



TO: Interested Parties / Applicant

RE: Ecological Systems, Inc. / 097-22302-00364

FROM: Felicia A. Robinson
Manager of Environmental Planning

Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within fifteen (15) calendar days of the receipt of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

If you have technical questions regarding the enclosed documents, please contact the Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures



Department of Public Works
Office of Environmental Services

2700 Belmont Avenue
Indianapolis, IN 46221

317-327-2234
Fax 327-2274
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indygov.org/dpw

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SECTION A SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates stationary wastewater/oil recovery and treatment facility

Authorized Individual: Vice President Operations
Source Address: 4910 West 86th Street, Indianapolis, Indiana, 46268
Mailing Address: 4910 West 86th Street, Indianapolis, Indiana, 46268
General Source Phone: (317) 879-9529
SIC Code: 4953
County Location: Marion
Source Location Status: Marion County
Nonattainment for ozone under the 8-hour standard
Nonattainment for PM2.5
Attainment for all other criteria pollutants.
Source Status: Minor Source Operating Permit
Minor Source, under PSD and Emission Offset Rules;
Minor Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) Bulk Unloading Trenches, identified as emission unit EU 1, with a material throughput of 480,000 gallons per day, installed in 1998.
- (b) One (1) Separator Pit, identified as emission unit EU 2, with a material throughput of 480,000 gallons per day, installed in 1998.
- (c) One (1) Demulsification Tank 06, identified at emission unit EU 3, maximum capacity of 100,000 gallons, with a material throughput of 480,000 gallons per day, installed in 1998.
- (d) One (1) Storage Tank 07, identified as emission unit EU 4, maximum capacity of 100,000 gallons, with a material throughput of 8,200 gallons per day, installed in 1998.
- (e) One (1) API Separator separated into North API and South API, identified at emission unit EU 5, with a material throughput of 480,000 gallons per day, installed in 1998.
- (f) Two (2) one (1) million gallon Storage Tanks, identified as emission unit EU 6, with a material throughput of 480,000 gallons per day, installed in 1998.
- (g) One (1) Dissolved Air Flotation Unit separated into North DAF and South DAF, identified as emission unit EU 7, with a material throughput of 480,000 gallons per day, installed in 1998.
- (h) One (1) Off Loading Pit, identified as emission unit EU 8, with a material throughput of 10,000 gallons per day, installed in 1998.
- (i) Four (4) 20,000 gallon Storage Tanks, identified as emission unit EU 9, with a material throughput of 32,800 gallons per day, installed in 1998.

- (j) Six (6) 15,000 gallon Storage Tanks, identified as emission unit EU 10, with a material throughput of 49,200 gallons per day, installed in 1998.
- (k) One (1) Process Feed Tank, identified as emission unit EU 11, with a maximum capacity of 1,000,000 gallons, material throughput of 180,000 gallons per day, installed in 1998.
- (l) One (1) Product Loadout Station, identified as emission unit EU 12, with a material throughput of 90,000 gallons per day, installed in 1998.
- (m) Fugitive equipment consisting of pumps, valves and compressor components, identified as EU 13, installed in 1998.
- (n) One (1) natural gas fired Hurst boiler Series 200, identified as EU 14, maximum heat input capacity 400 HP or 13.378 MMBtu/hr, installed in 1998, exhausting at one (1) stack, identified as PT 14.
- (o) Two (2) 25 MMBtu/hr natural gas fired Cleever Brooks boilers, identified as emission unit EU 15A and EU 15B, to be constructed in February 2006, exhausting at one (1) stack/vent, identified as PT 15.
- (p) One (1) Dehydration Unit, identified as emission unit EU 16, with a material throughput of 180,000 gallons per day, to be constructed in February 2006, exhausting at one (1) stack/vent, identified as PT 16.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

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

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the IDEM Commissioner or OES Administrator 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.5 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit 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 of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.6 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.7 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to Indianapolis OES, Air Permits.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to OES.
 - (2) 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 2-6.1-6 and an Operation Permit Validation Letter is issued.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

B.8 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60.40c, Subpart Dc, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- (a) Commencement of construction date (no later than 30 days after such date);
- (b) Actual start-up date (within 15 days after such date); and
- (c) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, IN 46204-2251

and

Indianapolis OES
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

The application and enforcement of these standards have been delegated to the IDEM, OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.

