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: December 21, 2011

RE: Electronic Recyclers International, Inc. / 063-30951-00064

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

Electronic Recyclers Int'l Inc.
2540 Airwest Boulevard
Plainfield, Indiana 46168

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-8-11.1, applicable to those conditions

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F063-30951-00064	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: December 21, 2011 Expiration Date: December 21, 2016

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

D.2.9 Record Keeping Requirement

SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary electronic recycler and CRT glass sorting and cleaning facility.

Source Address:	2540 Airwest Boulevard, Plainfield, Indiana 46168
General Source Phone Number:	(559) 442-3976
SIC Code:	5093 (Scrap and Waste Materials)
County Location:	Hendricks
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

(a) One (1) CRT tube line, constructed in 2011, with a maximum capacity of 3,100 lbs/hr, consisting of:

(1) Three (3) CRT glass cutting saws, identified as CRT Saws 1 through 3, with maximum capacities of 130 units per hour, each, utilizing a Donaldson baghouse, identified as DFO 4-32, as particulate control, and exhausting within the building;

(2) Seven (7) material transfer conveyors associated with the CRT saws, with maximum capacities of 3,100 lbs/hr, each;

(3) One (1) CRT glass tumbler, identified as CRT Tumbler, utilizing a Donaldson baghouse, identified as DFO 3-12, as particulate control, and exhausting within the building; and

(4) Two (2) material transfer conveyors associated with the CRT Tumbler, with maximum capacities of 3,100 lbs/hr, each.

(b) One (1) electronic shredding and separating process, approved for construction in 2011, and consisting of:

(1) One (1) electronic shredder, identified as Shredder, with a maximum capacity of 17,500 lbs/hr, utilizing a Donaldson baghouse, identified as DFO 3-48, for particulate control, and exhausting within the building;

(2) One (1) magnetic belt separator, with a maximum capacity of 17,500 lbs/hr, utilizing the Donaldson baghouse identified as DFO 3-48 for particulate control, and exhausting within the building;

(3) One (1) steel storage pit, with a maximum input capacity of 7,000 lbs/hr;

(4) One (1) sizer, with a maximum capacity of 10,500 lbs/hr, utilizing the Donaldson baghouse, identified as DFO 3-48 as particulate control, and exhausting within the building;

(5) Two (2) Eddy Current sorters, separating plastics from copper and aluminum, with a combined maximum capacity of 10,500 lbs/hr, utilizing one (1) Donaldson baghouse, identified as DFO 3-48, for particulate control, and exhausting within the building;

(6) Two (2) finders, separating plastics from fines, with a combined maximum capacity of 8,225 lbs/hr, utilizing one (1) Donaldson baghouse, identified as DFO 3-60, and exhausting within the building;

(7) One (1) V-CAD sorter, separating plastics by weight, with a maximum capacity of 4,750 lbs/hr, utilizing no control devices, and exhausting within the building; and

(8) Sixteen (16) material transfer conveyors, with maximum capacities of 17,500 lbs/hr, each.

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

This stationary source also includes the following insignificant activities:

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

(1) Six (6) air make-up units, with a combined heat input of 15.60 MMBtu/hr

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

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

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

SECTION B GENERAL CONDITIONS

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

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

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

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

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

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

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

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

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

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

(a) This permit, F063-30951-00064, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

B.5 Term of Conditions [326 IAC 2-1.1-9.5]

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

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

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

B.6 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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

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

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

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

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

B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

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

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

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

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

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

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

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

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

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

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

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

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

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

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

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

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

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

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

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

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

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

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

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

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

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

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

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

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

(a) All terms and conditions of permits established prior to F063-30951-00064 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

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

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

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

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

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

(1) That this permit contains a material mistake.

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

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

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

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a

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

Request for renewal shall be submitted to:

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

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

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

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

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

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

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

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

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

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:

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

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

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

(4) The Permittee notifies the:

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

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

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

B.21 Source Modification Requirement [326 IAC 2-8-11.1]

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

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

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as

such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

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

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

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

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

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

B.23 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

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

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

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

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

(a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

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

B.25 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-8-4(1)]

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

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

C.2 Overall Source Limit [326 IAC 2-8]

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

(a) Pursuant to 326 IAC 2-8:

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

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

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

(4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per twelve (12) consecutive month period.

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

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

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

C.3 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

C.7 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.

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

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

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

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

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

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

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

Compliance Requirements [326 IAC 2-1.1-11]

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

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

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

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

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

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

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

C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

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

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

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

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

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

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

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

no later than 180 days from the date on which this source commences operation.

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

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

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

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

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

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

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

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

(1) initial inspection and evaluation;

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

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

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

(1) monitoring results;

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

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

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

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

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

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

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

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of

permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) CRT tube line, constructed in 2011, with a maximum capacity of 3,100 lbs/hr, consisting of:

(1) Three (3) CRT glass cutting saws, identified as CRT Saws 1 through 3, with maximum capacities of 130 units per hour, each, utilizing a Donaldson baghouse, identified as DFO 4-32, as particulate control, and exhausting within the building;

(2) Seven (7) material transfer conveyors associated with the CRT saws, with maximum capacities of 3,100 lbs/hr, each;

(3) One (1) CRT glass tumbler, identified as CRT Tumbler, with a maximum capacity of 130 units per hour, utilizing a Donaldson baghouse, identified as DFO 3-12, as particulate control, and exhausting within the building; and

(4) Two (2) material transfer conveyors associated with the CRT Tumbler, with maximum capacities of 3,100 lbs/hr, each.

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

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

(a) PM emissions from the baghouse (DFO 4-32) controlling emissions from the three (3) CRT glass cutting saws shall not exceed 15.95 lb/hr.

(b) PM emissions from the baghouse (DFO 3-12) controlling emissions from the CRT tumbler shall not exceed 5.32 lb/hr.

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

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

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the Permittee shall comply with the following:

(a) PM10 emissions from the baghouse (DFO 4-32) controlling emissions from the three (3) CRT glass cutting saws shall not exceed 7.98 lb/hr.

(b) PM2.5 emissions from the baghouse (DFO 4-32) controlling emissions from the three (3) CRT glass cutting saws shall not exceed 7.98 lb/hr.

(c) PM10 emissions from the baghouse (DFO 3-12) controlling emissions from the CRT tumbler shall not exceed 2.66 lb/hr.

(d) PM2.5 emissions from the baghouse (DFO 3-12) controlling emissions from the CRT tumbler shall not exceed 2.66 lb/hr.

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

D.1.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from each of the following operations shall not exceed the pound per hour limits listed in the table below:

Unit ID	Unit Description	Maximum Throughput Rate (tons/hr)	Control Device ID	326 IAC 6-3-2 Total Allowable Particulate Emission Rate (lbs/hr)
CRT Saws 1-3	CRT Glass Cutting Saws	3,100 (each)	DFO 4-32	5.50 (each)
CRT Tumbler	CRT Glass Tumbler	3,100	DFO 3-12	5.50

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

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

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements

D.1.5 Particulate Matter (PM)

In order to comply with Conditions D.1.1 and D.1.2, the baghouses (DFO 4-32 and DFO 3-12) for PM, PM_{10}, and $PM_{2.5}$ control shall be in operation at all times when the CRT glass cutting saws and/or the CRT glass tumbler are in operation.

