INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a Minor Source Operating Permit

for Mishawaka Wastewater Treatment Plant in St. Joseph County

MSOP: M141-24394-00177

The Indiana Department of Environmental Management (IDEM) has received an application from Mishawaka Wastewater Treatment Plant located at 1020 Lincoln Way West, Mishawaka, IN 46544 for the renewal of a Minor Source Operating Permit (MSOP). IDEM's Office of Air Quality (OAQ) issues this type of permit to regulate the operation of sources that release air pollutants.

IDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and several associated documents, that would allow Mishawaka Wastewater Treatment Plant to continue to operate a municipally owned wastewater treatment plant. If this would operate 365 days a year, 24 hours a day, 7 days a week, it could potentially release: 1.22 tons of PM, 1.62 tons of PM10, 0.33 tons of SO_2, 49.51 tons of NOx, 1.56 tons of VOC, 45.18 tons of CO, 0.13 tons of hexane, 0.52 tons of formaldehyde, and 0.81 tons of total HAPs. The permit does not require any type of production limits or air pollution control equipment to limit the amount of air pollution that can be released.

A copy of the permit application and IDEM's preliminary findings are available at:

Mishawaka-Penn-Harris Public Library
209 Lincolnway East
Mishawaka, IN 46544

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

How can you participate in this process?

The day after this announcement is published in a newspaper marks the beginning of a 30-day public comment period. During that 30-day period, you may comment on this draft permit. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the air pollution impact of this draft permit are received, with a request for a public hearing, IDEM may hold a public hearing. If a public hearing is held, IDEM will make a separate announcement of the date, time, and location of that hearing. At a hearing, you would have an opportunity to submit written comments, make verbal comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation or a request for a public hearing should be sent in writing to IDEM. If you do not want to comment at this time, but would like to be added to IDEM's mailing list to receive notice of future action related to this permit application, please contact IDEM. Please refer to permit number **M141-24394-00177** in all correspondence.

Contact IDEM at:

Summer Keown
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204
(800) 451-6027, ask for extension 2-8427
Or dial directly: (317) 232-8427
E-mail: skeown@idem.in.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor or noise. For such issues, please contact your local officials.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate, Indianapolis.

If you have any questions please contact Summer Keown of my staff at the above address.

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

For additional information about air permits, and how you can participate, please see IDEM Citizens' Guide to Public Participation and Permit Guide on the Internet at: www.IN.gov/idem/permits/guide.

SJK

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Minor Source Operating Permit Renewal
OFFICE OF AIR QUALITY

Mishawaka Wastewater Treatment Plant
1020 Lincolnway West
Mishawaka, Indiana 46544

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

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.

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

Operation Permit No.: M 141-24394-00177	
Issued by:	Issuance Date:
Nisha Sizemore, Chief Permits Branch Office of Air Quality	Expiration Date:

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SECTION A SOURCE SUMMARY

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

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

The Permittee owns and operates a stationary municipally owned wastewater treatment facility.

Source Address:	1020 Lincolnway West, Mishawaka, Indiana 46544
Mailing Address:	1020 Lincolnway West, Mishawaka, IN 46544
General Source Phone Number:	(574) 258-1709
SIC Code:	4952
County Location:	St. Joseph
Source Location Status:	Nonattainment for 8-hour ozone standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

(a) One (1) internal combustion blower engine, identified as Blower Engine #3, installed in 1978, rated at 1.28 million British thermal units (MMBtu) per hour of digester gas. While only digester gas is used by the Source to operate this engine, the engine does have the ability to be operated using natural gas. The engine is rated at 2.27 MMBtu/hr of natural gas. Blower Engine #3 exhausts at one (1) stack, identified as stack #2.

(b) One (1) emergency flare, identified as flare, used to combust digester gas that is produced if the internal combustion engine is not in operation, installed in 1952, rated at 11 million British thermal units (MMBtu) per hour of digester gas, exhausting at one (1) stack, identified as flare.