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

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

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, IN 46204-2251

and

Indianapolis OES
Air Compliance
2700 South Belmont Ave.

Indianapolis, IN 46221

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

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

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and OES. IDEM, OAQ, and OES may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
- and
- Indianapolis OES
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221
- Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.
- (c) The Permittee shall notify the OAQ and OES within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a non-road engine, as defined in 40 CFR 89.2.

**B.12 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2]
[IC13-17-3-2][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, OES, and U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (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 processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (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.13 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, and OES, Air Permits, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, and OES shall issue a revised permit.

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

B.14 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to OES within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone number: 317-327-2234 (ask for OES Air Compliance), to determine the appropriate permit fee.

B.15 Credible Evidence [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

C.3 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis OES
Air Enforcement
2700 South Belmont Ave.
Indianapolis, IN 46221

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to

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

Testing Requirements

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

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

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis OES
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ, and OES of the actual test date at least fourteen (14) days prior to the actual date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, and OES, if the Permittee submits to IDEM, OAQ, and OES 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.7 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 IDEM commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.8 Compliance Monitoring [326 IAC 2-1.1-11]

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

C.9 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the

provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, and OES within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected emissions unit while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ, and OES that re-testing in one-hundred and twenty (120) days is not practicable, IDEM, OAQ, and OES may extend the re-testing deadline.
- (c) IDEM, OAQ, and OES reserve the authority to take any actions allowed under law in response to non-compliant stack tests.

The response action documents submitted pursuant to this condition do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.11 Malfunctions Report [326 IAC 1-6-2]

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

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

C.12 General Record Keeping Requirements [326 IAC 2-6.1-5]

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

Commissioner or OES Administrator within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.13 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-5] [IC 13-14-1-13]

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

Indianapolis OES
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.
- (c) Unless otherwise specified in this permit, any semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit 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.

SECTION D.1 EMISSIONS UNITS OPERATION CONDITIONS

Emissions Unit Description:

- (a) Bulk Unloading Trenches, identified as emission unit EU 1, with a material throughput of 480,000 gallons per day, installed in 1998.
- (b) One (1) Separator Pit, identified as emission unit EU 2, with a material throughput of 480,000 gallons per day, installed in 1998.
- (c) One (1) Demulsification Tank 06, identified at emission unit EU 3, maximum capacity of 100,000 gallons, with a material throughput of 480,000 gallons per day, installed in 1998
- (d) One (1) Storage Tank 07, identified as emission unit EU 4, maximum capacity of 100,000 gallons, with a material throughput of 8,200 gallons per day, installed in 1998.
- (e) One (1) API Separator separated into North API and South API, identified at emission unit EU 5, with a material throughput of 480,000 gallons per day, installed in 1998.
- (f) Two (2) one (1) million gallon Storage Tanks, identified as emission unit EU 6, with a material throughput of 480,000 gallons per day, installed in 1998.
- (g) One (1) Dissolved Air Flotation Unit separated into North DAF and South DAF, identified as emission unit EU 7, with a material throughput of 480,000 gallons per day, installed in 1998.
- (h) One (1) Off Loading Pit, identified as emission unit EU 8, with a material throughput of 10,000 gallons per day, installed in 1998.
- (i) Four (4) 20,000 gallon Storage Tanks, identified as emission unit EU 9, with a material throughput of 32,800 gallons per day, installed in 1998.
- (j) Six (6) 15,000 gallon Storage Tanks, identified as emission unit EU 10, with a material throughput of 49,200 gallons per day, installed in 1998.
- (k) One (1) Process Feed Tank, identified as emission unit EU 11, with a maximum capacity of 1,000,000 gallons, material throughput of 180,000 gallons per day, installed in 1998.
- (l) One (1) Product Loadout Station, identified as emission unit EU 12, with a material throughput of 90,000 gallons per day, installed in 1998.
- (m) Fugitive equipment consisting of pumps, valves and compressor components, identified as EU 13, installed in 1998.
- (n) One (1) Dehydration Unit, identified as emission unit EU 16, with a materail throughput of 180,000 gallons per day, to be constructed in February 2006, exhausting at one (1) stack/vent, identified as PT 16.