D.1.6 Testing Requirements [326 IAC 2-1.1-11]

(a) Not later than 180 days after the issuance of this permit, Permit No. 063-30951-00064, the Permittee shall perform PM, PM10, and PM2.5 testing of the baghouse (DFO 4-32) controlling emissions from the three (3) CRT glass cutting saws, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) Not later than 180 days after the issuance of this permit, Permit No. 063-30951-00064, the Permittee shall perform PM, PM10, and PM2.5 testing of the baghouse (DFO 3-12) controlling emissions from the CRT tumbler, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

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

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

D.1.7 Baghouse Parametric Monitoring

The Permittee shall record the pressure drops across DFO 4-32 and DFO 3-12 used in conjunction with the CRT glass cutting saws and the CRT glass tumbler, at least once per day when the CRT glass cutting saws and/or the CRT glass tumbler are in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 0.20 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.8 Broken or Failed Bag Detection

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

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has 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 B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.1.9 Record Keeping Requirement

(a) To document the compliance status with Condition D.1.7, the Permittee shall maintain daily records of the pressure drops across the baghouses (DFO 4-32 and DFO 3-12) controlling the electronic shredding and separating process. 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).

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

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b) One (1) electronic shredding and separating process, approved for construction in 2011, and consisting of:

(1) One (1) electronic shredder, identified as Shredder, with a maximum capacity of 17,500 lbs/hr, utilizing a Donaldson baghouse, identified as DFO 3-48, for particulate control, and exhausting within the building;

(2) One (1) magnetic belt separator, with a maximum capacity of 17,500 lbs/hr, utilizing the Donaldson baghouse identified as DFO 3-48 for particulate control, and exhausting within the building;

(3) One (1) steel storage pit, with a maximum input capacity of 7,000 lbs/hr;

(4) One (1) sizer, with a maximum capacity of 10,500 lbs/hr, utilizing the Donaldson baghouse, identified as DFO 3-48 as particulate control, and exhausting within the building;

(5) Two (2) Eddy Current sorters, separating plastics from copper and aluminum, with a combined maximum capacity of 10,500 lbs/hr, utilizing one (1) Donaldson baghouse, identified as DFO 3-48, for particulate control, and exhausting within the building;

(6) Two (2) finders, separating plastics from fines, with a combined maximum capacity of 8,225 lbs/hr, utilizing one (1) Donaldson baghouse, identified as DFO 3-60, and exhausting within the building;

(7) One (1) V-CAD sorter, separating plastics by weight, with a maximum capacity of 4,750 lbs/hr, utilizing no control devices, and exhausting within the building; and

(8) Sixteen (16) material transfer conveyors, with maximum capacities of 17,500 lbs/hr, each.

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

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 PSD Minor Limits [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

(a) PM emissions from the baghouse (DFO 3-48) controlling emissions from the electronic shredder, magnetic belt separator, sizer, and two (2) eddy current sorters, shall not exceed 8.45 lb/hr.

(b) PM emissions from the baghouse (DFO 3-60) controlling emissions from the two (2) finder emisison units, shall not exceed 1.69 lb/hr.

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration

(PSD)) not applicable.

D.2.2 FESOP Limitations [326 IAC 2-8-4][326 IAC 2-1.1-5]

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the Permittee shall comply with the following:

(a) PM10 emissions from the baghouse (DFO 3-48) controlling emissions from the electronic shredder, magnetic belt separator, sizer, and two (2) eddy current sorters, shall not exceed 4.23 lb/hr.

(b) PM2.5 emissions from the baghouse (DFO 3-48) controlling emissions from the electronic shredder, magnetic belt separator, sizer, and two (2) eddy current sorters, shall not exceed 4.23 lb/hr.

(c) PM10 emissions from the baghouse (DFO 3-60) controlling emissions from the two (2) finder emisison units, shall not exceed 0.85 lb/hr.

(d) PM2.5 emissions from the baghouse (DFO 3-60) controlling emissions from the two (2) finder emisison units, shall not exceed 0.85 lb/hr.

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

D.2.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from each of the following operations shall not exceed the pound per hour limits listed in the table below:

Unit ID	Unit Description	Maximum Throughput Rate (tons/hr)	Control Device	326 IAC 6-3-2 Total Allowable Particulate Emission Rate (lbs/hr)
Shredder	E-Waste Shredder	17,500	DFO 3-48	17.54
N/A	Magnetic Belt Separator	17,500	DFO 3-48	17.54
N/A	Sizer	10,500	DFO 3-48	12.45
N/A	Two (2) Eddy Current Sorters	10,500	DFO 3-48	12.45
N/A	Two (2) Finders	8,225	DFO 3-60	10.57

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

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

D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

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

Compliance Determination Requirements

D.2.5 Particulate Matter (PM)

In order to comply with Conditions D.2.1, D.2.2, and D.2.3, the baghouses (DFO 3-48 and DFO 3-60) for PM, PM_{10}, and $PM_{2.5}$ control shall be in operation at all times when the electronic shredding and separating process is in operation.

D.2.6 Testing Requirements [326 IAC 2-1.1-11]

(a) Not later than 180 days after the issuance of this permit, Permit No. 063-30951-00064, the Permittee shall perform PM, PM10, and PM2.5 testing of the baghouse (DFO 3-48) controlling emissions from the electronic shredder, magnetic belt separator, sizer, and two (2) eddy current sorters, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) Not later than 180 days after the issuance of this permit, Permit No. 063-30951-00064, the Permittee shall perform PM, PM10, and PM2.5 testing of the baghouse (DFO 3-60) controlling emissions from the two (2) finder emission units, utilizing methods approved by the commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

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

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

D.2.7 Baghouse Parametric Monitoring

The Permittee shall record the pressure drops across DFO 3-48 and DFO 3-60 used in conjunction with the electronic shredding and separating process, at least once per day when the electronic shredding and separating process is in operation. When for any one reading, the pressure drop across the baghouses is outside the normal range of 0.20 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.2.8 Broken or Failed Bag Detection

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

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has 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 B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

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

D.2.9 Record Keeping Requirement

(a) To document the compliance status with Condition D.2.7, the Permittee shall maintain daily records of the pressure drops across the baghouses (DFO 3-48 and DFO 3-60) controlling the electronic shredding and separating process. 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).

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Electronic Recyclers Int'l Inc.
Source Address: 2540 Airwest Boulevard, Plainfield, Indiana 46168
FESOP Permit No.: F063-30951-00064

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

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

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Electronic Recyclers Int'l Inc.
Source Address: 2540 Airwest Boulevard, Plainfield, Indiana 46168
FESOP Permit No.: F063-30951-00064

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Electronic Recyclers Int'l Inc.
Source Address: 2540 Airwest Boulevard, Plainfield, Indiana 46168
FESOP Permit No.: F063-30951-00064

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked ANo deviations occurred this reporting period@.