(c) Two (2) digester gas fired boilers, identified as Boiler #3 and Boiler #4, installed in December 2005, each rated at 8.0 million British thermal units (MMBtu) per hour, using natural gas as back up fuel, and each exhausting at one (1) stack, identified as stack #3 and stack #4, respectively.

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, M 141-24394-00177, 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.3 Term of Conditions [326 IAC 2-1.1-9.5]

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

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

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

B.4 Enforceability

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

B.5 Severability

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

B.6 Property Rights or Exclusive Privilege

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

B.7 Duty to Provide Information

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

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

B.8 Certification

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

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

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

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

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

(b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

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

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

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

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

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

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

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

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

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

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

(a) All terms and conditions of permits established prior to M 141-24394-00177 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

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

B.12 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

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

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

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, 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 ninety (90) days prior to the date of the expiration of this permit; and

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

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

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

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

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

B.15 Source Modification Requirement

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

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

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

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

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

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

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

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

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

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

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

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

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

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

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.

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

B.19 Credible Evidence [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Permit Revocation [326 IAC 2-1.1-9]

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

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.2 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

C.3 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.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

C.5 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.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

C.9 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.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

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

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

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

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

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

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

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

(1) monitoring results;

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

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

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

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

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

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

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

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

C.14 Malfunctions Report [326 IAC 1-6-2]

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

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

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

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

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

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

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

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

(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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

(a) One (1) internal combustion blower engine, identified as Blower Engine #3, installed in 1978, rated at 1.28 million British thermal units (MMBtu) per hour of digester gas. While only digester gas is used by the Source to operate this engine, the engine does have the ability to be operated using natural gas. The engine is rated at 2.27 MMBtu/hr of natural gas. Blower Engine #3 exhausts at one (1) stack, identified as stack #2.

This unit is currently not in operation and the Source has plans to replace the unit with a newer unit by the end of 2007. The Source will inform IDEM when these changes will occur.

(b) One (1) emergency flare, identified as flare, used to combust digester gas that is produced if the internal combustion engine is not in operation, installed in 1952, rated at 11 million British thermal units (MMBtu) per hour of digester gas, exhausting at one (1) stack, identified as flare.

(c) Two (2) digester gas fired boilers, identified as Boiler #3 and Boiler #4, installed in December 2005, each rated at 8.0 million British thermal units (MMBtu) per hour, using natural gas as back up fuel, and each exhausting at one (1) stack, identified as stack #3 and stack #4, respectively.

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

D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 [Emission Limitations for Facilities Specified in IAC 6-2-1(d)], the PM emissions from each boiler (ID Boilers #3 and #4) shall be limited to 0.6 pounds per MMBtu heat input.

This limitation is based on the following equation:

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

where: Pt = maximum allowable particulate matter (PM) emitted per MMBtu heat input
Q = total source max. indirect heater input = 8.0 + 8.0 = 16.0 MMBtu/hr

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

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

Company Name:	Mishawaka Wastewater Treatment Plant
Address:	1020 Lincolnway West
City:	Mishawaka, Indiana 46544
Phone #:	(574) 258-1709
MSOP #:	M 141-24394-00177

I hereby certify that Mishawaka Wastewater Treatment Pla is :
☐ still in operation.
☐ no longer in operation.

I hereby certify that Mishawaka Wastewater Treatment Pla is :
☐ in compliance with the requirements of MSOP M 141-24394-00177.
☐ not in compliance with the requirements of MSOP M 141-24394-00177.

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

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

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-6865

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

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

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

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

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

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

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

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

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

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

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

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

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

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____
*SEE PAGE 2

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

326 IAC 1-6-1 Applicability of rule

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

326 IAC 1-2-39 "Malfunction" definition

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

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

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

_____

_____

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	**Mishawaka Wastewater Treatment Plant**
Source Location:	**1020 Lincolnway West, Mishawaka, IN 46544**
County:	**St. Joseph**
SIC Code:	**4952**
Permit Renewal No.:	**M141-24394-00177**
Permit Reviewer:	**Summer Keown**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Mishawaka Wastewater Treatment Plant relating to the operation of a municipally owned wastewater treatment facility.