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

There are no requirements included in this permit for these emission units.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (o) One (1) natural gas fired Hurst boiler Series 200, identified as EU 14, maximum heat input capacity 400 HP or 13.378 MMBtu/hr, installed in 1998, exhausting at one (1) stack, identified as PT 14.
- (p) Two (2) 25 MMBtu/hr natural gas fired Cleever Brooks boilers, identified as emission unit EU 15A and EU 15B, to be constructed in February 2006, exhausting at one (1) stack/vent, identified as PT 15.

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

Emission Limitations and Standards

D.2.1 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a) Particulate emissions from the 13.378 MMBtu per hour Scotch boiler (EU 14) installed in 1998 shall be limited to 0.56 pounds (lbs) per MMBtu heat input.

Pursuant to 326 IAC 6-2-4(a) Particulate emissions from the two (2) 25 MMBtu per hour Cleever Brooks boilers (EU 15A and EU 15B) to be installed in 2006 shall be limited to 0.37 pounds (lbs) per MMBtu heat input.

The limitation is based on the following equation:

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

Where: Pt = Pounds of particulate matter emitted per million Btu (lbs/MMBtu) heat input.
Q = Total source maximum operating capacity rating in million Btu (lbs/MMBtu) heat input.

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

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for EU 14, EU 15A and EU 15B.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.3 Record Keeping Requirements

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

New Source Performance Standards (NSPS) Requirements

D.2.4 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1

for the boilers identified as EU 14 and EU 15 except as otherwise specified in 40 CFR Part 60, Subpart Dc.

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

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue,
Indianapolis, Indiana 46204

and

Indianapolis OES
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

D.2.5 Standards of Performance for Small-Commercial-Institutional Steam Generating Units Requirements [40 CFR Part 60, Subpart Dc] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall comply with the provisions of the NSPS, which are incorporated by reference as 326 IAC 12 for the boilers identified as EU 14, EU 15A and EU 15B as specified as follows.

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units which meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO₂) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

§ 60.41c Definitions.

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

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388-77, 90, 91, 95, or 98a, Standard Specification for Classification of Coals by Rank (IBR--see Sec. 60.17), coal refuse, and petroleum coke. Coal-derived

synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (i.e., the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396–78, 89, 90, 92, 96, or 98, “Standard Specification for Fuel Oils” (incorporated by reference—see §60.17).

Dry flue gas desulfurization technology means a sulfur dioxide (SO₂) control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO₂ control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR Parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other

sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means (1) a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane, or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835–86, 87, 91, or 97, "Standard Specification for Liquefied Petroleum Gases" (incorporated by reference—see §60.17).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO₂ emissions (nanograms per joule [ng/J], or pounds per million Btu [lb/million Btu] heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396–78, 89, 90, 92, 96, or 98, "Standard Specification for Fuel Oils" (incorporated by reference—see §60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of particulate matter (PM) or SO₂.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this part. This notification

shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(g) The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. The owner or operator of an affected facility that only burns very low sulfur fuel oil or other liquid or gaseous fuels with potential sulfur dioxide emissions rate of 140 ng/J (0.32 lb/MMBtu) heat input or less shall record and maintain records of the fuels combusted during each calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
And
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES
MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

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

Company Name:	Ecological Systems, Inc.
Address:	4910 West 86th Street
City:	Indianapolis
Phone #:	(317) 879-9529
MSOP #:	097-22302-00364

I hereby certify that Ecological Systems, Inc. is still in operation.
 no longer in operation.

I hereby certify that Ecological Systems, Inc. is in compliance with the requirements of MSOP 097-22302-00364.
 not in compliance with the requirements of MSOP 097-22302-00364.

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

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

Noncompliance:

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

326 IAC 1-6-1 Applicability of rule

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

326 IAC 1-2-39 "Malfunction" definition

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

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

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

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

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

Source Background and Description

Source Name:	Ecological Systems, Inc.
Source Location:	4910 West 86 th Street, Indianapolis, IN 46268
County:	Marion
SIC Code:	2899
Operation Permit No.:	097-22302-00364
Permit Reviewer:	Anh-tuan Nguyen

The Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES) have reviewed an application from Ecological Systems, Inc. relating to the operation of a wastewater/oil recovery and treatment facility.