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

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

Electronic Recyclers Int'l Inc.
2540 Airwest Boulevard
Plainfield, Indiana 46168

Affidavit of Construction for CRT Tube Line

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

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

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

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

4. I hereby certify that Electronic Recyclers Int'l Inc. 2540 Airwest Boulevard, Plainfield, Indiana 46168, has constructed and will operate the CRT Tube Line in conformity with the requirements and intent of the permit application received by the Office of Air Quality on September 21, 2011 and as permitted pursuant to New Source Construction Permit and New Source Construction Permit and Federally Enforceable State Operating Permit No. F063-30951-00064, Plant ID No. 063-00064 issued on _____.

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

Further Affiant said not.

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

Signature_____
Date_____

STATE OF INDIANA)
)SS

COUNTY OF _____)

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

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

Signature_____
Name_____ (typed or printed)

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

Electronic Recyclers Int'l Inc.
2540 Airwest Boulevard
Plainfield, Indiana 46168

Affidavit of Construction for Electronic Shredding and Separating Process

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

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

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

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

4. I hereby certify that Electronic Recyclers Int'l Inc. 2540 Airwest Boulevard, Plainfield, Indiana 46168, completed construction of the electronic recycler and CRT glass sorting and cleaning facility on
in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on September 21, 2011 and as permitted pursuant to New Source Construction Permit and Federally Enforceable State Operating Permit No. F063-30951-00064, Plant ID No. 063-00064 issued on _____.

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

Further Affiant said not.

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

Signature_____
Date_____

STATE OF INDIANA)
)SS

COUNTY OF _____)

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

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

Signature_____
Name_____ (typed or printed)

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a New Source Construction and Federally Enforceable State Operating Permit (FESOP)

Source Description and Location

Source Name:	**Electronic Recyclers International, Inc.**
Source Location:	**2540 Airwest Boulevard, Plainfield, IN 46168**
County:	**Hendricks**
SIC Code:	**5093 (Scrap and Waste Materials)**
Operation Permit No.:	**F 063-30951-00064**
Permit Reviewer:	**Jason R. Krawczyk**

On September 21, 2011, the Office of Air Quality (OAQ) received an application from Electronic Recyclers International, Inc. related to the construction and operation of a new E-waste shredding and CRT glass cutting and cleaning facility.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Hendricks County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Attainment effective October 19, 2007, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Basic nonattainment designation effective federally April 5, 2005, for PM2.5.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Hendricks 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) $PM_{2.5}$
U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Hendricks County as nonattainment for $PM_{2.5}$. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for $PM_{2.5}$ promulgated on May

8, 2008. These rules became effective on July 15, 2008. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
Hendricks County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Background and Description of New Source Construction

The Office of Air Quality (OAQ) has reviewed an application, submitted by Electronic Recyclers Int'l Inc. on September 21, 2011, relating to the construction and operation of new emission units at an existing CRT glass cutting and cleaning facility.

The following is a list of the new emission units and pollution control devices:

(a) One (1) electronic shredding and separating process, approved for construction in 2011, and consisting of:

(1) One (1) electronic shredder, identified as Shredder, with a maximum capacity of 17,500 lbs/hr, utilizing a Donaldson baghouse, identified as DFO 3-48, for particulate control, and exhausting within the building;

(2) One (1) magnetic belt separator, with a maximum capacity of 17,500 lbs/hr, utilizing the Donaldson baghouse identified as DFO 3-48 for particulate control, and exhausting within the building;

(3) One (1) steel storage pit, with a maximum input capacity of 7,000 lbs/hr;

(4) One (1) sizer, with a maximum capacity of 10,500 lbs/hr, utilizing the Donaldson baghouse, identified as DFO 3-48 as particulate control, and exhausting within the building;

(5) Two (2) Eddy Current sorters, separating plastics from copper and aluminum, with a combined maximum capacity of 10,500 lbs/hr, utilizing one (1) Donaldson baghouse, identified as DFO 3-48, for particulate control, and exhausting within the building;

(6) Two (2) finders, separating plastics from fines, with a combined maximum capacity of 8,225 lbs/hr, utilizing one (1) Donaldson baghouse, identified as DFO 3-60, and exhausting within the building;

(7) One (1) V-CAD sorter, separating plastics by weight, with a maximum capacity of 4,750 lbs/hr, utilizing no control devices, and exhausting within the building; and

(8) Sixteen (16) material transfer conveyors, with maximum capacities of 17,500 lbs/hr, each.

The following is a list of the insignificant activities:

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

(1) Six (6) air make-up units, with a combined heat input of 15.60 MMBtu/hr

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

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

(a) One (1) CRT tube line, constructed in 2011, with a maximum capacity of 3,100 lbs/hr, consisting of:

(1) Three (3) CRT glass cutting saws, identified as CRT Saws 1 through 3, with maximum capacities of 130 units per hour, each, utilizing a Donaldson baghouse, identified as DFO 4-32, as particulate control, and exhausting within the building;

(2) Seven (7) material transfer conveyors associated with the CRT saws, with maximum capacities of 3,100 lbs/hr, each;

(3) One (1) CRT glass tumbler, identified as CRT Tumbler, with a maximum capacity of 130 units per hour, utilizing a Donaldson baghouse, identified as DFO 3-12, as particulate control, and exhausting within the building; and

(4) Two (2) material transfer conveyors associated with the CRT Tumbler, with maximum capacities of 3,100 lbs/hr, each.

Enforcement Issues

IDEM is aware that equipment has been constructed prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP

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.

Pollutant	Potential To Emit (tons/year)
PM	Greater than 250
PM10[(1)]	Greater than 100, Less than 250
PM2.5	Greater than 100, Less than 250
SO_2	Less than 25
NO_x	Less than 25
VOC	Less than 25
CO	Less than 25
GHGs as CO_2e	Less than 100,000

(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".

HAPs	Potential To Emit (tons/year)
Single HAP	Less than 10
Combined HAPs	Less than 25

(a) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of PM10 and PM2.5 are each greater than one hundred (100) tons per year. The PTE of all other regulated criteria pollutants are each less than one hundred (100) tons per year. The source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued a New Source Construction Permit (326 IAC 2-5.1-3) and a Federally Enforceable State Operating Permit (FESOP) (326 IAC 2-8), because the source will limit emissions to less than the Title V major source threshold levels.

(b) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

(c) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year.