History

On March 2, 2007, Mishawaka Wastewater Treatment Plant submitted applications to the OAQ requesting to renew its operating permit. Mishawaka Wastewater Treatment Plant was issued a Minor Source Operating Permit, M141-13782-00177, on June 6, 2002.

Permitted Emission Units and Pollution Control Equipment

(a) One (1) internal combustion blower engine, identified as Blower Engine #3, installed in 1978, rated at 1.28 million British thermal units (MMBtu) per hour of digester gas. While only digester gas is used by the Source to operate this engine, the engine does have the ability to be operated using natural gas. The engine is rated at 2.27 MMBtu/hr of natural gas. Blower Engine #3 exhausts at one (1) stack, identified as stack #2.

(b) One (1) emergency flare, identified as flare, used to combust digester gas that is produced if the internal combustion engine is not in operation, installed in 1952, rated at 11 million British thermal units (MMBtu) per hour of digester gas, exhausting at one (1) stack, identified as flare.

(c) Two (2) digester gas fired boilers, identified as Boiler #3 and Boiler #4, installed in December 2005, each rated at 8.0 million British thermal units (MMBtu) per hour, using natural gas as back up fuel, and each exhausting at one (1) stack, identified as stack #3 and stack #4, respectively.

Emission Units and Pollution Control Equipment Removed From the Source

(a) Two internal combustion engines, consisting of the following:
  (1) One (1) internal combustion blower engine, installed in 1952, identified as Blower Engine #1, rated at 2.47 million British thermal units (MMBtu) per hour of natural gas or 1.47 MMBtu/hr digester gas, exhausting at one (1) stack, identified as #2; and

  (2) One (1) internal combustion blower engine, installed in 1952, identified as Blower Engine #2, rated at 2.44 million British thermal units (MMBtu) per hour of natural gas or 1.47 MMBtu/hr digester gas, exhausting at one (1) stack, identified as #2.

(b) Two boilers, consisting of the following:
  (1) One (1) backup boiler, identified as Boiler #1, installed in 1989, rated at 1.5 million British thermal units (MMBtu) per hour of natural gas, exhausting at one (1) stack, identified as #1; and

  (2) One (1) boiler, identified as Boiler #2, installed in 1993, rated at 2.16 million British thermal units (MMBtu) per hour of natural gas, exhausting at one (1) stack, identified as #1.

Existing Approvals

Since the issuance of the MSOP (M141-13782-00177) on June 6, 2002, the source has constructed or has been operating under the following approvals as well:

(a) Notice-Only Change No. 141-19215 issued on June 25, 2004; and

(b) Notice-Only Change No. 141-22547 issued on March 10, 2006.

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

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this MSOP Renewal:

(a) All construction conditions from all previously issued permits.

  Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

(b) Section D.1.1. of the prior MSOP (141-13782-00177) is no longer applicable because Boilers #1 and #2 were removed in December 2005 pursuant to Notice-Only Change 141-22547-00177, issued on March 10, 2006.

D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating, the PM emissions from each boiler (ID Boilers 1 and 2) shall be limited to 0.6 pounds per MMBtu heat input.

This limitation is based on the following equation:

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

where: Pt = maximum allowable particulate matter (PM) emitted per MMBtu heat input
Q = total source max. indirect heater input = 1.50 + 2.16
= 3.66 MMBtu/hr

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
2	Blower Engine #3	30	1	unknown	unknown
3	Boiler #3	20	2	unknown	unknown
4	Boiler #4	20	2	unknown	unknown
flare	flare	12	1	50	unknown

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in St. Joseph County

Pollutant	Status
PM_{10}	Attainment
$PM_{2.5}$	Attainment
SO_2	Attainment
NOx	Attainment
8-hour Ozone	Basic Nonattainment
CO	Attainment
Lead	Attainment

(a) 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 emissions and NOx emissions are considered when evaluating the rule applicability relating to ozone standards. St. Joseph County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.