New Emission Units and Pollution Control Equipment

The source consists of the following new emission units, which will be constructed in February 2006.

- (a) Two (2) 25 MMBtu/hr natural gas fired Cleever Brooks boilers, identified as emission unit EU 15A and EU 15B, to be constructed in February 2006, exhausting at one (1) stack/vent, identified as PT 15.
- (b) One (1) Dehydration Unit, identified as emission unit EU 16, with a material throughput of 180,000 gallons per day, to be constructed in February 2006, exhausting at one (1) stack/vent, identified as PT 16.

Permitted Emission Units and Pollution Control Equipment

The source also consists of the following permitted emission units and pollution control devices:

- (a) One (1) natural gas fired Scotch boiler Series 200, identified as EU 14, maximum heat input capacity 400 HP or 13.378 MMBtu/hr, installed in 1998, exhausting at one (1) stack, identified as PT 14.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted emission units:

- (a) Bulk Unloading Trenches, identified as emission unit EU 1, with a material throughput of 480,000 gallons per day, installed in 1998.
- (b) One (1) Separator Pit, identified as emission unit EU 2, with a material throughput of 480,000 gallons per day, installed in 1998.

- (c) One (1) Demulsification Tank 06, identified at emission unit EU 3, maximum capacity of 100,000 gallons, with a material throughput of 480,000 gallons per day, installed in 1998.
- (d) One (1) Storage Tank 07, identified as emission unit EU 4, maximum capacity of 100,000 gallons, with a material throughput of 8,200 gallons per day, installed in 1998.
- (e) One (1) API Separator separated into North API and South API, identified at emission unit EU 5, with a material throughput of 480,000 gallons per day, installed in 1998.
- (f) Two (2) one (1) million gallon Storage Tanks, identified as emission unit EU 6, with a material throughput of 480,000 gallons per day, installed in 1998.
- (g) One (1) Dissolved Air Flotation Unit separated into North DAF and South DAF, identified as emission unit EU 7, with a material throughput of 480,000 gallons per day, installed in 1998.
- (h) One (1) Off Loading Pit, identified as emission unit EU 8, with a material throughput of 10,000 gallons per day, installed in 1998.
- (i) Four (4) 20,000 gallon Storage Tanks, identified as emission unit EU 9, with a material throughput of 32,800 gallons per day, installed in 1998.
- (j) Six (6) 15,000 gallon Storage Tanks, identified as emission unit EU 10, with a material throughput of 49,200 gallons per day, installed in 1998.
- (k) One (1) Process Feed Tank, identified as emission unit EU 11, with a maximum capacity of 1,000,000 gallons, material throughput of 180,000 gallons per day, installed in 1998.
- (l) One (1) Product Loadout Station, identified as emission unit EU 12, with a material throughput of 90,000 gallons per day, installed in 1998.
- (m) Fugitive equipment consisting of pumps, valves and compressor components, identified as EU 13, installed in 1998.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Exemption 097-00364 issued on November 16, 1999.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

- (a) IDEM, OAQ, and OES are aware that equipment has been constructed and/or operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled "Unpermitted Emission Units and Pollution Control Equipment".
- (b) IDEM, OAQ, and OES are reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter / Outlet Dimensions (ft)	Flow Rate (acfm)	Temperature (°F)
PT 14	EU 14	32	25.6	6,200	440

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on November 14, 2005.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document (pages 1 through 5).

Potential to Emit of the Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	0.50
PM-10	2.10
SO ₂	0.20
VOC	22.31
CO	23.30
NO _x	27.80

HAPs	Potential to Emit (tons/yr)
Specify the HAP	Negligible
Total	Negligible

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of NO_x is greater than 25 tons per year and less than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants is less than 100 tons per year. Therefore, the provisions of 326 IAC 2-7 does not apply. An MSOP will be issued.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-2.5	non-attainment
PM-10	attainment
SO ₂	maintenance attainment
NO ₂	attainment
8-hour Ozone	basic nonattainment
1-hour Ozone	maintenance attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Marion County has been classified as nonattainment for PM_{2.5} in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as surrogate for PM_{2.5} emissions, pursuant to the Non-attainment New Source Review requirements. See the State Rule Applicability for the source section.
- (c) Marion County has been classified as attainment or unclassifiable in Indiana for PM₁₀, SO₂, NO₂, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (d) Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD, Part 70, or FESOP Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	0.50
PM-10	2.10
SO ₂	0.20
VOC	22.31
CO	23.30
NO _x	27.80
Single HAP	Negligible
Combination HAPs	Negligible

