughput capacity of 10,461 square feet of metal parts per hour, each, and a total maximum material usage rate of 347,000 pounds of powder paint per year, combined, equipped with an integral powder coating reclamation system having a control efficiency of 100%, and exhausting to the inside of the building.

- (5) Galvanizing Operations, approved for construction in 2009, consisting of using hand-held aerosol spray cans to coat holes drilled into metal lighting fixtures, a maximum throughput capacity of one (1) unit consisting of twelve (12) holes per hour, and a maximum material usage rate of one tenth (0.10) gallons of coating per unit, uncontrolled and exhausting through a wall vent identified as G1, with a flow rate of 250 cfm at ambient temperature. This insignificant unit is new to the source and will be constructed in 2009; and
- (6) One (1) wave soldering operation, approved for construction in 2009, using lead-free solder, with a maximum throughput capacity of two hundred eighty-five (285) feet of circuit board per hour, and a maximum material usage rate of two thousandths (0.0002) gallons of coating per unit, applied via dip coating, uncontrolled and exhausting through a wall vent with a flow rate of 700 cfm at ambient temperature.

Under 40 CFR 60.90, Subpart EE - New Source Performance Standards for Surface Coating of Metal Furniture, this is considered an affected surface coating operation.

- (b) One (1) anodizing line, constructed in 2004, with a maximum throughput capacity of two thousand (2,000) pounds of parts per hour, and consisting of the following:
 - (1) Three (3) alkaline cleaner tanks, collectively identified as A17, using a cleaner and sodium hydroxide, with a combined maximum usage rate of sixty (60) pounds per hour, uncontrolled and exhausting through Stack A17;
 - (2) One (1) caustic etch tank, identified as A18, using sodium hydroxide and etching materials, with a maximum solution usage rate of forty (40) pounds per hour, equipped with a scrubber, identified as S1, and exhausting through Stack A18;
 - (3) One (1) acid clean tank, identified as A19, using phosphoric acid, maximum acid cleaner, with a maximum usage rate of ten (10) pounds per hour, uncontrolled and exhausting through Stack A19;
 - (4) One (1) Bright Dip tank, identified as A20, using phosphoric acid and nitric acid, with a maximum acid usage rate of five hundred eighty (580) pounds per hour, equipped with a scrubber as a voluntary control, identified as S2, and exhausting to Stack A20;
 - (5) One (1) Desmut tank, identified as A3S, using sulfuric acid and sodium persulfate, with a maximum acid usage rate of twenty (20) pounds per hour, uncontrolled and exhausting through Stack A21;
 - (6) Five (5) sulfuric acid anodizing tanks, collectively identified as A22, with a combined maximum acid usage rate of one hundred (100) pounds per hour, equipped with a scrubber, identified as S3, and exhausting to Stack A22;
 - (7) Three (3) nickel acetate sealing tanks, collectively identified as A23, with a combined maximum material usage rate of six (6.0) pounds per hour, total, uncontrolled and exhausting through Stack A23; and
 - (8) One (1) nickel acetate sealing tank, identified as A24, with a maximum material usage rate of two (2.0) pounds per hour, uncontrolled and exhausting through Stack A24.

Under 40 CFR 63, Subpart WWWW: National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, the four (4) nickel acetate sealing tanks are each considered an affected facility.

- (c) Buffing Operations, consisting of fifteen (15) buffing machines, collectively identified as A25, constructed in 2003, with a combined maximum capacity of thirty (30) pounds of buffing compound and two thousand (2,000) pounds of parts per hour, all exhausting to a scrubber, identified as S4, and exhausting through Stack A25;
- (d) Welding Operations, consisting of seven (7) metal inert gas welding stations, constructed in 1995, with a maximum capacity of one and seven tenths (1.7) pounds of wire per station per hour and a combined total of one thousand five hundred (1,500) pounds of sheet metal per hour;
- (e) Shotblasting Operations, consisting of four (4) entirely enclosed shotblasting units, two (2) using sand and two (2) using glass, constructed in 2005, each equipped with an integral closed loop recycling system, as determined in Notice only Change #107-20286-00037, having no exhaust or air outlet;
- (f) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to three one-hundredths (0.03) grains per actual cubic foot and a gas flow rate less than or equal to four thousand (4,000) actual cubic feet per minute, including the following:
 - (1) Deburring; and
 - (2) Polishing.
- (g) Natural gas-fired combustion sources, with heat input equal to or less than ten (10) million Btu per hour, each, as follows:
 - (1) One (1) natural gas-fired air make-up unit, identified as A1, constructed in 1986, with a maximum heat input capacity of one and nine hundred twenty-five thousandths (1.925) million British thermal units per hour, uncontrolled and exhausting to Stack A1;
 - (2) One (1) natural gas-fired air make-up unit, identified as A2, constructed in 1980, with a maximum heat input capacity of two (2.0) million British thermal units per hour, uncontrolled and exhausting to Stack A2;
 - (3) One (1) natural gas-fired air make-up unit, identified as A3, constructed in 1980, with a maximum heat input capacity of two (2.0) million British thermal units per hour, and uncontrolled exhausting to Stack A3;
 - (4) One (1) pyrolysis cleaning oven, identified as A4, constructed in 2000, with a maximum heat input capacity of ninety-five hundredths (0.95) million British thermal units per hour, a maximum throughput capacity of twenty (20) pounds of metal parts per hour, controlled with an afterburner and exhausting to Stack A4;
 - (5) One (1) water treatment burner, identified as A5, constructed in 1985, with a maximum heat input capacity of two and five tenths (2.5) million British thermal units per hour, uncontrolled and exhausting to Stack A5;

- (6) One (1) water treatment burner, identified as A6, constructed in 1985, with a maximum heat input capacity of three and eight tenths (3.8) million British thermal units per hour, uncontrolled and exhausting to Stack A6;
 - (7) One (1) bake oven, identified as A7, constructed in 1985, with a maximum heat input capacity of three and five tenths (3.5) million British thermal units per hour, uncontrolled and exhausting to Stack A7;
 - (8) One (1) drying oven, identified as A8, constructed in 1985, with a maximum heat input capacity of two (2.0) million British thermal units per hour, uncontrolled and exhausting to Stack A8;
 - (9) One (1) natural gas-fired air makeup unit, identified as A9, constructed in 2002, with a maximum heat input capacity of one and nine hundred forty-four thousandths (1.944) million British thermal units per hour, uncontrolled and exhausting to Stack A9;
 - (10) One (1) natural gas-fired air makeup unit, identified as A10, constructed in 2002, with a maximum heat input capacity of two and nine hundred sixteen thousandths (2.916) million British thermal units per hour, uncontrolled and exhausting to Stack A10;
 - (11) Two (2) natural gas-fired air makeup units, identified as A11 and A12, constructed in 2002, with a maximum heat input capacity of four and five hundred seventy-nine thousandths (4.579) million British thermal units per hour, each, uncontrolled and exhausting to Stacks A11 and A12, respectively;
 - (12) Two (2) natural gas-fired boilers, identified as A13₁ and A13₂, constructed in 2002, with a maximum heat input capacity of three and three hundred sixty thousandths (3.360) million British thermal units per hour, each, uncontrolled and exhausting to Stack A13;
 - (13) Three (3) natural gas-fired anodizing line dryers, identified as A14 through A16, constructed in 2002, with a maximum heat input capacity of fifty-five hundredths (0.55) million British thermal units per hour, each, uncontrolled, with dryers A14 and A15 exhausting to Stack A14 and dryer A16 exhausting to Stack A16;
 - (14) One (1) natural gas-fired air make-up unit, identified as B1, constructed in 2000, with a maximum heat input capacity of one and nine hundred forty-four thousandths (1.944) million British thermal units per hour, uncontrolled and exhausting to Stack B1;
 - (15) One (1) natural gas-fired air make-up unit, identified as B2, constructed in 1979, with a maximum heat input capacity of one and (1.646) million British thermal units per hour, uncontrolled and exhausting to Stack B2; and
 - (16) One (1) natural gas-fired air make-up unit, identified as B3, constructed in 1977, with a maximum heat input capacity of one and five tenths (1.5) million British thermal units per hour, uncontrolled and exhausting to Stack B3.
- (h) Unpaved roads.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

There are no unpermitted facilities operating at this source during this review process.

Emission Units and Pollution Control Equipment Removed From the Source

- (a) The shotblasting operations have been reconfigured such that there are only four (4) booths now, two (2) using sand and two (2) using glass. The permit has been revised to reflect this change, accordingly.
- (b) The one (1) aluminum collection system, identified as ACS, scheduled for construction in 2006, to collect aluminum shavings for compaction and recycling, was never actually installed and therefore has been removed from the permit.

Existing Approvals

Since the issuance of the Minor Source Operating Permit (MSOP 107-17896-00037) on December 31, 2003, the source has constructed or has been operating under the following approvals as well:

- (a) Notice Only Change No.: 107-19187-00037, issued on June 16, 2004;
- (b) Notice Only Change No.: 107-20286-00037, issued on February 28, 2005;
- (c) Minor Permit Revision No.: 107-21344-00037, issued on August 17, 2005;
- (d) Notice Only Change No.: 107-23069-00037, issued on August 3, 2006;
- (e) Notice Only Change No.: 107-24140-00037, issued on January 30, 2007; and
- (f) Notice Only Change No.: 107-24562-00037, issued on May 7, 2007.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Air Pollution Control "Integral Part of the Process" Determinations

- (a) With this renewal, the Permittee has submitted the following information to justify why the powder coating reclamation system should be considered an integral part of the powder coating operations.

- (1) The process cannot operate without the control equipment.

The powder coating operation can only occur when the dust collection system used to reclaim unused coating is operational. The coating operation and the coating reclamation process is one unit. There is no way that the reclamation portion of the operation can be bypassed or circumvented. It is one continuous operation, and must be operated in that fashion. If it were not, the excess powder (that which is reclaimed) would foul the process. This operation is totally enclosed and unvented.

- (2) The control equipment serves a primary purpose other than pollution control.

Another purpose of the system is to collect and redistribute the excess unused powder coating mixed with virgin powder. A minimum of thirty eight percent (38%) of the powder is collected and effectively reused. Two percent of the total powder used is estimated to be classified as waste. The actual waste percentage will be less than two percent (2%). The thirty eight percent (38%) recovery rate is another reason for the system.

(3) The control equipment has an overwhelming positive net economic effect.