(b) St. Joseph County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions. See the State Rule Applicability – Entire Source section.

(c) St. Joseph 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. See the State Rule Applicability – Entire Source section.

(d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

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

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	1.22
PM-10	1.62
SO_2	0.33
VOC	1.56
CO	45.18
NO_x	49.51

HAPs	tons/year
Hexane	less than 10
Total	less than 25

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued a MSOP.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Actual Emissions

No previous emission data has been received from the source.

Potential to Emit After Issuance

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

	Potential To Emit (tons/year)						
Process/emission unit	**PM**	**PM-10**	**SO_2**	**VOC**	**CO**	**NO_x**	**HAPs**
Boilers #3 and #4	0.13	0.53	0.32	0.39	5.89	7.01	0.13
Blower Engine #3	0.27	0.27	0.01	1.17	36.14	40.57	0.68
Flare	0.82	0.82	0.00	0.00	36.14	1.93	0.00
Total	1.22	1.62	0.33	1.56	45.18	49.51	0.81

(a) This existing stationary source is not major for Emission Offset because the emissions of the nonattainment pollutants, VOC and NOx, are less than one hundred (<100) tons per year.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit M141-24394-00177, is 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 all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

The following federal rules are applicable to the source:

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

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

(c) The natural gas fired boilers (Boilers #3 and #4) are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Park 60.40c through 60.48c, Subpart Dc) (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) because although they were constructed after June 9, 1989, they each have a heat input capacity of less than 10 MMBtu per hour.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)
The total source potential emissions of all attainment pollutants (PM, PM10, SO2, NOx and CO) are less than two hundred and fifty (250) tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply.

326 IAC 2-3 (Emission Offset)
The unrestricted potential emissions of each nonattainment criteria pollutant are less than one hundred (100) tons per year. Therefore, this source, which is not one of the twenty-eight (28) listed source categories, is a minor source pursuant to 326 IAC 2-3, Emission Offset.

326 IAC 2-6 (Emission Reporting)
This source is located in St. Joseph County, has a potential to emit of less than one hundred (100) tons per year of each criteria pollutant, and a potential to emit of less than five (5) tons per year of lead. Therefore, 326 IAC 2-6 does not apply.

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 Exemptions), opacity from this source, which is not located in the area north of Kern Road and east of Pine Road in St. Joseph County, shall meet the following, unless otherwise stated in the 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.

State Rule Applicability – Individual Facilities

326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating):
The two (2) digester gas fired boilers, identified as Boilers #3 and #4, installed in December 2005, each rated at 8.0 MMBtu/hr, using natural gas as a back-up fuel, are subject to the particulate matter limitations of 326 IAC 6-2. Pursuant to this rule, the two (2) digester gas fired boilers

(Boilers #3 and #4), constructed after 1983, capable of burning natural gas, are limited by the following equation from 326 IAC 6-2-4:

$Pt = 1.09/Q^{0.26}$
where: Pt = maximum allowable particulate matter (PM) emitted per MMBtu heat input
Q = total source max. indirect heater input = 8.0 + 8.0 = 16.0 MMBtu/hr

$Pt = 1.09/(16.0)^{0.26} = 0.53$ lbs PM/MMBtu

For Q less than 10 mmBtu/hr, Pt shall not exceed 0.6 pounds per mmBtu.

Pt = (0.12 tons PM/yr) * (hr/16.0 MMBtu) * (yr/8,760 hrs) * (2,000 lbs/ton)
= 0.002 lbs PM/MMBtu

Actual lbs PM/MMBtu (0.002) are less than allowable lbs PM/MMBtu (0.6), therefore, the two (2) natural gas fired boilers, identified as Boilers #3 and #4, will comply with the requirements of 326 IAC 6-4.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
St. Joseph County is listed in 326 IAC 6.5-1-1 (a). However, neither the source nor the facilities are listed in 326 IAC 6.5-7. The source does not have the potential to emit one hundred (100) tons or more, nor does it have actual emissions of ten (10) tons or more of particulate matter per year. Therefore, 326 IAC 6.5 does not apply.