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or greater and it is not in one of the 28 listed source categories.
- (b) These emissions were based on information provided in the permit application

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit 097-22302-00364, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This status is based on the air approval issued to the source and the application submitted by the source. This status has been verified by the OES inspector assigned to the source.

Federal Rule Applicability

- (a) The three (3) boilers located at this source are subject to New Source Performance Standard (NSPS), 40 CFR 60.40c, Subpart Dc (Standards of Performance for Small-Commercial-Institutional Steam Generating Units), which is incorporated by reference as 326 IAC 12. The specific facilities subject to this rule include the following:
 - (1) One (1) natural gas fired Scotch boiler Series 200, identified as EU 14, maximum heat input capacity 400 HP or 13.378 MMBtu/hr, installed in 1998, exhausting at one (1) stack, identified as PT 14.
 - (2) Two (2) 25 MMBtu/hr Cleever Brooks boilers, identified as emission unit EU 15A and EU 15B, installed in 2006, exhausting at one (1) stack/vent, identified as PT 15.

Nonapplicable portions of the NSPS will not be included in the permit. The three (3) boilers are subject to the following portions of Subpart Dc.

- (1) 40 CFR 60.40c
- (2) 40 CFR 60.41c
- (3) 40 CFR 60.48c (a)
- (4) 40 CFR 60.48c (a)(1)
- (5) 40 CFR 60.48c (a)(3)
- (6) 40 CFR 60.48c (g)
- (7) 40 CFR 60.48c (i)
- (8) 40 CFR 60.48c (j)
- (b) This source is not subject to the New Source Performance Standard, 326 IAC 12, 40 CFR 60, Subpart Kb, because the storage vessels store liquids with maximum true vapor pressures less than 3.5 kilopascals (kPa).
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) 326 IAC 14, 20 and 40 CFR Part 63, included in this permit.

State Rule Applicability – Entire Source

326 IAC 2-1.1-5 (Non-attainment New Source Review)

This source is not major under nonattainment NSR because it has the potential to emit less than 100 tons of PM10 (as surrogate for PM2.5). Therefore, the Non-attainment New Source Review requirements are not applicable.

326 IAC 2-2 (Prevention of Significant Deterioration(PSD))

This source is not a major source. This source is not one (1) of the twenty-eight (28) listed source categories. The potential to emit each criteria pollutant from the entire source is less than 250 tons per year. Therefore, this source is a minor source and the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) are not applicable.

326 IAC 2-3 (Emission Offset)

Marion County has been designated as non-attainment for PM 2.5 in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled "Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas" authored by Steve Page, Director of OAQPS, until EPA promulgates the PM 2.5 major NSR regulations, states should assume that a major stationary source's PM10 emissions represent PM2.5 emissions. IDEM will use the PM10 nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM2.5 NAAQS. A major source in a nonattainment area as a source that emits or has the potential to emit 100 ton per year of any regulated pollutant. Ecological Systems, Inc. has a potential to emit of PM10 below 100 tons per year. Therefore, assuming that PM10 emissions represent PM2.5 emissions, 326 IAC 2-3 does not apply.

Marion County has been designated as basic nonattainment for the 8-hour ozone standard. The potential to emit of NOx and VOC from this source is less than 100 tons per year for each pollutant. Therefore, the requirements of 326 IAC 2-3 do not apply.

326 IAC 2-4.1 (Hazardous Air Pollutants)

This source will emit less than ten (10) tons per year of a single HAP or twenty-five (25) tons per year of a combination of HAPs, and construction occurred before July 27, 1997. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1(a)(1), (2), and (3), this source is not subject to 326 IAC 2-6 (Emission Reporting) because, as an MSOP source, it is not required to have an operating permit under 326 IAC 2-7, it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year, and it is not located in Lake or Porter Counties.