PTE of the Entire Source After Issuance of the FESOP

The table below summarizes the potential to emit of the entire source after issuance of this FESOP, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)									
	PM	PM10*	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO_2e**	Total HAPs	Worst Single HAP
Nat. Gas Combustion	0.13	0.52	0.52	0.04	6.83	0.38	5.74	8,249	0.13	0.12 Hexane
CRT Saws (DFO 4-32)	69.86	34.95	34.95	-	-	-	-	-	4.11	3.91 Lead
CRT Tumbler (DFO 3-12)	23.30	11.65	11.65	-	-	-	-	-	1.37	1.30 Lead
CRT Conveyors	0.18	0.07	0.07	-	-	-	-	-	0.01	0.01 Lead
E-Waste Shredder Process (DFO 3-48)	37.01	18.53	18.53	-	-	-	-	-	0.80	0.65 Lead
E-Waste Shredder Process (DFO 3-60)	7.40	3.72	3.72	-	-	-	-	-	0.16	0.13 Lead
V-CAD Sorter ***	-	-	-	-	-	-	-	-	-	-
Shredder Conveyors	3.68	1.35	1.35	-	-	-	-	-	0.04	0.03 Lead
Roadways (Fugitive)	1.68	0.34	0.08	-	-	-	-	-	-	-
Total PTE of Entire Source	**141.57**	**70.79**	**70.79**	**0.04**	**6.83**	**0.38**	**5.74**	**8,249**	**6.62**	**6.04 Lead**
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds**	250	250	250	250	250	250	250	100,000	NA	NA
Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA	NA

negl. = negligible
*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
**The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

*** Potential emissions from the closed loop V-CAD sorter are expected to be negligible.

(a) FESOP Status

This existing source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source will be limited to less than the Title V major source threshold levels. In addition, this existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the potential to emit HAPs is less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year of total HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-8 (FESOP).

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

(1) PM10 emissions from the baghouse (DFO 4-32) controlling emissions from the three (3) CRT glass cutting saws shall not exceed 7.98 lb/hr.

(2) PM2.5 emissions from the baghouse (DFO 4-32) controlling emissions from the three (3) CRT glass cutting saws shall not exceed 7.98 lb/hr.

(3) PM10 emissions from the baghouse (DFO 3-12) controlling emissions from the CRT tumbler shall not exceed 2.66 lb/hr.

(4) PM2.5 emissions from the baghouse (DFO 3-12) controlling emissions from the CRT tumbler shall not exceed 2.66 lb/hr.

(5) PM10 emissions from the baghouse (DFO 3-48) controlling emissions from the electronic shredder, magnetic belt separator, sizer, and two (2) eddy current sorters, shall not exceed 4.23 lb/hr.

(6) PM2.5 emissions from the baghouse (DFO 3-48) controlling emissions from the electronic shredder, magnetic belt separator, sizer, and two (2) eddy current sorters, shall not exceed 4.23 lb/hr.

(7) PM10 emissions from the baghouse (DFO 3-60) controlling emissions from the two (2) finder emisison units, shall not exceed 0.85 lb/hr.

(8) PM2.5 emissions from the baghouse (DFO 3-60) controlling emissions from the two (2) finder emisison units, shall not exceed 0.85 lb/hr.

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

(b) PSD Minor Source

This existing source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit particulate matter is limited to less than 250 tons per year, the potential to emit all other attainment regulated criteria pollutants are less than 250 tons per year, the potential to emit greenhouse gases (GHGs) is less than the PSD subject to regulation threshold of one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the source shall comply with the following:

(1) PM emissions from the baghouse (DFO 4-32) controlling emissions from the three (3) CRT glass cutting saws shall not exceed 15.95 lb/hr.

(2) PM emissions from the baghouse (DFO 3-12) controlling emissions from the CRT tumbler shall not exceed 5.32 lb/hr.

(3) PM emissions from the baghouse (DFO 3-48) controlling emissions from the electronic shredder, magnetic belt separator, sizer, and wto (2) eddy current sorters, shall not exceed 8.45 lb/hr.

(4) PM emissions from the baghouse (DFO 3-60) controlling emissions from the two (2) finder emisison units, shall not exceed 1.69 lb/hr.

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per 12 consecutive month period and shall render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(c) Nonattainment New Source Review
This existing source is not a major stationary source, under 326 IAC 2-1.1-5 (Nonattainment New Source Review), because the potential to emit particulate matter with a diameter less than ten 2.5 micrometers (PM2.5), is limited to less than 100 tons per year. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment New Source Review requirements do not apply.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

(a) The requirements of the New Source Performance Standard for Secondary Lead Smelters, 40 CFR 60, Subpart L (326 IAC 12), are not included in the permit, since this facility does not meet the definition of secondary lead smelter, as defined in 40 CFR 60.121(a). This facility recycles CRT glass by separating the tube steel mask, tube panel glass, and the funnel glass and sending them to end users.

(b) The requirements of the New Source Performance Standard for Metallic Mineral Processing Plants, 40 CFR 60, Subpart LL (326 IAC 12), are not included in the permit, since this operation is not considered a metallic mineral processing plant as defined by 60.381. The e-waste shredder process will not produce metallic mineral concentrates from ore obtained from a mine.

(c) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) from Secondary Lead Smelting, 40 CFR 63.541, Subpart X (326 IAC 20-13), are not included in the permit, since this facility does not meet the definition of secondary lead smelter, as defined in 40 CFR 63.542. This facility recycles CRT glass by separating the tube steel mask, tube panel glass, and the funnel glass and sending them to end users.

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Glass Manufacturing Area Sources, 40 CFR 63.11448, Subpart SSSSSS, are not included in the permit, since this facility recycles CRT glass by separating the tube steel mask, tube panel glass, and the funnel glass and sending them to end users. The facility does not manufacture glass.

(f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

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

State Rule Applicability Determination

The following state rules are applicable to the source:

(a) 326 IAC 2-8-4 (FESOP)
FESOP applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(c) 326 IAC 2-1.1-5 (Nonattainment New Source Review)
Nonattainment New Source Review applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
This source is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the existing and new units is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.

(e) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

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

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

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

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

(h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the potential fugitive particulate emissions are less than 25 tons per year.

(i) 326 IAC 15 (Lead Rules)
The source is not subject to the requirements of 326 IAC 15-1 (Lead Emission Limitations) since it is not specifically listed in 326 IAC 15-2.

Particulate Generating Processes

(j) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from each of the following operations shall not exceed the pound per hour limits listed in the table below:

Unit ID	Unit Description	Maximum Throughput Rate (tons/hr)	Control Device	326 IAC 6-3-2 Total Allowable Particulate Emission Rate (lbs/hr)	Control Device Required
Shredder	E-Waste Shredder	17,500	DFO 3-48	17.54	No
N/A	Magnetic Belt Separator	17,500	DFO 3-48	17.54	No
N/A	Sizer	10,500	DFO 3-48	12.45	No
N/A	Two (2) Eddy Current Sorters	10,500	DFO 3-48	12.45	No
N/A	Two (2) Finders	8,225	DFO 3-60	10.57	No
CRT Saws 1-3	CRT Glass Cutting Saws	3,100 (each)	DFO 4-32	5.50 (each)	Yes
CRT Tumbler	CRT Glass Tumbler	3,100	DFO 3-12	5.50	Yes

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

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

Pursuant to 326 IAC 6-1-3(b)(14), the Steel Storage Pit, Shredder Conveyors, V-CAD Sorter, CRT Saw Conveyors, and CRT Tumbler Conveyors are exempt from the requirements of 326 6-3-2 because they have potential particulate emissions less than five hundred fifty-one thousandths (0.551) pounds per hour.