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)
This rule is not applicable because the potential to emit SO_2 from all facilities and from the entire source is less than twenty-five (25) tons per year.

326 IAC 8-1-6 (New facilities: general reduction requirements)
Since there are no 326 IAC 8 rules that apply to this source 326 IAC 8-1-6, which requires Best Available Control Technology (BACT), could apply. This rule is not applicable since the potential VOC emissions from this source are less than twenty-five (25) tons per year.

Recommendation

The staff recommends to the Commissioner that the Minor Source Operating Permit Renewal 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.

An application for the purposes of this review was received on March 2, 2007.

Conclusion

The operation of this municipally owned wastewater treatment facility shall be subject to the conditions of the attached Minor Source Operating Permit Renewal No. 141-24394-00177.

Appendix A: Emission Calculations

Company Name: Mishawaka Wastewater Treatment Plant
Source Location: 1020 Lincolnway West, Mishawaka, IN 46544
Permit Number: 141-24394-00177
Plt ID: 141-00177
Reviewer: Summer Keown
Date: June 20, 2007

Uncontrolled Potential Emissions (tons/year)

Emissions Generating Activity				
Pollutant	Boilers	Stationary Internal Combustion Blower Engine	Digester Gas Flare	**TOTAL**
PM	0.13	0.27	0.82	1.22
PM10	0.53	0.27	0.82	1.62
SO2	0.32	0.01	0.00	0.33
NOx	7.01	40.57	1.93	49.51
VOC	0.39	1.17	0.00	1.56
CO	5.89	3.15	36.14	45.18
total HAPs	0.13	0.68	0.00	0.81
worst case single HAP	0.13	0.52	0.00	
	hexane	formaldehyde		

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

Controlled Potential Emissions (tons/year)

Emissions Generating Activity				
Pollutant	Natural Gas Combustion	Stationary Internal Combustion Blower Engine	Digester Gas Flare	**TOTAL**
PM	0.13	0.27	0.82	1.22
PM10	0.53	0.27	0.82	1.62
SO2	0.32	0.01	0.00	0.33
NOx	7.01	40.57	1.93	49.51
VOC	0.39	1.17	0.00	1.56
CO	5.89	3.15	36.14	45.18
total HAPs	0.13	0.68	0.00	0.81
worst case single HAP	0.13	0.52	0.00	
	hexane	formaldehyde		

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

Appendix A: Emission Calculations
Boiler Emission Summary

Company Name: Mishawaka Wastewater Treatment Plant
Source Location: 1020 Lincolnway West, Mishawaka, IN 46544
Permit Number: 141-24394-00177
Plt ID: 141-00177
Reviewer: Summer Keown
Date: 6/20/2007

Uncontrolled Potential Emissions (tons/year) - Boilers #3 and #4 Combined

Emissions Generating Activity			
Pollutant	Natural Gas Combustion	Digester Gas Combustion	**TOTAL**
PM	**0.13**	0.00	0.13
PM10	**0.53**	0.00	0.53
SO2	0.04	**0.32**	0.32
NOx	**7.01**	0.00	7.01
VOC	**0.39**	0.21	0.39
CO	**5.89**	0.00	5.89
total HAPs	**0.13**	negl.	0.13
worst case single HAP	**0.13**	negl.	0.13
	(hexane)		

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

Worst case emissions in bold.

Controlled Potential Emissions (tons/year)

Emissions Generating Activity			
Pollutant	Natural Gas Combustion	Digester Gas Combustion	**TOTAL**
PM	**0.13**	0.00	0.13
PM10	**0.53**	0.00	0.53
SO2	0.04	**0.32**	0.32
NOx	**7.01**	0.00	7.01
VOC	**0.39**	0.21	0.39
CO	**5.89**	0.00	5.89
total HAPs	**0.13**	negl.	0.13
worst case single HAP	**0.13**	negl.	0.13
	(hexane)		

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

Worst case emissions in bold.