It is estimated that thirty eight percent (38%) of the powder is collected for reuse. The economic benefit of this is as follows:

Equipment Cost

Annualized Equipment Cost for Recirculation / Collection System			
Cost \$150,000, spread over five years, including install and ops)	\$	35,000.00	per year
Operation and Maintenance	\$	10,000.00	per year
Subtotal	\$	45,000.00	per year

Product Savings

Powder Coating Usage Rate (278 parts per hour)		81.6	pounds per hour
Potential Operating Hours per Year		8,760	hours per year
Potential Powder Coating Usage Rate		714,816	pounds per year
Amount Product Reclaimed - 38%		271,630	pounds per year
Assumes a Transfer Efficiency of 60%.			
The remainder is reclaimed and reused, except for 2% going to waste.			
Powder Coating Cost per Unit	\$	1.57	cost per pound
Powder Coating Recovery Savings/Year	\$	426,459.23	per year

Total Economic Impact

Product Savings - Operational Cost		\$ 381,459.23	per year
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IDEM, OAQ has evaluated the information submitted by the source and agrees that the powder coating reclamation system should be considered an integral part of the powder coating operations. This determination is based on the fact that the coating operation and coating reclamation processes are each components of a single system, in that there is no way that the reclamation portion of the operation can be bypassed or circumvented. Additionally, the coating collected by the system is mixed with virgin powder and reused, resulting in the overwhelming positive net economic cost savings of \$381,459.23 per year to the permittee.

Therefore, the permitting level will be determined using the potential to emit after the powder coating reclamation system. Operating conditions in the proposed permit will specify that the powder coating reclamation system shall operate at all times that each of the four (4) powder coating booths, within the fully enclosed and unvented powder paint line, are in operation.

(b) An "integral to process" determination was conducted and approved for the shotblast recycling system during Notice only Change No. 107-20286-00037.

The four (4) shotblast units, two (2) using sand and two (2) using glass, each include an integral closed loop recycling system with 100% capture efficiency. Each recycling system delivers the shot media from a drum beneath the unit and captures the media back to the drum. Each process is entirely enclosed and unvented (i.e., there is no exhaust or outlet air). Without the recycling systems, the media cannot be delivered and shotblasting cannot occur.

Therefore, emissions from these units are calculated after consideration of the control device. Operating conditions in the proposed permit will specify that the shotblast recycling system shall operate at all times that each of the four (4) shotblast units are in operation.

Enforcement Issues

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

Note: Methyl Ethyl Ketone (MEK) was delisted as a Hazardous Air Pollutant by both the US EPA, on December 19, 2005, and the Indiana Department of Environmental Management, on November 23, 2006. Therefore, MEK has been removed from consideration when calculating and evaluating the source's Hazardous Air Pollutants (HAPs) unlimited potential to emit (PTE).

County Attainment Status

The source is located in Montgomery County. Pursuant to 326 IAC 1-4-55, the following attainment status designations are applicable:

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
➤	¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
➤	Unclassifiable or attainment 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 September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.
- (3) 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.
- (4) 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. Montgomery 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**
 Montgomery County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Indiana has three (3) years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM2.5 emissions until 326 IAC 2-2 is revised.
- (c) **Other Criteria Pollutants**
 Montgomery County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) **Fugitive Emissions**
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Criteria Pollutant	tons/year
PM	65.66
PM10 ¹	65.45
PM2.5	65.07
SO2	0.58
NOx	24.38
VOC	6.88
CO	17.42

HAPs	tons/year
Xylenes	0.45
Hexane	0.36
Toluene	0.22
Ethylbenzene	0.08
Formaldehyde	0.02
Manganese	0.02
Total	1.15

(1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM10 and PM2.5 is still greater than or equal to 25 tons per year but less than 100 tons per year and the potential to emit of all other criteria pollutants is less than 25 tons per year. Therefore, pursuant to 326 IAC 2-5.1-3, Section (a)(1), and 326 IAC 2-6.1-2, the source is not subject to the provisions of 326 IAC 2-7 and will be issued an MSOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.
- (c) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.

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Federal Rule Applicability

The following federal rules are applicable to the proposed renewal:

New Source Performance Standards (NSPS)

- (a) This existing stationary metal lighting fixture manufacturing source is subject to the New Source Performance Standards for Surface Coating of Metal Furniture (40 CFR 60, Subpart EE), because the surface coating operations, including; the spray coating operations, consisting of two (2) paint booths identified as "p4" and "p5", ultraviolet painting operations, consisting of two (2) roll coating units collectively identified as "flange painting", gluing operations, consisting of two (2) flow coating units collectively identified as "gluing", powder coating operations, consisting of one (1) fully enclosed and unvented powder paint line comprised of four (4) electrostatic powder coating application booths, and the galvanizing operations, applied via hand-held aerosol spray cans, combined, use more than 3,842 liters (1,014.95 gallons) of coatings (as applied) per year, and construction, modification, or reconstruction was commenced after November 28, 1980.

The surface coating operations are therefore subject to the following portions of Subpart EE:

- (1) § 60.310(a), (b);
- (2) § 60.311;
- (3) § 60.312;
- (4) § 60.313(a), (b) & (c)(1);
- (5) § 60.315(a)(1) & (2), (b), (d); and
- (6) § 60.316

Nonapplicable portions of the NSPS will not be included in the permit.

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the surface coating operations, except as otherwise specified in 40 CFR 60, Subpart EE.

- (b) The requirements of the New Source Performance Standard for Incinerators, 40 CFR 60, Subpart E (326 IAC 12), are not included in this renewal, because although this existing stationary metal lighting fixture manufacturing source was constructed after the applicability date of August 17, 1971, the paint residues being combusted still do not meet the definition of solid waste as defined by 40 CFR Part 60.51(b).
- (c) The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc (326 IAC 12), are not included in this renewal, because the two (2) boilers, identified as A13₁ and A13₂, still rated at three and three hundred sixty thousandths (3.360) million British thermal units per hour, each, still have maximum design heat input capacities of less than the applicability threshold of ten (10) million British thermal units per hour.
- (d) There are no other New Source Performance Standards (NSPS)(40 CFR Part 60) included for this renewal.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (a) The requirements of 40 CFR 63, Subpart Mmmm, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Miscellaneous Metal Parts and Products Surface Coating, are not included in this renewal because this existing source is still not a major source of HAP emissions.

- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Metal Furniture, 40 CFR 63.2 Subpart RRRR, are not included in this revision, because this existing source is still not a major source of HAP emissions.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH, are not included in this renewal, because although this existing area source continues to use spray application to apply coatings to metal lighting fixtures, the coatings used still do not contain any of the specifically listed target HAPs (i.e., compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd)).
- (d) This existing stationary metal lighting fixture manufacturing source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Plating and Polishing Operations, 40 CFR 63, Subpart WWWW (6W), because the three (3) nickel acetate sealing tanks, collectively identified as A23, and the one (1) nickel acetate sealing tank, identified as A24, each contains nickel in the seal bath solution in amounts greater than or equal to one tenth percent (0.1%).

The four (4) nickel acetate sealing tanks are therefore subject to the following portions of Subpart 6W:

- (1) § 63.11504(a)(1)(iii), (a)(2), (a)(3);
- (2) § 63.11505(a)(1), (b), (e);
- (3) § 63.11506(a);
- (4) § 63.11507(g);
- (5) § 63.11508(a), (b), (c)(7), (d)(1), (d)(2), (d)(8)
- (6) § 63.11509(a), (b), (c)(6), (c)(7), (d), (e), (f)
- (7) § 63.11510
- (8) § 63.11511
- (9) § 63.11512

Nonapplicable portions of the NESHAP will not be included in the permit.

The requirements of 40 CFR 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 63, Subpart WWWW.

- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXX (6X) (326 IAC 20), are not included in this renewal, because although this existing source manufactures metal lighting fixtures, it is not primarily engaged in the operations in one of the nine metal fabrication and finishing source categories, as defined in 40 CFR 63.11514 and 63.11522.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, 40 CFR 63, Subpart N, 326 IAC 14, (326 IAC 20-8-1) are not included in this renewal, because the anodizing operations conducted at this source still do not utilize chromium.
- (g) The requirements of 40 CFR 63, Subpart T (63.460 through 63.470), the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning and 326 IAC 20-6, are not included in this renewal because this existing source still does not use degreasing solvents that contain any of the halogenated compounds listed in 40 CFR 63.460(a).

- (h) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR Part 63, 326 IAC 14, and 326 IAC 20) included in this renewal.

Compliance Assurance Monitoring (CAM)

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is still not included in the permit, because the potential to emit of the source has been limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability

Entire Source:

- (a) 326 IAC 1-6-3 (Preventive Maintenance Plan (PMP))
Any person responsible for operating any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1 [Exemptions, Registrations, Minor Source Operating Permit Program (MSOP), Federally Enforceable State Operating Permit (FESOP) and Title V/Part 70 permit program (TV)], shall prepare and maintain a preventive maintenance plan in accordance with 326 IAC 1-6-3(a), whenever a source is required to comply with an applicable emission limitation and/or air pollution control regulation. A PMP is required for each of the spray coating, powder coating, anodizing, buffing, and shotblasting operations, the boilers and pyrolysis cleaning oven, and any associated control devices.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
While this existing stationary metal lighting fixture manufacturing source is located in an Attainment/Unclassifiable Area for all criteria pollutants, it still does not meet the definition of a major stationary source under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, the requirements of 326 IAC 2-2 (PSD) still do not apply to this source, and are not included in this renewal.
- (c) 326 IAC 2-3 (Emission Offset)
Montgomery County has been classified as attainment or unclassifiable in Indiana for all criteria pollutants. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) still do not apply to this source, and the requirements are not included in this renewal.
- (d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The unrestricted potential HAP emissions from this existing stationary metal lighting fixture manufacturing source are less than the Title V Major Source thresholds of ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)) still do not apply to this source, see "Unrestricted Potential Emissions" section above, and the requirements are not included in this renewal.
- (e) 326 IAC 2-6 (Emission Reporting)
This existing stationary metal lighting fixture manufacturing source is not required to have an operating permit under 326 IAC 2-7 (Part 70), is located in Montgomery County, and does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year. Therefore, pursuant to 326 IAC 2-6-1(b), the source is still only subject to additional information requests as provided in 326 IAC 2-6-5.
- (f) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the "Unrestricted Potential Emissions" section above.