(k) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Each of the particulate generating processes at this source is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each unit is less than twenty-five (25) tons per year.

Air Make-Up Units

(l) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
Each of the air make-up units at this source is exempt from the requirements of 326 IAC 6-3, because, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight. In addition, pursuant to 326 IAC 6-3-1(b)(14), each of the air make-up units at this source is also exempt from the requirements of 326 IAC 6-3, because they each have potential particulate emissions of less than five hundred fifty one thousandths (0.551) pound per hour.

(m) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
Pursuant to 326 IAC 7-1.1-1, each of the air make-up units at this source is not subject to the requirements of 326 IAC 7-1.1, since each has unlimited sulfur dioxide (SO_2) emissions less than twenty-five (25) tons per year and ten (10) pounds per hour respectively.

(n) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Each of the air make-up units at this source is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each unit is less than twenty-five (25) tons per year.

(o) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.

(p) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Compliance Determination, Monitoring and Testing Requirements

(a) The compliance determination and monitoring requirements applicable to this source are as follows:

Control ID	Parameter	Frequency	Range	Excursions and Exceedances
DFO 4-32	Pressure Drop	Daily	0.20 - 8.0 Inches H2O	Response Steps
DFO 3-12	Pressure Drop	Daily	0.20 - 8.0 Inches H2O	
DFO 3-48	Pressure Drop	Daily	0.20 - 8.0 Inches H2O	
DFO 3-60	Pressure Drop	Daily	0.20 - 8.0 Inches H2O	

(b) The testing requirements applicable to this source are as follows:

Control ID	Timeframe for Testing	Pollutant(s)	Frequency of Testing
DFO 4-32*	Not later than 180 days after the issuance of this permit, Permit No. 063-30951-00064	PM, PM10, PM2.5	Once every five (5) years
DFO 3-12*	Not later than 180 days after the issuance of this permit, Permit No. 063-30951-00064	PM, PM10, PM2.5	
DFO 3-48	Not later than 180 days after the issuance of this permit, Permit No. 063-30951-00064	PM, PM10, PM2.5	
DFO 3-60	Not later than 180 days after the issuance of this permit, Permit No. 063-30951-00064	PM, PM10, PM2.5	

Since alternative emissions factors have been used to determine the PTE of the entire source, testing will be required to verify emissions rates.

* These control devices and the associated units they control have been constructed prior to the issuance of this permit.

Note: There are two (2) Affidavits of Construction attached to the permit since several units have already been constructed.

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 21, 2011.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Construction FESOP No. 063-30951-00064. The staff recommends to the Commissioner that this New Source Construction and FESOP be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Jason R. Krawczyk 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) 234-5174 or toll free at 1-800-451-6027 extension 4-5174.

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

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

SUMMARY OF EMISSIONS

Company Name: Electronic Recyclers Int'l Inc.
Address City IN Zip: 2540 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-30951-00064
Plt ID: 063-00064
Reviewer: Jason R. Krawczyk
Date: November 2, 2011

Uncontrolled Emissions (Tons/Yr)

Pollutant	Nat. Gas Combustion	CRT Saws (DFO 4-32)	CRT Tumbler (DFO 3-12)	CRT Conveyors	E-Waste Shredder Process (DFO 3-48)	E-Waste Shredder Process (DFO 3-60)	Shredder Conveyors	Roadways (Fugitive)	Total
PM	0.13	139.70	46.57	0.18	73.99	14.80	3.68	1.68	279.04
PM10	0.52	69.85	23.28	0.07	36.99	7.40	1.35	0.34	139.46
PM2.5	0.52	69.85	23.28	0.07	36.99	7.40	1.35	0.08	139.46
VOC	0.38	-	-	-	-	-	-	-	0.38
NOx	6.83	-	-	-	-	-	-	-	6.83
SO2	0.04	-	-	-	-	-	-	-	0.04
CO	5.74	-	-	-	-	-	-	-	5.74
CO2e	8,249	-	-	-	-	-	-	-	8,249
Single HAP (Lead)	3.42E-05	3.91	1.30	0.01	0.65	0.13	0.03	-	6.04
Combined HAPs	0.13	4.11	1.37	0.01	0.80	0.16	0.04	-	6.62

Controlled Emissions (Tons/Yr)

Pollutant	Nat. Gas Combustion	CRT Saws (DFO 4-32)	CRT Tumbler (DFO 3-12)	CRT Conveyors	E-Waste Shredder Process (DFO 3-48)	E-Waste Shredder Process (DFO 3-60)	Shredder Conveyors	Roadways (Fugitive)	Total
PM	0.13	0.14	0.05	0.18	0.07	0.01	3.68	1.68	4.27
PM10	0.52	0.07	0.02	0.07	0.04	0.01	1.35	0.34	2.07
PM2.5	0.52	0.07	0.02	0.07	0.04	0.01	1.35	0.08	2.07
VOC	0.38	-	-	-	-	-	-	-	0.38
NOx	6.83	-	-	-	-	-	-	-	6.83
SO2	0.04	-	-	-	-	-	-	-	0.04
CO	5.74	-	-	-	-	-	-	-	5.74
CO2e	8,249	-	-	-	-	-	-	-	8,249
Single HAP (Lead)	0.00	3.91E-03	1.30E-03	0.01	6.54E-04	1.31E-04	0.03	-	0.04
Combined HAPs	0.13	4.11E-03	1.37E-03	0.01	8.03E-04	1.61E-04	0.04	-	0.18

Limited Emissions (Tons/Yr)

Pollutant	Nat. Gas Combustion	CRT Saws (DFO 4-32)	CRT Tumbler (DFO 3-12)	CRT Conveyors	E-Waste Shredder Process (DFO 3-48)	E-Waste Shredder Process (DFO 3-60)	Shredder Conveyors	Roadways (Fugitive)	Total
PM	0.13	69.86	23.30	0.18	37.01	7.40	3.68	1.68	141.57
PM10	0.52	34.95	11.65	0.07	18.53	3.72	1.35	0.34	70.79
PM2.5	0.52	34.95	11.65	0.07	18.53	3.72	1.35	0.08	70.79
VOC	0.38	-	-	-	-	-	-	-	0.38
NOx	6.83	-	-	-	-	-	-	-	6.83
SO2	0.04	-	-	-	-	-	-	-	0.04
CO	5.74	-	-	-	-	-	-	-	5.74
CO2e	8,249	-	-	-	-	-	-	-	8,249
Single HAP (Lead)	0.00	3.91	1.30	0.01	0.65	0.13	0.03	-	6.04
Combined HAPs	0.13	4.11	1.37	0.01	0.80	0.16	0.04	-	6.62