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 the permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability – Individual Facilities

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-4(a) Particulate emissions from the 13.378 MMBtu per hour Scotch boiler (EU 14) installed in 1998 shall be limited to 0.56 pounds (lbs) per MMBtu heat input.

Pursuant to 326 IAC 6-2-4(a) Particulate emissions from the two (2) 25 MMBtu per hour Cleever Brooks boilers (EU 15A and EU 15B) installed in 2006 shall be limited to 0.37 pounds (lbs) per MMBtu heat input.

The limitation is based on the following equation:

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

Where: Pt = Pounds of particulate matter emitted per million Btu (lbs/MMBtu) heat input.
Q = Total source maximum operating capacity rating in million Btu (lbs/MMBtu) heat input.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

The Permittee has no individual facility with the potential to emit more than twenty-five (25) tons per year of VOCs. Therefore, 326 IAC 8-1-6 does not apply.

326 IAC 8-4 (Petroleum Sources)

This rule applies to the sources described as follows: petroleum refineries, petroleum liquid storage facilities, bulk gasoline terminals, bulk gasoline plants, gasoline dispensing facilities, and gasoline transports. This source does not fit the definition of petroleum sources. Therefore, 326 IAC 8-4 does not apply.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

The Source does not have storage vessels which store volatile organic liquids (VOL) with a maximum true vapor pressure equal to or greater than five-tenths (0.5) pounds per square inch absolute (psia). Therefore, 326 IAC 8-9 does not apply.

Conclusion

The construction and operation of this wastewater/oil recovery and treatment facility shall be subject to the conditions of the New Source Construction and Minor Source Operating Permit 097-22302-00364.

**Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services**

Addendum to the Technical Support Document
for a Minor Source Operating Permit

Source Name:	Ecological Systems, Inc.
Source Location:	4910 West 86 th Street, Indianapolis, IN 46268
County:	Marion County
SIC Code:	4953
Operation Permit No.:	097-22302-00364
Permit Reviewer:	Anh-tuan Nguyen

On February 8, 2006, the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that Ecological Systems, Inc. (ESI) had applied for a Minor Source Operating Permit to construct and operate a wastewater/oil recovery and treatment facility. The notice also stated that OAQ and OES proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On March 6, 2006, Mary Ann Saggese (Plew Shadley Racher & Braun) attorney for Ecological Systems, Inc. submitted comments on the draft Minor Source Operating Permit. Upon further review, the OAQ and OES have decided to make the following revisions to the Minor Source Operating Permit. The TSD will remain as it originally appeared when published. Changes to the permit or technical support material that occur after the permit has published for public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Bolded language has been added and the language with strikeout has been deleted. The Table of Contents has been modified to reflect these changes.

The comments and responses, including changes to the permit, are as follows:

Comment 1:

The SIC cited in the permit and the TSD is incorrect and should be corrected to "4953" for non-hazardous waste treatment and disposal.

Response 1:

The standard industrial classification (SIC) code cited in section A.1 of the permit (2899) corresponds to "Chemicals and Chemical Preparations, Not Elsewhere Classified." This incorrect SIC code for has been corrected as follows:

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates stationary wastewater/oil recovery and treatment facility

Authorized Individual: Vice President Operations

Source Address: 4910 West 86th Street, Indianapolis, Indiana, 46268
Mailing Address: 4910 West 86th Street, Indianapolis, Indiana, 46268
General Source Phone: (317) 879-9529
SIC Code: ~~2899~~ **4953**
County Location: Marion
Source Location Status: Marion County
Nonattainment for ozone under the 8-hour standard
Nonattainment for PM2.5
Attainment for all other criteria pollutants.
Source Status: Minor Source Operating Permit
Minor Source, under PSD and Emission Offset Rules;
Minor Source, Section 112 of the Clean Air Act

Comment 2:

The boiler identified as EU 14 is referred to as a "Scotch" boiler. "Scotch" is the name brand and the other 2 Clever Brooks boilers are also Scotch. To eliminate confusion, the term "Scotch" should be replaced with "Hurst" in Sections A.2(n) and D.2(n).