- (g) 326 IAC 5-1 (Opacity Limitations)
This existing stationary metal lighting fixture manufacturing source is located in Montgomery County. Therefore, pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall continue to meet the following, unless otherwise stated in the permit:
- (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (h) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), this existing stationary metal lighting fixture manufacturing source shall still 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.
- (i) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
While this existing stationary metal lighting fixture manufacturing source is located in an Attainment/Unclassifiable Area for all criteria pollutants, and was constructed after the applicability date of December 13, 1985, it still has total, uncontrolled, potential, fugitive emissions of less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 6-5, Fugitive Particulate Matter Emission Limitations, still do not apply to any of the emission units at this source, and are not included in this renewal.
- (j) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The unlimited potential VOC emissions from the anodizing, welding, wave soldering, incineration, natural gas combustion, and unpaved roads, are less than twenty-five (25) tons per year, each. Therefore, the requirements of 326 IAC 8-1-6 General Reduction Requirements still do not apply to anodizing, welding, wave soldering, incineration, natural gas combustion, and unpaved roads, and are not included in this renewal.
- (k) 326 IAC 12-1 (New Source Performance Standards)
The two (2) paint booths, identified as P4 and P5, and the two (2) ultraviolet painting operations, collectively identified as Flange Painting, are required to comply with the requirements of 40 CFR 60, Subpart EE, Standards of Performance for Surface Coating of Metal Furniture, as described in the "Federal Rule Applicability" section of this TSD.
- (l) 326 IAC 14 (Emission Standards for Hazardous Air Pollutants)
There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR Part 63) included in the renewal for this source. See the "Federal Rule Applicability" section of this TSD.
- (l) 326 IAC 20 (Hazardous Air Pollutants)
There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR Part 63) included in the renewal for this source. See the "Federal Rule Applicability" section of this TSD.

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Surface Coating Operations

(a) Spray Coating Operations, consisting of two (2) paint booths identified as "P4" and "P5";

(1) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The existing Spray Coating Operations, consisting of two (2) paint booths identified as "P4" and "P5", continue to use more than five (5) gallons of coating per day, therefore, pursuant to 326 IAC 6-3-2(d) (Particulate emission limitations, work practices, and control technologies), the particulate matter (PM) from the two (2) paint booths, shall continue to be controlled by dry particulate filters, and the control device shall continue to be operated in accordance with manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall still inspect the control device and do either of the following no later than four (4) hours after such observation:

- (A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall continue to maintain records of any actions taken as a result of the inspections, any repairs to the control device, or changes in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must still be maintained for five (5) years.

(2) 326 IAC 8-2-6 (Metal furniture coating operations)

(A) The existing Spray Coating Operations, consisting of two (2) paint booths identified as "P4" and "P5", constructed in 2005, after the rule applicability date of July 1, 1990, continues to apply coatings to metal lighting fixture parts, SIC Code 3645: Residential Electric Lighting Fixtures. Initially, the VOC emissions from paint booths P4 and P5 were greater than fifteen (15) pounds per day, and although the source has recently switched to coatings which reduce the VOC emissions to below fifteen (15) pounds per day, pursuant to 326 IAC 8-1-1(a), the requirements of 326 IAC 8-2-6 (Metal Furniture Coating Operations) still apply to paint booths P4 and P5, and are included in this renewal.

- (i) Pursuant to 326 IAC 8-2-6(b), the volatile organic compound (VOC) content of the coating utilized in the two (2) paint booths shall be limited to three (3.0) pounds of VOCs per gallon of coating excluding water and clean-up solvents, delivered to the coating applicator from prime and topcoat or single coat operations.

The source has elected to use Daily Volume Weighted Averaging (DVWA) to determine compliance with this rule, to allow for increased operational flexibility. Therefore, compliance shall be determined using the following equation:

$$A = [\sum (C \times U) / \sum U]$$

Where:

A = the volume weighted average in pounds VOC per gallon less water as applied;

C = the VOC content of the coating in pounds VOC per gallon less water as applied; and

U = the usage rate of the coating in gallons per day.

Based on the MSDS submitted by the source and calculations made, the spray coating operations, consisting of two (2) paint booths identified as "P4" and "P5", are in compliance with this requirement.

Records of daily usage of gallons of coating solids, and VOC content of each coating and all dilution solvents shall be maintained and made available upon request. Also, records of daily emissions in pounds VOC shall be maintained and made available upon request. If daily records sufficient to determine an accurate daily weighted average are not available, each coating, and solvent shall meet the requirements of the applicable section.

- (B) The requirements of 326 IAC 8-2-6 are not applicable to cleanup solvent activities performed in the existing Spray Coating Operations, since usage of cleanup solvents are not considered an application of surface coatings, which are defined as protective, functional, or decorative films (326 IAC 8-1-0.5(c)), and since they have actual VOC emissions less than fifteen (15) pounds per day before add-on controls.

(3) 326 IAC 8-2-9 (Miscellaneous Metal Coating)

The existing Spray Coating Operations, consisting of two (2) paint booths identified as "P4" and "P5", constructed in 2005, were previously held subject to this rule, however, in the course of this review IDEM has determined that the source is otherwise subject to 326 IAC 8-2-6 (Metal furniture coating operations). Therefore, the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating), do not apply to the two (2) paint booths at this source, and are not included in this renewal.

There are no other 326 IAC 8 Rules applicable to the existing Spray Coating Operations.

See Appendix A, and Appendix B, for the detailed calculations.

- (b) Ultraviolet Painting Operations, consisting of two (2) roll coating units collectively identified as "Flange Painting";

(1) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The existing Ultraviolet Painting Operations, collectively identified as "Flange Painting", continues to use roll coating to apply materials to metal lighting fixture parts. Therefore, since surface coating operations using roll coating are specifically exempted from the rule, 326 IAC 6-3-1(b)(6), the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) still do not apply to the Ultraviolet Painting Operations at this source, and are not included in this renewal.

- (2) 326 IAC 8-2-6 (Metal furniture coating operations)
The existing Ultraviolet Painting Operations, consisting of two (2) roll coating units collectively identified as "Flange Painting", constructed in 2004 and 2006, after the rule applicability date of July 1, 1990, continue to apply coatings to metal lighting fixture parts, SIC Code 3645: Residential Electric Lighting Fixtures. However, potential and actual emissions will continue to be less than fifteen (15) pounds of VOC per day before add-on controls. Therefore, the requirements of 326 IAC 8-2-6 (Metal furniture coating operations), still do not apply to the Ultraviolet Painting Operations at this source, and are not included in this renewal.
- (3) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
The existing Ultraviolet Painting Operations, consisting of two (2) roll coating units collectively identified as "Flange Painting", constructed in 2004 and 2006, were previously held subject to this rule, however, in the course of this review IDEM has determined that the source is otherwise subject to 326 IAC 8-2-6 (Metal furniture coating operations). Therefore, the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating), do not apply to the Ultraviolet Painting Operations at this source, and are not included in this renewal.

There are no other 326 IAC 8 Rules applicable to the existing Ultraviolet Painting Operations.

See Appendix A for the detailed calculations.

- (c) Gluing Operations, consisting of two (2) flow coating units collectively identified as "Gluing";
 - (1) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The existing gluing operations, collectively identified as "Gluing", continue to use flow coating to apply materials to metal lighting fixture parts. Therefore, since surface coating operations using flow coating are specifically exempted from the rule, 326 IAC 6-3-1(b)(7), the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) still do not apply to the gluing operations at this source, and are not included in this renewal.
 - (2) 326 IAC 8-2-6 (Metal furniture coating operations)
The existing gluing operations, consisting of two (2) flow coating units collectively identified as "Gluing", constructed in 2004 and 2006, after the rule applicability date of July 1, 1990, continue to apply coatings to metal lighting fixture parts, SIC Code 3645: Residential Electric Lighting Fixtures. However, potential and actual emissions will continue to be less than fifteen (15) pounds of VOC per day before add-on controls. Therefore, the requirements of 326 IAC 8-2-6 (Metal furniture coating operations), still do not apply to the gluing operations at this source, and are not included in this renewal.
 - (3) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
The existing gluing operations, consisting of two (2) flow coating units collectively identified as "Gluing", constructed in 2004 and 2006, were previously held subject to this rule, however, in the course of this review IDEM has determined that the source is otherwise subject to 326 IAC 8-2-6 (Metal furniture coating operations). Therefore, the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating), do not apply to the gluing operations at this source, and are not included in this renewal.

There are no other 326 IAC 8 Rules applicable to the existing gluing operations.

See Appendix A for the detailed calculations.

- (d) Powder Coating Operations, consisting of one (1) fully enclosed powder paint line comprised of four (4) application booths;

- (1) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The existing powder coating operations, consisting of one (1) fully enclosed powder paint line comprised of four (4) application booths and integral powder coating reclamation system, apply surface coating using a powder coating application method and do not use any solvents or water based coatings. These coating booths are not considered to be "surface coating" operations as defined in 326 IAC 6-3-1.5(5). Additionally, the existing powder coating operations have potential particulate emissions of less than five hundred fifty-one thousandths (0.551) pound per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), the powder coating operations, consisting of one (1) fully enclosed and unvented powder paint line comprised of four (4) application booths and integral powder coating reclamation system, are exempt from the requirements of 326 IAC 6-3.

Since the powder coating reclamation system has been determined an integral part of the powder coating operations, particulate from the powder coating operations shall be controlled by the powder coating reclamation system at all times that the powder paint line, comprised of four (4) application booths, is in operation.

- (2) 326 IAC 8-2-6 (Metal furniture coating operations)
(A) The existing powder coating operations, consisting of one (1) fully enclosed and unvented powder paint line comprised of two (2) application booths, constructed in 1986, after the rule applicability date of January 1 1980, continue to apply coatings to metal lighting fixture parts, SIC Code 3645: Residential Electric Lighting Fixtures. However, the potential and actual emissions from the application booths will continue to be less than twenty-five (25) tons of VOC per year before add-on controls. Therefore, the requirements of 326 IAC 8-2-6 (Metal furniture coating operations), still do not apply to any of the two (2) powder coating application booths, constructed in 1986, and are not included in this renewal; and
(B) The existing powder coating operations, consisting of one (1) fully enclosed and unvented powder paint line comprised of two (2) application booths, constructed in 2007, after the rule applicability date of July 1, 1990, continue to apply coatings to metal lighting fixture parts, SIC Code 3645: Residential Electric Lighting Fixtures. However, the potential and actual emissions will continue to be less than fifteen (15) pounds of VOC per day before add-on controls. Therefore, the requirements of 326 8-2-6 (Metal furniture coating operations), still do not apply to any of the two (2) powder coating application booths, constructed in 2007, and are not included in this renewal.
- (3) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
The existing powder coating operations, consisting of one (1) fully enclosed and unvented powder paint line comprised of two (2) application booths, constructed in 1986, and two (2) application booths, constructed in 2007, were previously held subject to this rule, however, in the course of this review IDEM has

determined that the source is otherwise subject to 326 IAC 8-2-6 (Metal furniture coating operations). Therefore, the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating), do not apply to any of the powder coating application booths, and are not included in this renewal.

There are no other 326 IAC 8 Rules applicable to the existing powder coating operations.

See Appendix A for the detailed calculations.