Appendix A: Emissions Calculations
Natural Gas Combustion Only

Company Name: Electronic Recyclers Int'l Inc.
Address City IN Zip: 2540 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-30951-00064
Plt ID: 063-00064
Reviewer: Jason R. Krawczyk
Date: November 2, 2011

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Emission Unit ID
15.60	136.66	Six (6) Air Make-up units @ 2.6 MMBtu/hr, each.
15.60	136.66	

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.13	0.52	0.04	6.83	0.38	5.74

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

Methodology:
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Hazardous Air Pollutants

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.435E-04	8.199E-05	5.125E-03	1.23E-01	2.323E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.416E-05	7.516E-05	9.566E-05	2.596E-05	1.435E-04
				Combined HAPs:	**0.13**

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

Greenhouse Gasses

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120000	2.3	2.2
Potential Emission in tons/yr	8,199	0.16	0.15
Summed Potential Emissions in tons/yr	8,200		
CO2e Total in tons/yr	8,249		

Methodology:
The N2O Emission Factor for uncontrolled is 2.2.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emissions Calculations
CRT Saw Emissions

Company Name: Electronic Recyclers Int'l Inc.
Address City IN Zip: 2540 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-30951-00064
Plt ID: 063-00064
Reviewer: Jason R. Krawczyk
Date: November 2, 2011

Particulate Emissions

Emission Unit(s)	Maxiumum Capacity (tubes/hr)	PM Emission (lbs/tube)	PM PTE Before Control		PM10/PM2.5 PTE Before Control	
			(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
CRT Saws	130	0.25	31.89	**139.70**	15.95	**69.85**

Emission Unit(s)	Control Efficiency (%)	PTE After Control			
		PM		PM10 / PM2.5	
		(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
CRT Saws	99.90%	0.03	**0.14**	0.02	**0.07**

Note:
Emission factor is based on mass balance information provided by source.
Assumed PM10 = 50% PM
Assumed PM2.5 = PM10

Methodology:
PM PTE Before Control (lbs/hr) = Maximum Capacity (tubes/hr) * PM Emisison Factor (lbs/tube)
PM PTE Before Control (tons/yr) = PM PTE Before Controls (lbs/hr) * 8,760 hrs / 2,000 lbs
PM10/PM2.5 PTE Before Control (lbs/hr) = PM PTE Before Control (lbs/hr) * 50%
PM10/PM2.5 PTE Before Control (tons/yr) = PM10/PM2.5 PTE Before Controls (lbs/hr) * 8,760 hrs / 2,000 lbs
After Control (lbs/hr) = Before Control (lbs/hr) * (1- Control Efficiency (%))
After Control (tons/yr) = After Control (lbs/hr) * 8,760 hrs / 2,000 lbs

HAP Percentages					
Antimony	Cadmium	Chromium	Colbalt	Nickel	Lead
(%)	(%)	(%)	(%)	(%)	(%)
0.038%	0.052%	0.005%	0.001%	0.048%	2.80%

HAP Emissions Before Controls						
Antimony	Cadmium	Chromium	Colbalt	Nickel	Lead	Combined HAPs
(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
0.05	0.07	0.01	8.10E-04	0.07	**3.91**	**4.11**

HAP Emissions After Controls						
Antimony	Cadmium	Chromium	Colbalt	Nickel	Lead	Combined HAPs
(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
5.36E-05	7.31E-05	6.33E-06	8.10E-07	6.65E-05	**3.91E-03**	**4.11E-03**

Note:
HAP Percentages provided by source based on Glass Dust Lab Analaysis

Methodology:
HAP Emissions Before Control (lbs/hr) = PM PTE Before Control (tons/yr) * Maximum HAP Content (%)
HAP Emissions After Control (lbs/hr) = Before Control (tons/yr) * (1- Control Efficiency (%))

Appendix A: Emissions Calculations
CRT Tumbler Emissions

Company Name: Electronic Recyclers Int'l Inc.
Address City IN Zip: 2540 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-30951-00064
Plt ID: 063-00064
Reviewer: Jason R. Krawczyk
Date: November 2, 2011

Particulate Emissions

Emission Unit(s)	Maxiumum Capacity (tubes/hr)	PM Emission (lbs/tube)	PM PTE Before Control		PM10/PM2.5 PTE Before Control	
			(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
CRT Saws	130	0.08	10.63	**46.57**	5.32	**23.28**

Emission Unit(s)	Control Efficiency (%)	PTE After Control			
		PM		PM10 / PM2.5	
		(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
CRT Saws	99.90%	0.01	**0.05**	0.01	**0.02**

Note:
Emission factor is based on mass balance information provided by source.
Assumed PM10 = 50% PM
Assumed PM2.5 = PM10

Methodology:
PM PTE Before Control (lbs/hr) = Maximum Capacity (tubes/hr) * PM Emisison Factor (lbs/tube)
PM PTE Before Control (tons/yr) = PM PTE Before Controls (lbs/hr) * 8,760 hrs / 2,000 lbs
PM10/PM2.5 PTE Before Control (lbs/hr) = PM PTE Before Control (lbs/hr) * 50%
PM10/PM2.5 PTE Before Control (tons/yr) = PM10/PM2.5 PTE Before Controls (lbs/hr) * 8,760 hrs / 2,000 lbs
After Control (lbs/hr) = Before Control (lbs/hr) * (1- Control Efficiency (%))
After Control (tons/yr) = After Control (lbs/hr) * 8,760 hrs / 2,000 lbs

HAP Percentages					
Antimony	Cadmium	Chromium	Colbalt	Nickel	Lead
(%)	(%)	(%)	(%)	(%)	(%)
0.038%	0.052%	0.005%	0.001%	0.048%	2.80%

HAP Emissions Before Controls						
Antimony	Cadmium	Chromium	Colbalt	Nickel	Lead	Combined HAPs
(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
0.02	0.02	0.00	2.70E-04	0.02	**1.30**	**1.37**

HAP Emissions After Controls						
Antimony	Cadmium	Chromium	Colbalt	Nickel	Lead	Combined HAPs
(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
1.79E-05	2.44E-05	2.11E-06	2.70E-07	2.22E-05	**1.30E-03**	**1.37E-03**

Note:
HAP Percentages provided by source based on Glass Dust Lab Analaysis

Methodology:
HAP Emissions Before Control (lbs/hr) = PM PTE Before Control (tons/yr) * Maximum HAP Content (%)
HAP Emissions After Control (lbs/hr) = Before Control (tons/yr) * (1- Control Efficiency (%))

Appendix A: Emissions Calculations
CRT Conveyor Emissions

Company Name: Electronic Recyclers Int'l Inc.
Address City IN Zip: 2540 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-30951-00064
Plt ID: 063-00064
Reviewer: Jason R. Krawczyk
Date: November 2, 2011