Response 2:

As requested the boiler identified as EU 14 will be renamed from "Scotch" to "Hurst" in section A.2 and D.2 as follows:

- (n) One (1) natural gas fired ~~Scotch~~ **Hurst** boiler Series 200, identified as EU 14, maximum heat input capacity 400 HP or 13.378 MMBtu/hr, installed in 1998, exhausting at one (1) stack, identified as PT 14.

Comment 3:

ESI requests that the Annual Notification requirements in the MSOP present solely the specific language stated in 326 IAC 2-6.1-5 (a)(5), which requires that the permit contain:

- (5) A requirement that an authorized individual provide an annual notice to the department that the source is in operation and in compliance with the permit or registration.

The draft MSOP includes a requirement to report noncompliance "at any time during the year" in addition to the permittee's compliance status. The MSOP regulations were strictly constructed to require a statement of compliance status at the time of submitting the Annual Notification, but not to include an accounting of any past issues of noncompliance which have since been resolved. The draft MSOP condition elevates the Annual Notification to the level of an Annual Compliance Certification pursuant to the Part 70 Permit requirements. This is without merit and is overreaching regulatory authority. ESI requests that the Condition B.9(b) be revised to be consistent with the regulatory requirement by deleting provision (b).

Response 3:

The permit has been revised as follows to correctly reflect the requirements of 326 IAC 2-6.1-5.

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

- (a) ~~An A-~~ **An authorized individual** shall be submitted **by an authorized individual** to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

~~(b)~~ Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

~~(e)~~(b) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, IN 46204-2251

and

Indianapolis OES
Air Compliance
2700 South Belmont Ave.
Indianapolis, IN 46221

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

Upon further review, the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) have decided to make the following change to the permit.

Change 1:

On February 27, 2006, the New Source Performance Standard (NSPS), 40 CFR 60.40c, Subpart Dc (Standards of Performance for Small-Commercial-Institutional Steam Generating Units) was revised in the Federal Register.

The following changes were made to condition D.2.5 to reflect these revisions to the NSPS.

§ 60.41c Definitions

...

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials in ASTM D388-77, **90, 91, 95, or 98a**, "Standard Specification for Classification of Coals by Rank" (incorporated by reference--see §60.17); coal refuse; and petroleum coke. **Coal-derived** synthetic fuels derived from coal for the purpose of creating useful heat, including but not limited to solvent-refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are **also** included in this definition for the purposes of this subpart.

...

§ 60.48c Reporting and recordkeeping requirements

(g) The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. **The owner or operator of an affected facility that only burns very low sulfur fuel oil or other liquid or gaseous fuels with potential sulfur dioxide emissions rate of 140 ng/J (0.32 lb/MMBtu) heat input or less shall record and maintain records of the fuels combusted during each calendar month.**



**NEW SOURCE CONSTRUCTION PERMIT
 and MINOR SOURCE OPERATING PERMIT
 INDIANA DEPARTMENT OF ENVIRONMENTAL
 MANAGEMENT
 OFFICE OF AIR QUALITY
 and
 INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

**Ecological Systems, Inc.
 4910 West 86th Street
 Indianapolis, IN 46268**

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

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

Operation Permit No.: MSOP 097-22302-00364	
Issued by:	
Original Signed by:	Issuance Date: 3/16/2006
Felicia A. Robinson Manager of Environmental Planning Indianapolis Office of Environmental Services	Expiration Date: 3/15/2011



Air Quality Hotline: 317-327-4AIR | knozone.com

**Department of Public Works
 Office of Environmental Services**

2700 Belmont Avenue
 Indianapolis, IN 46221

317-327-2234
 Fax 327-2274
 TDD 327-5186
indygov.org/dpw

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 Small Industrial Boiler**

Company Name: Ecological Systems, Inc.
Address City IN Zip: 4910 West 86th Street
Permit Number: 097-22302-00364
Pit ID: 097-00364
Reviewer: Anh-tuan Nguyen
Date: 12/16/2005

Heat Input Capacity
 MMBtu/hr

EU 14	13.4
EU 15	25
	25
	63.4

Potential Throughput
 MMCF/yr
 555.4

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.5	2.1	0.2	27.8	1.5	23.3

*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

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton



See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 Small Industrial Boiler
 HAPs Emissions**

Company Name: Ecological Systems, Inc.
Address City IN Zip: 4910 West 86th Street
Permit Number: 097-22302-00364
Pit ID: 097-00364
Reviewer: Anh-tuan Nguyen
Date: 12/16/2005

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	5.832E-04	3.332E-04	2.083E-02	4.998E-01	9.442E-04

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.388E-04	3.055E-04	3.888E-04	1.055E-04	5.832E-04

Methodology is the same as page 1.