(e) NEW - Galvanizing Operations:

- (1) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The galvanizing operations use hand-held aerosol spray cans to coat holes drilled into metal lighting fixtures. Therefore, since applications of aerosol coating products to repair minor surface damage and imperfections are specifically exempted from the rule, 326 IAC 6-3-1(b)(12), the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) do not apply to the galvanizing operations at this source, and are not included in this renewal.
- (2) 326 IAC 8-2-6 (Metal furniture coating operations)
The galvanizing operations, approved for construction in 2009, after the rule applicability date of January 1 1980, will apply coatings to metal lighting fixture parts, SIC Code 3645: Residential Electric Lighting Fixtures. However, the potential and actual emissions will be less than fifteen (15) pounds of VOC per day before add-on controls. Therefore, the requirements of 326 IAC 8-2-6 (Metal furniture coating operations), do not apply to the galvanizing operations, and are not included in this renewal.
- (3) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
The galvanizing operations, approved for construction in 2009, are not subject to this rule because the source is otherwise subject to 326 IAC 8-2-6 (Metal furniture coating operations),. Therefore, the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) do not apply to the galvanizing operations and are not included in this renewal.

There are no other 326 IAC 8 Rules applicable to the galvanizing operations.

See Appendix A for the detailed calculations.

(f) NEW - Wave Soldering Operations:

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The wave soldering operations use dip coating to apply flux to lighting fixture circuit boards. Therefore, since surface coating operations using dip coating are specifically exempted from the rule, 326 IAC 6-3-1(b)(5), the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) still do not apply to the wave soldering operations at this source, and are not included in this renewal.
- (b) 326 IAC 8-2-6 (Metal furniture coating operations)
The wave soldering operations, approved for construction in 2009, after the rule applicability date of January 1 1980, will apply flux to lighting fixture circuit boards, SIC Code 3645: Residential Electric Lighting Fixtures. However, the potential and actual emissions will be less than fifteen (15) pounds of VOC per

day before add-on controls. Therefore, the requirements of 326 IAC 8-2-6 (Metal furniture coating operations), do not apply to the wave soldering operations, and are not included in this renewal.

- (c) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
The wave soldering operations, approved for construction in 2009, are not subject to this rule because the source is otherwise subject to 326 IAC 8-2-6 (Metal furniture coating operations). Therefore, the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) do not apply to the wave soldering operations and are not included in this renewal.
- (d) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The unlimited potential VOC emissions from the wave soldering operations are less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 (General Reduction Requirements) do not apply to the wave soldering operations at this source, and are not included in this renewal.

There are no other 326 IAC 8 Rules applicable to the wave soldering operations.

See Appendix A for the detailed calculations.

Anodizing

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
- (1) The three (3) alkaline cleaner tanks, identified as A17 and exhausting through Stack A17, one (1) caustic etch tank, identified as A18 and exhausting through Stack A18, the one (1) acid clean tank, identified as A19 and exhausting through Stack A19, the one (1) Desmut tank, identified as A21 and exhausting through Stack A21, the five (5) sulfuric acid anodizing tanks, identified as A22 and exhausting to Stack A22, the three (3) seal tanks, identified as A23 and exhausting through Stack A23, and the one (1) seal tank, identified as A24, and exhausting through Stack A24, continue to have potential particulate emissions of less than five hundred fifty-one thousandths (0.551) pounds per hour from each process. Therefore, pursuant to 326 IAC 6-3-1(b)(14), Manufacturing processes with potential emissions less than five hundred fifty-one thousandths (0.551) pound per hour, the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) still do not apply to any of the previously listed facilities, and are not included in this renewal.
- (2) The one (1) Bright Dip tank, identified as A20, and equipped with a scrubber, identified as S2, exhausting to Stack A20, continues to operate at a process weight rate between one hundred (100) pounds per hour and 60,000 pounds per hour. Therefore, pursuant to 326 IAC 6-3-2(e) the allowable rate of emissions shall continue to be calculated by use of the equation:

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

The particulate from the one (1) Bright Dip tank, identified as A20 and equipped with a scrubber, identified as S2, exhausting to Stack A20, shall not exceed four and eighty-six hundredths (4.86) pounds per hour, when operating a process weight rate of 2,580 pounds of parts and acid per hour.

Based on the calculations in Appendix A, the uncontrolled potential PM emission rate, is:

$$3.68 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.84 \text{ lbs/hr}$$

Since the unrestricted potential particulate emissions from the Bright Dip tank are eighty-four hundredths (0.84) pound per hour, and the maximum the allowable rate of emissions is four and eighty-six hundredths (4.86) pounds per hour, the one (1) Bright Dip tank will not require a control device to comply with the rule.

The source has chosen to install a scrubber as a voluntary control on this unit.

Buffing

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The fifteen (15) existing buffing machines collectively identified as A25 and exhausting through Stack A25, continue to operate at a process weight rate between one hundred (100) pounds per hour and 60,000 pounds per hour. Therefore, pursuant to 326 IAC 6-3-2(e) the allowable rate of emissions shall continue to be calculated by use of the equation:

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

The particulate from the fifteen (15) buffing machines shall not exceed four and fourteen hundredths (4.14) pounds per hour, total combined, when operating a process weight rate of 2,030 pounds of parts and buffing materials per hour.

Based on the calculations in Appendix A, the combined, uncontrolled potential PM emission rate, is:

$$52.6 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 12.0 \text{ lbs/hr}$$

Since the unrestricted potential particulate emissions from the fifteen (15) buffing machines are twelve (12.0) pounds per hour, total combined, and the maximum the allowable rate of emissions is four and fourteen hundredths (4.14) pounds per hour, total combined, the scrubber (S4) must be in operation at all times when the fifteen (15) buffing machines are in operation in order for the facility to comply with this rule.

Welding

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The welding operations, conducted at the source, continue to consume less than six hundred twenty-five (625) pounds of rod or wire per day. Therefore, since pursuant to 326 IAC 6-3-1(b)(9), welding operations that consume less than six hundred twenty-five (625) pounds of rod or wire per day are specifically exempted, the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) still do not apply to the welding operations at this source, and are not included in this renewal.

Shotblasting

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

An "integral to process" determination was conducted and approved for the shotblast recycling system during Notice only Change No. 107-20286-00037. The four (4) shotblast units, two (2) using sand and two (2) using glass, each include an integral closed loop recycling system with 100% capture efficiency. Each recycling system delivers the shot media from a drum beneath the unit and captures the media back to the drum. Each process is entirely enclosed and unvented (i.e., there is no exhaust or outlet air). Without the recycling systems, the media cannot be delivered and shotblasting

cannot occur. Thus, emissions from these units are calculated after consideration of the control device, and have been determined negligible. Therefore, since pursuant to 326 IAC 6-3-1(b)(14), manufacturing processes with potential emissions less than five hundred fifty-one thousandths (0.551) pound per hour are specifically exempted, the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) still do not apply to four (4) shotblasting units, and are not included in this renewal.

Since the closed loop recycling system has been determined an integral part of the shotblasting operations, particulate from each of the four (4) entirely enclosed and unvented shotblasting units shall be controlled by the closed loop recycling system at all times that each of the four (4) entirely enclosed and unvented shotblasting units are in operation.

Metal Finishing - deburring and polishing

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the metal finishing operations are exempt from the requirements of 326 IAC 6-3, because the potential particulate emissions are less than five hundred fifty-one thousandths (0.551) pound per hour. Therefore, the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) are not included in this renewal.

Incineration & Natural Gas Combustion

- (a) 326 IAC 4-2-2 (Incinerators)
- (1) The one (1) controlled pyrolysis cleaning oven continues to meet the definition of an incinerator under 326 IAC 1-2-34, because it is an engineered apparatus that burns waste substances with controls on combustion factors including, but not limited to, temperature, retention time, and air. Therefore, pursuant to 326 IAC 4-2-2, the one (1) controlled pyrolysis cleaning oven, which serves as an incinerator, shall continue to:
- (A) Consist of primary and secondary chambers or the equivalent;
 - (B) Be equipped with a primary burner;
 - (C) Comply with 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2 (Permit Review Rules);
 - (D) Be maintained properly as specified by the manufacturer and approved by IDEM;
 - (E) Be operated according to the manufacturer's recommendation and only burn waste approved by IDEM;
 - (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 materials including, but not limited to, viable pathogenic bacteria, dangerous chemical or gases, or noxious odors are prevented;
 - (H) Not create a nuisance or a fire hazard; and

- (I) Not emit particulate matter (PM) in excess of five tenths (0.5) pounds per 1,000 pounds of dry exhaust gas corrected to fifty percent (50%) excess air.

The operation of the incinerator shall continue to be terminated immediately upon noncompliance with any of the above mentioned requirements.

The pyrolysis cleaning oven still has a maximum exhaust rate of five hundredths (0.05) pounds of PM per 1,000 pounds of dry exhaust gas, corrected to fifty percent (50%) excess air, based on calculations supplied by the applicant. Therefore, the one (1) pyrolysis cleaning oven is still in compliance with this rule.

- (2) The ten (10) air make-up units, four (4) drying ovens, one (1) bake oven, two (2) water treatment burners, and two (2) boilers, are each still not incinerators, as defined by 326 IAC 1-2-34, since they continue not to burn waste substances. Therefore, the requirements of 326 IAC 4-2-2: Incinerators still do not apply to the ten (10) air make-up units, four (4) drying ovens, one (1) bake oven, two (2) water treatment burners, and two (2) boilers, and are not included in this renewal.

(b) 326 IAC 6-2 (Particulate Emissions from Indirect Heating Units)

- (1) The two (2) existing boilers, identified as A13₁ and A13₂, constructed in 2002, after the rule applicability date of September 21, 1983, must continue to comply with the requirements of 326 IAC 6-2-4, as follows:

The emission limitations are based on the following equation as provided in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

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

The heat input capacities of the two (2) boilers are 3.360 million British thermal units per hour, each. There were no boilers in operation at the source when these boilers were constructed.

$$Pt = 1.09/(6.72)^{0.26} = 0.66 \text{ lb/MMBtu heat input}$$

Pursuant to 326 IAC 6-2-4(a), for Q less than ten (10) mmBtu/hr, Pt shall still not exceed six tenths (0.6) mmBtu. Therefore, the particulate matter emissions from the boilers shall continue to be limited to six tenths (0.6) pounds per mmBtu heat input.

Based on Appendix A and AP-42, the potential PM emission rate is still one and ninety hundredths (1.90) pounds per million cubic feet of natural gas or nineteen

ten-thousandths (0.0019) pounds per million British thermal units. Therefore, the two (2) boilers still comply with this rule.

- (2) The ten (10) air make-up units, four (4) drying ovens, one (1) bake oven, two (2) water treatment burners, and one (1) pyrolysis cleaning oven, are each still not sources of indirect heating, as defined in 326 IAC 1-2-19 "Combustion for indirect heating". Therefore, the requirements of 326 IAC 6-2 (Particulate Emissions from Indirect Heating Units) still do not apply to the ten (10) air make-up units, four (4) drying ovens, one (1) bake oven, two (2) water treatment burners, and one (1) pyrolysis cleaning oven, and are not included in this renewal.