Conveyors

Process Description	Number of Emission Points	Maximum Capacity (tons/hr)	PM Emission Factor (lbs/ton)	PTE of PM (lb/hr)	PTE of PM (tons/yr)	PM10 Emission Factor (lbs/ton)	PTE of PM10 (tons/yr)	PM2.5 Emission Factor (lbs/ton)	PTE of PM2.5 (tons/yr)
CRT Saws Conveyor Transfer Points	7	1.55	3.00E-03	0.00	0.14	1.10E-03	0.05	1.10E-03	0.05
CRT Tumbler Conveyor Transfer Points	2	1.55	3.00E-03	0.00	0.04	1.10E-03	0.01	1.10E-03	0.01
				Potential Emissions:	**0.18**		**0.07**		**0.07**

Note:
The emission factor for conveyor transfer points are from AP-42, Chapter 11.19, Table 11.19.2-2 (SCC 3-05-020-06) (8/04).
No emission factor is identified for PM2.5 for dry conveying, therefore it is assumed PM10 = PM2.5

Methodology:
PTE (tons/yr) = Number of Emission Points x Maximum Capacity (tons/hr) x Emission Factor (lbs/ton) x 8760 (hrs/yr) x 1 ton/2000 lbs
PTE of PM (lb/hr) = Macimum Capacity (tons/hr) * PM Emission Factor (lbs/ton)
PTE of Lead (tons/yr) = PTE of PM (tons/yr) * Maximum Lead Content (%)

HAP Percentages					
Antimony	Cadmium	Chromium	Colbalt	Nickel	Lead
(%)	(%)	(%)	(%)	(%)	(%)
0.038%	0.052%	0.005%	0.001%	0.048%	2.80%

HAP PTE						
Antimony	Cadmium	Chromium	Colbalt	Nickel	Lead	**Combined HAPs**
(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	**(tons/yr)**
0.00	0.00	0.00	0.00	0.00	**0.01**	**0.01**

Note:
HAP Percentages provided by source based on Glass Dust Lab Analaysis

Methodology:
HAP PTE (tons/yr) = PTE of PM (tons/yr) * Maximum HAP Content (%)

Appendix A: Emissions Calculations
E-Waste Shredder Process (DFO 3-48) Emissions

Company Name: Electronic Recyclers Int'l Inc.
Address City IN Zip: 2540 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-30951-00064
Plt ID: 063-00064
Reviewer: Jason R. Krawczyk
Date: November 2, 2011

Emission Unit(s)	Maxiumum Capacity (tons/hr)	PM Emission Factor (lbs/ton)	PM PTE Before Control (lbs/hr)	PM PTE Before Control (tons/yr)	PM10/PM2.5 PTE Before Control (lbs/hr)	PM10/PM2.5 PTE Before Control (tons/yr)
Shredder, Magnetic Belt Separator, Eddy Current Sorters, Sizer	8.75	1.93	16.89	**73.99**	8.45	**36.99**

Emission Unit(s)	Control Efficiency (%)	PM PTE After Control (lbs/hr)	PM PTE After Control (tons/yr)	PM10/PM2.5 PTE After Control (lbs/hr)	PM10/PM2.5 PTE After Control (tons/yr)
Shredder, Magnetic Belt Separator, Eddy Current Sorters, Sizer	99.90%	0.02	**0.07**	0.01	**0.04**

Note:
Emission factor is based on mass balance information provided by source.
Assumed PM10 = 50% PM
Assumed PM2.5 = PM10
Emissions from the Shredder, Magnetic Belt Separator, Sizer, and Eddy Current Sorter are all controlled by the Donaldson Baghouse (DFO 3-48).

Methodology:
PM PTE Before Control (lbs/hr) = Maximum Capacity (tubes/hr) * PM Emisison Factor (lbs/tube)
PM PTE Before Control (tons/yr) = PM PTE Before Controls (lbs/hr) * 8,760 hrs / 2,000 lbs
PM10/PM2.5 PTE Before Control (lbs/hr) = PM PTE Before Control (lbs/hr) * 50%
PM10/PM2.5 PTE Before Control (tons/yr) = PM10/PM2.5 PTE Before Controls (lbs/hr) * 8,760 hrs / 2,000 lbs
After Control (lbs/hr) = Before Control (lbs/hr) * (1- Control Efficiency (%))
After Control (tons/yr) = After Control (lbs/hr) * 8,760 hrs / 2,000 lbs

HAP Percentages								
Antimony	Arsenic	Cadmium	Chromium	Colbalt	Nickel	Selenium	Mercury	Lead
(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
0.0471%	0.0011%	0.0143%	0.0161%	0.0080%	0.1130%	0.0008%	0.0009%	0.8840%

HAP Emissions Before Controls									
Antimony	Arsenic	Cadmium	Chromium	Colbalt	Nickel	Selenium	Mercury	Lead	**Combined HAPs**
(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	**(tons/yr)**
0.03	8.06E-04	0.01	0.01	5.88E-03	0.08	5.99E-04	6.73E-04	**0.65**	**0.80**

HAP Emissions After Controls									
Antimony	Arsenic	Cadmium	Chromium	Colbalt	Nickel	Selenium	Mercury	Lead	**Combined HAPs**
(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	**(tons/yr)**
3.48E-05	8.06E-07	1.06E-05	1.19E-05	5.88E-06	8.36E-05	5.99E-07	6.73E-07	**6.54E-04**	**8.03E-04**

Note:
HAP Percentages provided by source based on Glass Dust Lab Analaysis

Methodology:
HAP Emissions Before Control (tons/yr) = PM PTE Before Control (tons/yr) * Maximum HAP Content (%)
HAP Emissions After Control (tons/yr) = Before Control (tons/yr) * (1- Control Efficiency (%))

Appendix A: Emissions Calculations
E-Waste Shredder Process (DFO 3-60) Emissions

Company Name: Electronic Recyclers Int'l Inc.
Address City IN Zip: 2540 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-30951-00064
Plt ID: 063-00064
Reviewer: Jason R. Krawczyk
Date: November 2, 2011

Emission Unit(s)	Maxiumum Capacity (tons/hr)	PM Emission Factor (lbs/ton)	PM PTE Before Control (lbs/hr)	PM PTE Before Control (tons/yr)	PM10/PM2.5 PTE Before Control (lbs/hr)	PM10/PM2.5 PTE Before Control (tons/yr)
Finders	4.11	0.82	3.38	**14.80**	1.69	**7.40**

Emission Unit(s)	Control Efficiency (%)	PM PTE After Control (lbs/hr)	PM PTE After Control (tons/yr)	PM10/PM2.5 PTE After Control (lbs/hr)	PM10/PM2.5 PTE After Control (tons/yr)
Finders	99.90%	0.00	**0.01**	0.00	**0.01**

Note:
Emission factor is based on mass balance information provided by source.
Assumed PM10 = 50% PM
Assumed PM2.5 = PM10
Emissions from the Finders emission unit is controlled by the Donaldson Baghouse (DFO 3-60).