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

**Appendix A: VOC Emission Calculations
From TANKS 4.0**

Company Name: Ecological Systems, Inc.
Address City IN Zip: 4910 West 86th Street, Indianapolis, IN 46268
Permit Number: 097-22302-00364
Plt ID: 097-00364
Reviewer: Anh-tuan Nguyen
Date: 12/16/2005

EU ID	Component	Losses per tank (lbs/year)			Total VOC emissions (tons/yr)
		Working Loss	Breathing Loss	Total Loss	
16	Distillate fuel oil no. 2	494.90	0.00	494.90	0.25
	ESI light ends	5030.71	0.00	5030.71	2.52
3	Distillate fuel oil no. 2	30.71	0.18	30.89	0.02
	ESI light ends	865.44	5.13	870.57	0.44
4	Distillate fuel oil no. 2	136.99	0.00	136.99	0.07
	ESI light ends	454.81	0.00	454.81	0.23
6 (2 tanks)	Distillate fuel oil no. 2	53.80	1.47	55.27	0.06*
	ESI light ends	1516.08	41.44	1557.52	1.56*
9 (4 tanks)	Distillate fuel oil no. 2	58.66	0.00	58.66	0.12**
	ESI light ends	194.75	0.00	194.75	0.39**
10 (6 tanks)	Distillate fuel oil no. 2	57.77	0.00	57.77	0.17***
	ESI light ends	191.80	0.00	191.80	0.58***
11	Distillate fuel oil no. 2	61.35	5.91	67.26	0.20
	ESI light ends	1576.04	151.73	1727.77	0.86
Total =					7.44

Total Emissions (tons/yr) = Total Loss (lbs/yr) * 1 ton / 2000 lbs

* Total Emissions (tons/yr) = Total loss (lbs/yr) * 1 ton / 2000 lbs * 2 tanks

** Total Emissions (tons/yr) = Total loss (lbs/yr) * 1 ton / 2000 lbs * 4 tanks

*** Total Emissions (tons/yr) = Total loss (lbs/yr) * 1 ton / 2000 lbs * 6 tanks

**Appendix A: VOC Emission Calculations
From Water 9**

Company Name: Ecological Systems, Inc.
Address City IN Zip: 4910 West 86th Street, Indianapolis, IN 46268
Permit Number: 097-22302-00364
Pit ID: 097-00364
Reviewer: Anh-tuan Nguyen
Date: 12/16/2005

EU ID	Unit Name	VOC emissions (Mg/yr)	Total VOC emissions (tons/yr)
1	Unloading Trenches	3.31	3.64
2	Separator Pit	0.34	0.37
	Concrete Access Pit	1.49	1.64
5	API Separator	0.21	0.23
7	DAF	1.22	1.34
	Oil Rag Sump	0.29	0.32
		Total =	7.55

Total VOC emission (tons/yr) = Voc emission (Mg/yr) * 1.1 ton/Mg

Company Name: Ecological Systems, Inc.
Address City IN Zip: 4910 West 86th Street, Indianapolis, IN 46268
Permit Number: 097-22302-00364
Plt ID: 097-00364
Reviewer: Anh-tuan Nguyen
Date: 12/16/2005

SUMMARY OF CALCULATED POTENTIAL EMISSION RATES - BEFORE CONROLS

Emission Unit	PM	PM-10	SO ₂	NO _x	VOC	CO	HAPs
1					3.64		
2					2.01		
3					0.46		
4					0.30		
5					0.23		
6					1.62		
7					1.66		
8					2.66		
9					0.51		
10					0.75		
11					1.06		
12					1.04		
13					2.10		
14	0.10	0.40	0.10	5.90	0.30	4.90	
15	0.40	1.70	0.10	21.90	1.20	18.40	
16					2.77		
Total	0.50	2.10	0.20	27.80	22.31	23.30	0.00
	PM	PM-10	SO₂	NO_x	VOC	CO	HAPs