(c) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

- (1) The ten (10) air make-up units, four (4) drying ovens, one (1) bake oven, two (2) water treatment burners, and two (2) boilers, each, continue to not meet the definition of a "manufacturing process", and are therefore each exempt from the requirements of 326 IAC 6-3. Consequently, the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) still do not apply to the ten (10) air make-up units, four (4) drying ovens, one (1) bake oven, two (2) water treatment burners, one (1) pyrolysis cleaning oven, and two (2) boilers, each, and are not included in this renewal.

- (2) The one (1) controlled pyrolysis cleaning oven continues to be used as an incinerator. Therefore, since pursuant to 326 IAC 6-3-1(b)(2), the process of incineration is still specifically exempted, the requirements of 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) still do not apply to the pyrolysis cleaning oven and are not included in this renewal.

(d) 326 IAC 7-1 (Sulfur Dioxide Emissions Limitations: Applicability)

The potential emissions from the ten (10) air make-up units, four (4) drying ovens, one (1) bake oven, two (2) water treatment burners, one (1) pyrolysis cleaning oven, and two (2) boilers, each, continue to be less than twenty-five (25) tons per year and ten (10) pounds per hour respectively. Therefore, the requirements of 326 IAC 7-1.1 (Sulfur Dioxide Emissions Limitations) still do not apply to the ten (10) air make-up units, four (4) drying ovens, one (1) bake oven, two (2) water treatment burners, one (1) pyrolysis cleaning oven, and two (2) boilers, each, and are not included in this renewal.

(e) 326 IAC 9-1 (Carbon Monoxide Emission Limits)

The one (1) controlled pyrolysis cleaning oven, constructed after the applicability date of March 21, 1972, continues to be used as an incinerator. Emissions of carbon monoxide shall be limited as follows:

- (1) The source shall not operate a refuse incinerator or refuse burning equipment unless the waste gas stream is burned in one (1) of the following:
 - (A) Direct-flame afterburner.
 - (B) Secondary chamber.

The one (1) controlled pyrolysis cleaning oven is controlled by a direct-flame afterburner, and is, therefore, in compliance with this rule.

Compliance Determination, Monitoring, Testing, Recordkeeping, and Reporting Requirements

Compliance Determination

- (a) The spray coating operations, paint booths P4 and P5, continue to have applicable compliance determination conditions as specified below:

Emission Unit/Control	Operating Parameters	Method
Spray coating operations (Booths P4 and P5)	VOC content	Preparing or obtaining the "as supplied" and "as applied" VOC data sheets
		The daily volume weighted average shall be calculated for all coatings and diluents.
		Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4 as required by IDEM.

- (1) Confirmation of the VOC content of the coatings used in the spray coating operations is still required to determine compliance with the provisions of 326 IAC 8-2-6 (Metal furniture coating operations).
- (2) The integral powder coating reclamation system, for the powder coating operations, shall be in operation and control emissions from the powder paint line, comprised of four (4) application booths, at all times that each of the four (4) application booths, are in operation.
- (b) The buffing operations scrubber (S4), for particulate control, shall be in operation and control emissions from the fifteen (15) buffing machines at all times that each of the buffing machines are in operation.
- (c) The integral closed loop recycling system, for the shotblasting operations, consisting of four (4) entirely enclosed and unvented shotblasting units, shall be in operation and control emissions from the four (4) entirely enclosed and unvented shotblasting units at all times that each of the shotblasting units are in operation.

Compliance Monitoring Requirements

- (a) The spray coating operations, paint booths P4 and P5, and the scrubber for the buffing operations, have applicable compliance monitoring conditions as specified below:

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Control	Parameter	Frequency	Range	Excursions and Exceedances
Spray paint booth dry filters (booths P4 and P5)	Inspections	Daily	Normal-Abnormal	Response Steps
Spray paint booth coating emissions and presence of overspray on the rooftops and the nearby ground	Inspections	Weekly and Monthly	Normal-Abnormal	Response Steps
Scrubber for the buffing operations (S4)	Pressure Drop	Once per day	7.0 inches or greater	Response Steps
	Flow rate	Once per day	450 to 1,200 gallons/min	Response Steps
	Visible Emissions	Once per day	< 40% for any (1) 6min avg period < 60% for more than 15 minutes	Response Steps
	Condition of scrubber	As needed	Normal-Abnormal	Response Steps

- (1) The calendar quarter inspections for the scrubber (S4) controlling the buffing operations have not been included in the renewal for this source. IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit. In addition, the requirement to keep records of the inspections has been removed. Daily pressure drop and flow rate readings are deemed sufficient to ensure compliance with the 326 IAC 6-3-2 Particulate Emission limitations.

These monitoring conditions are necessary because the dry filters for the two (2) paint spray booths, and the scrubber used in conjunction with the buffing operations, must operate properly to ensure continued compliance with 326 IAC 6-3-2(d) (Particulate emission limitations, work practices, and control technologies), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-6.1 (MSOP).

- (b) There continue to be no specific compliance monitoring requirements for the ultraviolet painting, gluing, powder coating, and galvanizing operations, and the anodizing, welding, wave soldering, shotblasting, incineration, natural gas combustion, aluminum collection system, and unpaved roads.

Testing requirements

- (a) There continue to be no specific testing requirements associated with any of the emission units at this source.

Recordkeeping and Reporting Requirements

- (a) The Permittee shall maintain records of material and solvent usage, and VOC content, usage and emissions in order demonstrate compliance with the VOC emission limits established for the spray coating operations; and
- (b) The Permittee shall continue to maintain records of the once per day dry particulate filter inspections established for the spray coating operations; and

- (c) The Permittee shall continue to maintain records of the once per week and once per month coating emissions and overspray inspections established for the spray coating operations; and
- (d) The Permittee shall continue to maintain records of the daily visible emission notations for the buffing operation stack exhaust; and
- (e) The Permittee shall continue to maintain records of the daily pressure drop and flow rate for the scrubber used in conjunction with the buffing operations; and
- (f) The Permittee shall continue to maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan as required for the surface coating and buffing operations.

Air Quality Impacts from Minor Sources

Pursuant to 326 IAC 2-1.1-5, IDEM, OAQ, has determined that a modeling analysis of the Unlimited Potential to Emit (PTE) criteria pollutants from this existing source is unnecessary to estimate whether the Limited PTE for all criteria pollutants will cause or contribute to a violation of any National Ambient Air Quality Standard (NAAQS), since they each do not exceed the PSD Significant Emission Rate thresholds.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on September 30, 2008.

The construction and operation of this stationary metal lighting fixture manufacturing source shall be subject to the conditions of the attached MSOP Renewal No. 107-27054-00037. The staff recommends to the Commissioner that this MSOP Renewal be approved.

IDEM Contact

Questions regarding this proposed permit can be directed to Ms. Hannah Desrosiers at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5374 or toll free at 1-800-451-6027 extension 4-5374.

A copy of the findings is available on the Internet at: www.in.gov/idem/permits/air/pending.html.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem/permits/guide/.

**Appendix A: Emissions Calculations
Emission Summary**

Company Name: Acuity Lighting Group
Address City IN Zip: 1615 East Elmore Street, Crawfordsville, IN 47933
Permit No.: F107-24140-00037
Revision No.: F107-27054-00037
Reviewer: Hannah L. Desrosiers
Date Submitted: September 20, 2008

Uncontrolled Potential Emissions (tons/year)																
Category	Pollutant	Emissions Generating Activity													TOTAL	
		Surface Coating Operations							Anodizing Line	Buffing Operations	Metal Finishing - Deburring & Polishing	Welding	Incineration	Natural Gas Combustion		Unpaved Roads
		Paint Booths (P4 & P5)	Ultraviolet Painting Operations	Gluing Operations	Powder Coating Operations	NEW Galvanizing Operation	NEW Wave Solder Operation									
Criteria Pollutants	PM	0.64	1.15	0.10	0.00	0.11	0.002	7.60	52.75	0.20	1.26	0.31	1.54	0.22	65.85	
	PM10 *	0.64	1.15	0.10	0.00	0.11	0.002	7.60	52.75	0.02	1.26	0.31	1.54	0.01	65.47	
	PM2.5	0.64	1.15	0.10	0.00	0.11	0.002	7.60	52.75	0.02	1.26	0.31	1.15	0.01	65.09	
	SO2	0	0	0	0	0	0	0.35	0	0	0	0.11	0.12	0	0.58	
	NOx	0	0	0	0	0	0	4.03	0	0	0	0.13	20.22	0	24.38	
	VOC	0.77	1.21	0.07	0	2.04	1.56	0	0	0	0	0.13	1.11	0	6.88	
	CO	0	0	0	0	0	0	0	0	0	0	0.44	16.98	0	17.42	
	Totals	0.59	0.00	0	0	0.17	0	0	0	0	0	0.02	0	0.38	0	1.19
Hazardous Air Pollutants	Benzene	0	0	0	0	0	0	0	0	0	0	0	4.25E-04	0	4.25E-04	
	Dichlorobenzene	0	0	0	0	0	0	0	0	0	0	0	2.43E-04	0	2.43E-04	
	Ethylbenzene	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0.08	
	Formaldehyde	0	0	0	0	0	0	0	0	0	0	0	0.02	0	0.02	
	Hexane	0	0	0	0	0	0	0	0	0	0	0	0.36	0	0.36	
	Toluene	0.05	0	0	0	0.17	0	0	0	0	0	0	6.87E-04	0	0.22	
	Xylenes	0.45	0	0	0	0	0	0	0	0	0	0	0	0	0.45	
	Cadmium	0	0	0	0	0	0	0	0	0	0	0	2.22E-04	0	2.22E-04	
	Chromium	0	0	0	0	0	0	0	0	0	0	5.21E-05	0	2.83E-04	0	3.35E-04
	Cobalt	0.004	0	0	0	0	0	0	0	0	0	0	0	0	4.08E-03	
	Lead	0	0	0	0	0	0	0	0	0	0	0	1.01E-04	0	1.01E-04	
	Manganese	0	0	0	0	0	0	0	0	0	0.02	0	7.68E-05	0	0.02	
	Nickel	0	0	0	0	0	0	0	0.04	0	0	5.21E-05	0	4.25E-04	0	0.04
	Totals	0.59	0.00	0	0	0.17	0	0	0	0	0	0.02	0	0.38	0	1.19
Worse Case HAP														0.45		

Total emissions based on rated capacity at 8,760 hours/year.