Methodology:
PM PTE Before Control (lbs/hr) = Maximum Capacity (tubes/hr) * PM Emisison Factor (lbs/tube)
PM PTE Before Control (tons/yr) = PM PTE Before Controls (lbs/hr) * 8,760 hrs / 2,000 lbs
PM10/PM2.5 PTE Before Control (lbs/hr) = PM PTE Before Control (lbs/hr) * 50%
PM10/PM2.5 PTE Before Control (tons/yr) = PM10/PM2.5 PTE Before Controls (lbs/hr) * 8,760 hrs / 2,000 lbs
After Control (lbs/hr) = Before Control (lbs/hr) * (1- Control Efficiency (%))
After Control (tons/yr) = After Control (lbs/hr) * 8,760 hrs / 2,000 lbs

HAP Percentages								
Antimony	Arsenic	Cadmium	Chromium	Colbalt	Nickel	Selenium	Mercury	Lead
(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
0.0471%	0.0011%	0.0143%	0.0161%	0.0080%	0.1130%	0.0008%	0.0009%	0.8840%

HAP Emissions Before Controls									
Antimony	Arsenic	Cadmium	Chromium	Colbalt	Nickel	Selenium	Mercury	Lead	**Combined HAPs**
(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	**(tons/yr)**
0.01	1.61E-04	2.12E-03	2.38E-03	1.18E-03	0.02	1.20E-04	1.35E-04	**0.13**	**0.16**

HAP Emissions After Controls									
Antimony	Arsenic	Cadmium	Chromium	Colbalt	Nickel	Selenium	Mercury	Lead	**Combined HAPs**
(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	**(tons/yr)**
6.97E-06	1.61E-07	2.12E-06	2.38E-06	1.18E-06	1.67E-05	1.20E-07	1.35E-07	**1.31E-04**	**1.61E-04**

Note:
HAP Percentages provided by source based on Glass Dust Lab Analaysis

Methodology:
HAP Emissions Before Control (tons/yr) = PM PTE Before Control (tons/yr) * Maximum HAP Content (%)
HAP Emissions After Control (tons/yr) = Before Control (tons/yr) * (1- Control Efficiency (%))

Appendix A: Emissions Calculations
Shredder Conveyor System Emissions

Company Name: Electronic Recyclers Int'l Inc.
Address City IN Zip: 2540 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-30951-00064
Plt ID: 063-00064
Reviewer: Jason R. Krawczyk
Date: November 2, 2011

Conveyors

Process Description	Number of Emission Points	Maximum Capacity (tons/hr)	PM Emission Factor (lbs/ton)	PTE of PM (lb/hr)	PTE of PM (tons/yr)	PM10 Emission Factor (lbs/ton)	PTE of PM10 (tons/yr)	PM2.5 Emission Factor (lbs/ton)	PTE of PM2.5 (tons/yr)
Shredder Conveyor Transfer Points	16	17.5	3.00E-03	0.05	3.68	1.10E-03	1.35	1.10E-03	1.35
			Potential Emissions:		**3.68**		**1.35**		**1.35**

Note:
The emission factor for conveyor transfer points are from AP-42, Chapter 11.19, Table 11.19.2-2 (SCC 3-05-020-06) (8/04).
No emission factor is identified for PM2.5 for dry conveying, therefore it is assumed PM10 = PM2.5

Methodology:
PTE (tons/yr) = Number of Emission Points x Maximum Capacity (tons/hr) x Emission Factor (lbs/ton) x 8760 (hrs/yr) x 1 ton/2000 lbs
PTE of PM (lb/hr) = Macimum Capacity (tons/hr) * PM Emission Factor (lbs/ton)
PTE of Lead (tons/yr) = PTE of PM (tons/yr) * Maximum Lead Content (%)

HAP Percentages								
Antimony	Arsenic	Cadmium	Chromium	Colbalt	Nickel	Selenium	Mercury	Lead
(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
0.0471%	0.0011%	0.0143%	0.0161%	0.0080%	0.1130%	0.0008%	0.0009%	0.8840%

HAP PTE								
Antimony	Arsenic	Cadmium	Chromium	Colbalt	Nickel	Selenium	Mercury	Lead
(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
1.73E-03	4.01E-05	5.26E-04	5.92E-04	2.92E-04	4.16E-03	2.98E-05	3.35E-05	**0.03**

Combined HAPs
(tons/yr)
0.04

Note:
HAP Percentages provided by source based on Shredder Dust Lab Analaysis

Methodology:
HAP PTE (tons/yr) = PTE of PM (tons/yr) * Maximum HAP Content (%)

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Electronic Recyclers Int'l Inc.
Source Address: 2540 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-30951-00064
Source ID: 063-00064
Reviewer: Jason R. Krawczyk
Date: November 2, 2011

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

Type	Number of one-way trips per hour per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Fully Loaded Big Rig	1.2	28.80	40.0	1152.00	342	0.065	1.87	680.89
Empty Big Rig	1.2	28.80	18.0	518.40	342	0.065	1.87	680.89
	Total	**57.60**		**1670.40**			**3.73**	**1361.78**

Average Vehicle Weight Per Trip = 29.00 tons/trip
Average Miles Per Trip = 0.06 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	29.0	29.0	29.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m^2 = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	2.698	0.540	0.1324	lb/mile
Mitigated Emission Factor, Eext =	2.467	0.493	0.1211	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Fully Loaded Big Rig	0.92	0.18	0.05	0.84	0.17	0.04
Empty Big Rig	0.92	0.18	0.05	0.84	0.17	0.04
	1.84	**0.37**	**0.09**	**1.68**	**0.34**	**0.08**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

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

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

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

TO: Tom Shinault
Electronic Recyclers Intl Inc
PO Box 2428
Fresno, CA 93745

DATE: December 21, 2011

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

SUBJECT: Final Decision
FESOP
063-30951-00064

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:
OAQ Permits Branch Interested Parties List

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

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

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

December 21, 2011

TO: Plainfield Public Library

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

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

Applicant Name: **Electronic Recyclers International Inc**
Permit Number: **063-30951-00064**

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

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

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	CDENNY 12/21/2011 Electronic Recyclers Intl Inc 063-30951-00064 (final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Tom Shinault Electronic Recyclers Intl Inc PO Box 2428 Fresno CA 93745 (Source CAATS)									
2		Larry and Becky Bischoff 10979 North Smokey Row Road Mooresville IN 46158 *(Affected Party)*									
3		Hendricks County Commissioners 355 S Washington Danville IN 46122 *(Local Official)*									
4		Plainfield Public Library 1120 Stafford Rd Plainfield IN 46168-2230 *(Library)*									
5		Betty Bartley P.O. Box 149 Danville IN 46122 *(Affected Party)*									
6		Plainfileld Town Council and Town Manager P.O. Box 65 Plainfield IN 46168 *(Local Official)*									
7		Hendricks County Health Department 355 S Washington Street, Suite 210 Danville IN 46122-1759 *(Health Department)*									
8		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 *(Affected Party)*									
9		Aarons 2548 Airwest Blvd Plainfield IN 46168-7701 *(Affected Party)*									
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

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