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

Controlled Potential Emissions (tons/year)																
Category	Pollutant	Emissions Generating Activity													TOTAL	
		Surface Coating Operations							Anodizing Line	Buffing Operations	Metal Finishing - Deburring & Polishing	Welding	Incineration	Natural Gas Combustion		Unpaved Roads
		Paint Booths (P4 & P5)	Ultraviolet Painting Operations	Gluing Operations	Powder Coating Operations	NEW Galvanizing Operation	NEW Wave Solder Operation									
Criteria Pollutants	PM	0.03	1.15	0.10	0.00	0.11	0.002	2.17	0.11	0.01	1.26	0.31	1.54	0.22	6.98	
	PM10 *	0.03	1.15	0.10	0.00	0.11	0.002	2.17	0.11	0.00	1.26	0.31	1.54	0.01	6.77	
	PM2.5	0.03	1.15	0.10	0.00	0.11	0.002	2.17	0.11	0.00	1.26	0.31	1.15	0.01	6.39	
	SO2	0	0	0	0	0	0	0.35	0	0	0	0.11	0.12	0	0.58	
	NOx	0	0	0	0	0	0	4.03	0	0	0	0.13	20.22	0	24.38	
	VOC	0.77	1.21	0.07	0	2.04	1.56	0	0	0	0	0.13	1.11	0	6.88	
	CO	0	0	0	0	0	0	0	0	0	0	0.44	16.98	0	17.42	
	Totals	0.59	0.00	0	0	0.17	0	0	0	0	0	0.02	0	0.38	0	1.19
Hazardous Air Pollutants	Benzene	0	0	0	0	0	0	0	0	0	0	0	4.25E-04	0	4.25E-04	
	Dichlorobenzene	0	0	0	0	0	0	0	0	0	0	0	2.43E-04	0	2.43E-04	
	Ethylbenzene	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0.08	
	Formaldehyde	0	0	0	0	0	0	0	0	0	0	0	0.02	0	0.02	
	Hexane	0	0	0	0	0	0	0	0	0	0	0	0.36	0	0.36	
	Toluene	0.05	0	0	0	0.17	0	0	0	0	0	0	6.87E-04	0	0.22	
	Xylenes	0.45	0	0	0	0	0	0	0	0	0	0	0	0	0.45	
	Cadmium	0	0	0	0	0	0	0	0	0	0	0	2.22E-04	0	2.22E-04	
	Chromium	0	0	0	0	0	0	0	0	0	0	5.21E-05	0	2.83E-04	0	3.35E-04
	Cobalt	0.004	0	0	0	0	0	0	0	0	0	0	0	0	4.08E-03	
	Lead	0	0	0	0	0	0	0	0	0	0	0	1.01E-04	0	1.01E-04	
	Manganese	0	0	0	0	0	0	0	0	0	0.02	0	7.68E-05	0	0.02	
	Nickel	0	0	0	0	0	0	0	0.04	0	0	5.21E-05	0	4.25E-04	0	0.04
	Totals	0.59	0.00	0	0	0.17	0	0	0	0	0	0.02	0	0.38	0	1.19
Worse Case HAP														0.45		

Total emissions based on rated capacity at 8,760 hours/year.

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

**Appendix A: Emissions Calculations
VOC and Particulate Emissions
From Surface Coating Operations**

Company Name: Acuity Lighting Group
Address City IN Zip: 1615 East Elmore Street, Crawfordsville, IN 47933
Permit No.: F107-24140-00037
Revision No.: F107-27054-00037
Reviewer: Hannah L. Desrosiers
Date Submitted: September 20, 2008

Emission Unit / Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Material Usage (gal/unit)	Maximum Throughput (unit/hour)	Maximum Material Usage (gal/hr)	Maximum Material Usage (gal/day)	Maximum Material Usage (lb/hr)	Pounds VOC per gallon of coating	Pounds VOC per gallon of coating less water	Potential VOC pounds per hour	Potential VOC pounds per day	***Actual VOC (lb/day)	Potential VOC tons per year	****Actual VOC (ton/yr)	Particulate Potential (ton/yr)	Lbs VOC/gal solids	Transfer Efficiency									
Spray Coating Operations, consisting of two (2) paint booths identified as "P4" and "P5"																														
Hydro Prime (073-189)	10.82	46.40%	43.30%	3.1%	0.00%	39.30%	0.0003	120.00	0.041	0.979	0.441	0.335	0.335	0.014	0.328	0.109	0.060	0.020	0.518	0.85	50%									
Fast Dry 35 - White Base (C1512)	11.42	37.66%	0.00%	37.7%	0.00%	47.58%	0.0003	120.00	0.041	0.979	0.466	4.301	4.301	0.175	4.211	1.404	0.769	0.256	0.636	9.04	50%									
SP-41 (cleanup solvent)	7.18	100.00%	0.00%	100.0%	0.00%	0.00%	0.00002	120.00	0.002	0.058	0.017	7.180	7.180	0.017	0.414	0.138	0.075	0.025	0.000	0.00	100%									
Total:																	0.0003	120.00	0.04	0.18	4.21	1.40	0.77	0.26	0.64					
Total Gal of Mat. Used /yr :																	86.50		PM Control Efficiency: 95.0%										Controlled: 0.03	
Ultraviolet Painting Operations, consisting of two (2) roll coating units collectively identified as "Flange Painting"																														
UV Curable Screen Printing Ink	13.80	5.00%	0.00%	5.0%	0.00%	100.00%	0.0010	400.00	0.400	9.600	5.520	0.690	0.690	0.276	6.624	2.208	1.209	0.403	1.148	0.690	95%									
Total:																	0.0010	400.00	0.40	0.28	6.62	2.21	1.21	0.40	1.15					
Total Gal of Mat. Used /yr :																	848.00													
Gluing Operations, consisting of two (2) flow coating units collectively identified as "Gluing"																														
Lockite 352 Light Cure	9.30	3.24%	0.00%	3.2%	0.00%	100.00%	0.0005	100.00	0.050	1.200	0.465	0.301	0.301	0.015	0.362	0.121	0.066	0.022	0.099	0.301	95%									
Total:																	0.0005	100.00	0.05	0.02	0.36	0.12	0.07	0.02	0.10					
Total Gal of Mat. Used /yr :																	106.00													
NEW Galvanizing Operation																														
Spray Galvanize	9.60	48.52%	0.00%	48.5%	0.00%	12.00%	0.1000	1.00	0.100	2.400	0.960	4.658	4.658	0.466	11.179	3.726	2.040	0.680	0.108	38.816	95%									
Total:																	0.1000	1.00	0.10	0.47	11.18	3.73	2.04	0.68	0.11					
Total Gal of Mat. Used /yr :																	212.00													
NEW Wave Solder Operation																														
Wave Solder Flux	6.63	97.00%	0.00%	97.0%	0.00%	3.00%	0.0002	285.00	0.055	1.327	0.366	6.426	6.426	0.355	8.527	2.842	1.556	0.519	0.002	214.208	95%									
Total:																	0.0002	285.00	0.06	0.36	8.53	2.84	1.56	0.52	0.002					
Total Gal of Mat. Used /yr for 40 CFR 60, Subpart EE applicability:																	1,252.50													

METHODOLOGY

Maximum Material Usage (gal/hr) = Number of booths in line * Gallons of Material used per unit (gal/unit) * Maximum Throughput (units/hr/booth)
 Maximum Material Usage (lb/hr) = Density (Lb/Gal) * Maximum Material Usage (gal/hr)
 Total Gallons of Material Used per Year = Total Maximum Material Usage (gal/hr) * 8hrs/day * 265 days/yr
 Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
 Pounds of VOC per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
 Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
 Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
 Particulate Potential (tons per year) = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
 Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
 Total Gallons of Material Used per Year for 40 CFR 60, Subpart EE applicability = SUM[Total Gallons of Material Used per Year for Spray Coating Operations + Total Gallons of Material Used per Year for Ultraviolet Painting Operations]
 Total = Worst Coating + Sum of all solvents used
 ** Total State Potential Emissions = Sum of Totals from each Coating Operation
 ***Actual VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * 8hrs
 ****Actual VOC tons per year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (2920 hr/yr) * (1 ton/2000 lbs)

NOTES

> Actual usage based on 8hrs per day and 265 days per year.
 > Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.
 > It is assumed that PM = PM10 = PM2.5

	VOC	PM
** Total State Potential Emissions (tons/yr)	Uncontrolled: 5.64	1.99
	Controlled: 5.64	1.39

40 CFR 63, Subpart EE (2E) Applicability Determination

The surface coating operations, including: the spray coating operations, consisting of two (2) paint booths identified as "p4" and "p5"; the ultraviolet painting operations, consisting of two (2) roll coating units collectively identified as "flange painting"; the gluing operations, consisting of two (2) flow coating units collectively identified as "gluing"; the powder coating operations, consisting of one (1) fully enclosed and unvented powder paint line comprised of four (4) electrostatic powder coating application booths, and the galvanizing operations, applied via hand-held aerosol spray cans, combined, use more than 3,842 liters (1,014.95 gallons) of coatings (as applied) per year.

Subpart 2E applies to each of the coating operations included within the surface coating operations.

**Appendix A: Emissions Calculations
HAP Emissions
From Surface Coating Operations**

Company Name: Acuity Lighting Group
Address City IN Zip: 1615 East Elmore Street, Crawfordsville, IN 47933
Permit No.: F107-24140-00037
Revision No.: F107-27054-00037
Reviewer: Hannah L. Desrosiers
Date Submitted: September 20, 2008

Material	Density (Lb/Gal)	Maximum Material Usage (gal/hour)	Weight % Xylene	Weight % Toluene	Weight % Cobalt	Weight % Ethylbenzene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Cobalt Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)
Spray Coating Operations - consisting of Paint Booths P4 & P5										
Hydro Prime (073-189)	10.82	0.04	22.00%	0.00%	0.10%	4.00%	0.43	0.00	0.002	0.08
Fast Dry 35 - White Base (C1512)	11.42	0.04	22.00%	0.00%	0.20%	4.00%	0.45	0.00	0.004	0.08
SP-41 (cleanup solvent)	7.18	0.00	0.00%	70.00%	0.00%	0.00%	0.00	0.05	0.00	0.00
Total (Sum of emission from SP-41 (clean-up solvent) and the worst case of L20 and P27):							0.45	0.05	0.004	0.08
Ultraviolet Painting Operations - Flange Painting - consisting of (2) roll coating units										
UV Curable Screen Printing Ink	13.80	0.40	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
Total:							0.00	0.00	0.00	0.00
Galvanizing Operation										
Spray Galvanize	9.60	0.10	0.00%	4.00%	0.00%	0.00%	0.00	0.17	0.00	0.00
Total:							0.00	0.17	0.00	0.00

*Total State Potential HAPs Emissions (tons/yr):	0.45	0.22	0.004	0.08
Total Combined HAPs PTE (tons/yr):	0.76			

METHODOLOGY

* Total State Potential Emissions = Sum of Totals from each Coating Operation
HAPS emission rate (tons/yr) = Density (lb/gal) * Maximum Material Usage (gal/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

NOTES

The coatings used in the Powder Coating Operations, Gluing Operations, and the Wave Solder Operation do not contain any Hazardous Air Pollutants (HAPs)

**Appendix A: Emissions Calculations
Particulate (PM/PM10/PM2.5) Emissions
From the Powder Coating Operations**

Company Name: Acuity Lighting Group
Address City IN Zip: 1615 East Elmore Street, Crawfordsville, IN 47933
Permit No.: F107-24140-00037
Revision No.: F107-27054-00037
Reviewer: Hannah L. Desrosiers
Date Submitted: September 20, 2008

Particulate Potential to Emit (PTE) (tons/yr)

Process	Maximum Material Usage (lbs/hr)	Weight Percent Solids (%)	Transfer Efficiency (%)	Control Efficiency (%)	Potential to Emit (PTE)* (lbs/hr)	Potential to Emit (PTE)* (tons/yr)
Powder Coating Operation	39.61	100%	95.00%	100.00%	0.00	0.00

Methodology

Maximum material usage (lbs/hr) = 347,000 pounds of powder paint per year / 8760 hrs per year

Transfer efficiency taken from 40 CFR 60, Subpart EE, Table 1.

Potential to Emit (PTE) (ton/yr) = Max. Material usage * Weight Percent Solids (%) * (1 - Transfer Efficiency (%)) * (1 - Control Efficiency (%))

Potential to Emit (PTE) (ton/yr) = PTE (lbs/hr) * 8760 hrs/yr * 1ton/2,000 lbs

Notes

The Powder Coating Operation is totally enclosed and unvented. The control system, used to reclaim unused powder, is determined integral. Therefore, the PM control efficiency is 100% for this unit and emissions are counted after control.

* PM, PM10, and PM 2.5 emissions are assumed equal.

An MSDS, submitted by the source, for the powder coating used in the powder coating operations shows the coating is VOC and HAP free.

**Appendix A: Emission Calculations
Anodizing Operations**

Company Name: Acuity Lighting Group
Address City IN Zip: 1615 East Elmore Street, Crawfordsville, IN 47933
Permit No.: F107-24140-00037
Revision No.: F107-27054-00037
Reviewer: Hannah L. Desrosiers
Date Submitted: September 20, 2008

Tank ID	Process	Chemical Constituents	Surface Area (ft ²)	Before Control Emission Rate (lbs/hr)*	Before Control Emission Rate (tons/yr)*	Control Efficiency (%)	After Control Emission Rate (lbs/hr)*	After Control Emission Rate (tons/yr)*
Anodizing line - tank sources								
A17	Alkaline Soak Cleaning	Sodium Metasilicate Hexylene Glycol (3%)	144	0.300 PM/PM10	1.31 PM/PM10	n/a	0.300 PM/PM10	1.31 PM/PM10
A19	Acid Cleaner	Phosphoric Acid (3%)	48	0.028 PM/PM10	0.123 PM/PM10	n/a	0.028 PM/PM10	0.123 PM/PM10
A20	Bright Dip	Phosphoric Acid (80%) Nitric Acid (3%)	52	0.840 PM/PM10 and NO _x	3.68 PM/PM10 and NO _x	94	0.050 PM/PM10 and NO _x	0.221 PM/PM10 and NO _x
A21	Desmut	Nitric Acid (10%)	44	0.080 PM/PM10 and NO _x	0.350 PM/PM10 and NO _x	n/a	0.080 PM/PM10 and NO _x	0.350 PM/PM10 and NO _x
A22	Sulfuric Acid Anodize	Sulfuric Acid (18%)	268	0.080 PM/PM10 and SO ₂	0.350 PM/PM10 and SO ₂	94	0.005 PM/PM10 and SO ₂	0.021 PM/PM10 and SO ₂
Anodizing line - etch sources								
A18	Etch Tank	Caustic Etch (80% water)	5	0.40 PM/PM10	1.75 PM/PM10	94	0.024 PM/PM10	0.105 PM/PM10
A23 & A24	Four (4) Nickel Acetate Seal Tanks	Nickel Acetate Seal (5% Nickel, 5% Other, and 90% water)	1	0.008 PM/PM10 and 0.0088 Ni	0.035 PM/PM10 and 0.038 Ni	n/a	0.008 PM/PM10 and 0.0088 Ni	0.035 PM/PM10 and 0.038 Ni

Total Particulate Emissions:	1.74	7.60	---	0.50	2.17
Total SO ₂ Emissions:	0.08	0.35	---	---	---
Total NO _x Emissions:	0.92	4.03	---	---	---
Total Nickel (Ni) Emissions:	0.009	0.04	---	---	---

Methodology

It is assumed that PM = PM10 = PM2.5

Data table above taken from the TSD, pg 6, of permit No. F107-17896-00037.

The applicant provided emissions for the anodizing line tank sources (A17 and A19 through 22) based on the EPA's "Metal Finishing Facility Risk Screening Tool" (September 2002).

The applicant also provided PM/PM10 emissions calculations for the one (1) etch tank (A18) and the four (4) seal tanks (A23 and A24). These calculations were based on the New York State Department of Environmental Conservation, Environmental Conservation Handbook, Chapter 3600, and have been determined to be accurate.

Metal HAP Emissions from the Nickel used in the Nickel Acetate Seal Tanks were calculated from formulae taken from AP 42-12.20 Electroplating.

Notes

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

326 IAC 6-3-2(e) Allowable Rate of Emissions

Unit ID	*** Process Weight Rate (total materials throughput) (lbs/hr)	Process Weight Rate (tons/hr)	Allowable PM Emissions (lbs/hr)
Anodizing	2,580	1.29	4.86

Methodology

***Process weight; weight rate: Total weight of all materials introduced into any source operation (326 IAC 1-2-59(a)).

Allowable Emissions (lb/hr) = 4.10(Process Weight Rate (t)^{0.67}

Allowable Emissions (tons/yr) = (Allowable Emissions (lb/hr)*8760)/2000

40 CFR 63, Subpart W (6W) Applicability Determination

Each of the four (4) nickel acetate sealing tanks contains nickel in the seal bath solution in amounts greater than or equal to one tenth percent (0.1%).

Subpart 6W applies to the four (4) nickel acetate sealing tanks, identified as A23 & A24.

Appendix A: Emission Calculations
Particulate Emissions
Buffing Operations

Company Name: Acuity Lighting Group
Address City IN Zip: 1615 East Elmore Street, Crawfordsville, IN 47933
Permit No.: F107-24140-00037
Revision No.: F107-27054-00037
Reviewer: Hannah L. Desrosiers
Date Submitted: September 20, 2008

Unit ID	Production Schedule (hrs/yr)	Weight of Material Collected (lbs/yr)	Amount Collected (lbs/hr)	Potential Collected (tons/yr)	Control Efficiency	PM Potential Generated (lbs/hr)	PM Potential Generated (tons/yr)	PM Emissions after controls (lbs/hr)	PM Emissions after controls (tons/yr)
Buffing (A25)	4,160	50,000	12.0	52.6	99.8%	12.0	52.75	0.024	0.11

Methodology

It is assumed that PM = PM10 = PM2.5

Actual collected (lbs/hr) = Weight of Material Collected (lbs/yr) / Production schedule (hrs/yr)

Potential collected (tons/yr) = Amount collected (lbs/hr) x 8,760 hrs/yr / 2,000 lbs/ton

Potential generated (lbs/hr) = amount collected (lbs/hr) / control efficiency (%)

Potential generated (tons/yr) = Potential generated (lbs/hr) * (8760 hr/yr) * (ton/2000 lb)

Emissions after controls (lbs/hr) = potential generated (lbs/hr) * (1-control efficiency (%))

Emissions after controls (tons/yr) = Emissions after controls (lbs/hr) * (8760 hr/yr) * (ton/2000 lb)

326 IAC 6-3-2(e) Allowable Rate of Emissions

Unit ID	*** Process Weight Rate (total materials throughput) (lbs/hr)	Process Weight Rate (tons/hr)	Allowable PM Emissions (lbs/hr)	Allowable PM Emissions (tons/yr)
Buffing	2,030	1.02	4.14	18.14

NOTES

Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

Methodology

***Process weight; weight rate: Total weight of all materials introduced into any source operation (326 IAC 1-2-59(a)).

Allowable Emissions (lb/hr) = 4.10(Process Weight Rate)^{0.67}

Allowable Emissions (tons/yr) = (Allowable Emissions (lb/hr)*8760)/2000

**Appendix A: Emission Calculations
Metal Finishing operations, including;
Ten (10) Metal Grinding Stations for Deburring and Polishing**

Company Name: Acuity Lighting Group
Address City IN Zip: 1615 East Elmore Street, Crawfordsville, IN 47933
Permit No.: F107-24140-00037
Revision No.: F107-27054-00037
Reviewer: Hannah L. Desrosiers
Date Submitted: September 20, 2008

Unit ID	Control Efficiency (%)	PM Emission Factor (lbs/ton)	PM ₁₀ Emission Factor (lbs/ton)	Maximum Capacity (lbs/hr)	PM Emission Rate before Controls (lbs/hr)	PM Emission Rate before Controls (tons/yr)	PM Emission Rate after Controls (lb/hr)	PM Emission Rate after Controls (tons/yr)
Metal Finishing	95.0%	0.045	0.0045	2000.0	0.05	0.20	0.002	0.01

PM ₁₀ Emission Rate before Controls (lbs/hr)	PM ₁₀ Emission Rate * before Controls (tons/yr)	PM ₁₀ Emission Rate after Controls (lb/hr)	PM ₁₀ Emission Rate * after Controls (tons/yr)
0.0045	0.02	0.0002	0.0010

Methodology

Emission Rate for PM an PM₁₀ before controls (lbs/hr) = Emission Factor (lbs/ton) * Capacity (lbs/hr) * (1 ton/2000 lbs)
 Emission Rate for PM and PM₁₀ before controls (tons/yr) = Emission Rate (lbs/hr) * (8760 hours/1 year) *(1 ton/2000 lbs)
 Emission Rate for PM and PM₁₀ after controls (lbs/hr) = Emission Rate (lbs/hr) before controls * (1-control efficiency)
 Emission Rate for PM and PM₁₀ after controls (tons/yr) = Emission Rate after controls (lbs/hr) * (8760 hours/1 year) * (1 ton/2000 lbs)

The emission factor for PM10 is from Fire 6.25 SCC# 30400360 (Grey Iron Foundries - Castings Finishing). AP-42 does not supply a PM emission factor for Grey Iron Foundries - Castings Finishing, therefore, as a conservative estimate, since PM10 emissions are equal to 10% of the PM emissions for SCC#030400340 (Grey Iron Foundries - Grinding/Cleaning), the same ratio is assumed for the Castings Finishing and the PM emission factor was interpolated, accordingly.

Notes

* PM 2.5 emissions are assumed equal to PM10 emissions.
 * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

326 IAC 6-3-2(e) Allowable Rate of Emissions

Unit ID	Process Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)
Metal Finishing	2,000	1.00	4.10

Methodology

***Process weight; weight rate: Total weight of all materials introduced into any source operation (326 IAC 1-2-59(a)).
 Allowable Emissions (lb/hr) = 4.10(Process Weight Rate (lb/hr)^{0.67}
 Allowable Emissions (tons/yr) = (Allowable Emissions (lb/hr)*8760)/2000

**Appendix A: Emissions Calculations
Welding and Thermal Cutting**

Company Name: Acuity Lighting Group
Address City IN Zip: 1615 East Elmore Street, Crawfordsville, IN 47933
Permit No.: F107-24140-00037
Revision No.: F107-27054-00037
Reviewer: Hannah L. Desrosiers
Date Submitted: September 20, 2008

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	Type of Wire Used	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)	
				PM/PM10/PM2.5	Mn	Ni	Cr	PM/PM10/PM2.5	Mn	Ni	Cr		
WELDING													
Metal Inert Gas (MIG)(carbon steel)	7	1.7	carbon steel	0.0241	3.20E-04	1.00E-06	1.00E-06	0.287	0.004	1.19E-05	1.19E-05	0.004	
EMISSION TOTALS													
Potential Emissions lbs/hr								0.287	3.81E-03	1.19E-05	1.19E-05	3.83E-03	
Potential Emissions lbs/day								6.88	0.091	2.86E-04	2.86E-04	0.092	
Potential Emissions tons/year								1.26	0.02	5.21E-05	5.21E-05	0.02	

*Emission factors are from AP-42, Chapter 12.19, SCC 3-09-050 (January 1995), and are default values for carbon steel.

METHODOLOGY

It is assumed that PM = PM10 = PM2.5.
 Potential Emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)
 Potential Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day
 Potential Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

NOTES

Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

Maximum electrode consumption per day

PROCESS	Number of Stations	Maximum electrode consumption per station (lbs/hr)	Combined maximum electrode consumption (lbs/hr)	Combined maximum electrode consumption (lbs/day)	Combined maximum electrode consumption (lbs/yr)
WELDING					
Metal Inert Gas (MIG)(ER5154)	7	1.7	11.9	285.6	104,244.0

Methodology

Combined maximum electrode consumption (lbs/hr) = Number of Stations * Maximum electrode consumption per station (lb/hr)
 Combined maximum electrode consumption (lbs/day) = Combined maximum electrode consumption (lbs/hr) * 24 hrs/day

326 IAC 6-3-2(e) Allowable Rate of Emissions Applicability Determination

Welding is exempt from this rule, provided that less than six hundred twenty-five (625) pounds of rod or wire is consumed per day.

**Appendix A: Emission Calculations
Incinerator Process Emissions
Pyrolysis Cleaning Oven (A4)**

Company Name: Acuity Lighting Group
Address City IN Zip: 1615 East Elmore Street, Crawfordsville, IN 47933
Permit No.: F107-24140-00037
Revision No.: F107-27054-00037
Reviewer: Hannah L. Desrosiers
Date Submitted: September 20, 2008

THROUGHPUT lbs/hr 20.0

THROUGHPUT ton/yr 87.6

	Criteria Pollutant				
	PM	SO2	NOX	VOC	CO
Emission Factor in lb/ton	7.0	2.5	3.0	3.0	10.0
Potential Emissions in ton/yr	0.307	0.110	0.131	0.131	0.438

Methodology

It is assumed that PM = PM10 = PM2.5

Emission factors are from AP 42 (5th Edition 1/95) Table 2.1-12, Uncontrolled emission factors for industrial/commercial refuse combustors, multiple chambers

Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Acuity Lighting Group
Address City IN Zip: 1615 East Elmore Street, Crawfordsville, IN 47933
Permit No.: F107-24140-00037
Revision No.: F107-27054-00037
Reviewer: Hannah L. Desrosiers
Date Submitted: September 20, 2008

Combustion Source	Unit ID	# of units	Heat Input per unit (MMBtu/hr)	Total Heat Input (MMBtu/hr)
Air Make-up Unit(s)	A1	1	1.93	1.93
Air Make-up Unit(s)	A2, A3	2	2.00	4.00
Pyrolysis cleaning oven	A4	1	0.95	0.95
Water Treatment Burner	A5	1	2.50	2.50
Water Treatment Burner	A6	1	3.80	3.80
Baking Oven	A7	1	3.50	3.50
Dry-off Oven	A8	1	2.00	2.00
Air Make-up Unit(s)	A9	1	1.94	1.94
Air Make-up Unit(s)	A10	1	2.92	2.92
Air Make-up Unit(s)	A11, A12	2	4.58	9.16
Boiler	A13-1, A13-2	2	3.36	6.72
Anodizing Line Dryer	A14, A15, A16	3	0.55	1.65
Air Make-up Unit(s)	B1	1	1.94	1.94
Air Make-up Unit(s)	B2	1	1.65	1.65
Air Make-up Unit(s)	B3	1	1.50	1.50
Total	---	20	13.58	46.15

Maximum Heat Input Capacity
MMBtu/hr
46.15

Potential Throughput
MMCF/yr
404.30

Criteria Pollutant Emissions

Emission Factor in lb/MMCF	Pollutant						
	PM	PM10*	PM2.5*	SO2	NOx	VOC	CO
7.6	7.6	5.7	0.6	100.0	5.5	84.0	
				**see below			
Potential Emission in tons/yr	1.54	1.54	1.15	0.12	20.22	1.11	16.98

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

HAPs Emissions

Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenzen	Formaldehyde	Hexane	Toluene
2.10E-03	1.20E-03	0.08	1.80	3.40E-03	
Potential Emission in tons/yr	4.25E-04	2.43E-04	1.52E-02	0.364	6.87E-04

Emission Factor in lb/MMcf	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03	
Potential Emission in tons/yr	1.01E-04	2.22E-04	2.83E-04	7.68E-05	4.25E-04

METHODOLOGY

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Total HAPs = **0.381** tons/yr

Worst Single HAP = **0.364** tons/yr

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98).

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emission Calculations Unpaved Roads

Company Name: Acuity Lighting Group
Address City IN Zip: 1615 East Elmore Street, Crawfordsville, IN 47933
Permit No.: F107-24140-00037
Revision No.: F107-27054-00037
Reviewer: Hannah L. Desrosiers
Date Submitted: September 20, 2008

The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8760 hours of use and AP-42, Ch 11.2.1.

$$E_f = \{k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M_{dry}/0.2)^c]\} \cdot [(365-p)/365]$$

8	trips/month x	
0.40	miles/roundtrip x	
12	months/yr =	<u>38.4</u> miles per year

	PM	PM10	
E _f =	11.24	0.70	lb/mile
where k =	10	2.6	(particle size multiplier for PM-10) (k=10 for PM-30 or TSP)
s =	4.8	4.8	mean % silt content of unpaved roads
b =	0.5	0.4	Constant for PM-10 (b = 0.5 for PM-30 or TSP)
c =	0.4	0.3	Constant for PM-10 (c = 0.4 for PM-30 or TSP)
W =	38.0	2.0	tons average vehicle weight
M _{dry} =	0.2	0.2	surface material moisture content, % (default is 0.2 for dry conditions)
p =	125	125	number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)

$$PM = \frac{11.24 \text{ lb/mi} \times 38.4 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.216 \text{ tons/yr}$$

$$PM10 = \frac{0.70 \text{ lb/mi} \times 38.4 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.013 \text{ tons/yr}$$

NOTES

It is assumed that PM2.5 = PM10

Appendix B: Compliance Demonstration
326 IAC 8-2-6 Daily Volume Weighted Average for the
Spray Coating Operations (paint booths "P4" and "P5")

Company Name: Acuity Lighting Group
Address City IN Zip: 1615 East Elmore Street, Crawfordsville, IN 47933
Permit No.: F107-24140-00037
Revision No.: F107-27054-00037
Reviewer: Hannah L. Desrosiers
Date Submitted: September 20, 2008

Material	VOC Content	Usage - gal/day	Pounds of VOC/day	Comments
Spray Coating Operations, consisting of two (2) paint booths identified as "P4" and "P5"				
Hydro Prime (073-189)	0.34	0.98	0.33	Water based
Fast Dry 35 - White Base (C1512)	4.30	0.98	4.21	Oil based
SP-41 (cleanup solvent)	7.18	0.06	0.41	Solvent Clean-up (Xylene)
Total Usage in gallons			2.02	
Weighted VOC usage (lbs)			4.95	
DVWA (lbs VOC / gallon)			2.46	

METHODOLOGY

> Daily Volume Weighted Average (DVWA) = [SUM (VOC content of the coating (pounds VOC per gallon less water as applied) * usage rate of the coating (gallons per day)) / SUM (usage rate of the coating (gallons per day))]

NOTES

> Values for VOC Content and Usage (gal/day) taken from the "VOC and Particulate Emissions from Surface Coating Operations" sheet.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Tom Deaton
Acuity Lighting Group
1615 E Elmore St
Crawfordsville, IN 47933

DATE: May 28, 2009

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

SUBJECT: Final Decision
MSOP - Renewal
107 - 27054 - 00037

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:

Mel Mendoza, Dir of Ops
Jeffrey Zak Scientific Control Laboratories
Mack Overton Astbury Environmental Engineering
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

May 28, 2009

TO: Crawfordsville Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Acuity Lighting Group
Permit Number: 107 - 27054 - 00037

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	LPOGOST 5/28/2009 Acuity Lighting Group, Inc. 107 - 27054 - 00037 (final)		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

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1		Tom Deaton Acuity Lighting Group, Inc. 1615 E Elmore St Crawfordsville IN 47933 (Source CAATS) Via confirmed delivery									
2		Mel Mendoza Dir of Ops Acuity Lighting Group, Inc. 1615 E Elmore St Crawfordsville IN 47933 (RO CAATS)									
3		Crawfordsville City Council and Mayors Office 300 E. Pike St Crawfordsville IN 47933 (Local Official)									
4		Montgomery County Health Department 110 W. South Blvd Suite 100 Crawfordsville IN 47933-3351 (Health Department)									
5		Mr. Charles L. Berger Berger & Berger, Attorneys at Law 313 Main Street Evansville IN 47700 (Affected Party)									
6		Jeffrey Zak Scientific Control Laboratories 3158 South Kolin Avenue Chicago IL 60623 (Consultant)									
7		Mr. Robert Ford RR 1, Box 233 New Ross IN 47968 (Affected Party)									
8		Mr. Mack Overton Astbury Environmental Engineering 5645 W. 79th Street Indianapolis IN 46278 (Consultant)									
9		Ms. Magje Read P.O. Box 248 Battle Ground IN 47920 (Affected Party)									
10		Montgomery County Commissioner 110 West South Boulevard Crawfordsville IN 47933 (Local Official)									
11		Crawfordsville Public Library 205 South Washington Street Crawfordsville IN 47933 (Library)									
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