Appendix A: Emissions Calculations

Digester Gas Combustion - Boilers #3 and #4

Company Name: **Mishawaka Wastewater Treatment Plant**
Source Location: **1020 Lincolnway West, Mishawaka, IN 46544**
Permit Number: **141-24394-00177**
Reviewer: **Summer Keown**
Date: **June 20, 2007**

Digester Gas Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	
16.0	140.2	
8.0		mmBtu/hr Boiler #3- External combustion boiler - Digester Gas
8.0		mmBtu/hr Boiler #4- External combustion boiler - Digester Gas

	PM	PM10	SO2	NOx	VOC	CO
Digester Gas Emission Factor in lb/MMBtu	0.00	0.00	4.50	0.00	3.00	0.00
Total Digester Gas Potential Emission in tons/yr	**0.00**	**0.00**	**0.32**	**0.00**	**0.21**	**0.00**

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 for Digester Gas Combustion are from USEPA - Fire 6.25, SCC Code 1-03-007-01

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

Worst Case potential Emissions = Assumes worst case fuel combusted 8760 hours /year

Appendix A: Emissions Calculations

Digester Gas Combustion - Boilers #3 and #4

Company Name: **Mishawaka Wastewater Treatment Plant**

Source Location: **1020 Lincolnway West, Mishawaka, IN 46544**

Permit Number: **141-24394-00177**

Reviewer: **Summer Keown**

Date: **June 20, 2007**

HAPs - Organics -Natural Gas Combustion

	1,1,1 Trichloroethane	Acetaldehyde	Acrolein	Benzene	Dichloromethane
Emission Factor in lb/mmBtu	1.25E-04	1.30E-04	7.80E-05	3.50E-03	1.37E-04
Potential Emission in tons/yr	8.74E-06	9.11E-06	5.47E-06	2.45E-04	9.59E-06

	Formaldehyde	Xylene	Styrene	Toluene
Emission Factor in lb/mmBtu	2.94E-04	3.68E-05	7.64E-05	1.09E-04
Potential Emission in tons/yr	2.06E-05	2.58E-06	5.35E-06	7.64E-06

Total HAPs emissions = 3.14E-04

Methodology is the same as previous page.

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

Company Name: **Mishawaka Wastewater Treatment Plant**
Source Location: **1020 Lincolnway West, Mishawaka, IN 46544**
Permit Number: **141-24394-00177**
Plt ID: **141-00177**
Reviewer: **Summer Keown**
Date: **June 20, 2007**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
16.0	140.2

Heat Input Capacity includes two (2) process heaters, Boiler #3 and Boiler #4, each rated at 8.0 MMBtu/hr.

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.13	0.53	0.04	7.01	0.39	5.89

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

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

Company Name: Mishawaka Wastewater Treatment Plant
Source Location: 1020 Lincolnway West, Mishawaka, IN 46544
Permit Number: 141-24394-00177
Plt ID: 141-00177
Reviewer: Summer Keown
Date: June 20, 2007

	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	1.472E-04	8.410E-05	5.256E-03	1.261E-01	2.383E-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	3.504E-05	7.709E-05	9.811E-05	2.663E-05	1.472E-04

Methodology is the same as previous page.

Total HAPs Emissions = 1.323E-01

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: Emissions Calculations
Digester Gas Combustion -4-cycle Lean Burn Engines
Company Name: Mishawaka Wastewater Treatment Plant
Address City IN Zip: 1020 Lincolnway West, Mishawaka, IN 46544
MSOP # M 141-24394-00177
Reviewer: Summer Keown
Date: June 20, 2007

Digester Gas Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
1.3	11.2

1.28 mmBtu/hr backup Blower Engine #3- Internal combustion engine - Digester Gas

	PM*	PM10*	SO2	NOx	VOC	CO
Digester Gas Emission Factor in lb/mmBtu	48.0	48.0	0	250.0	0	470.0
Digester Gas Potential Emission in tons/yr	**0.27**	**0.27**	**0.00**	**1.40**	**0.00**	**2.64**

Natural Gas Heat Input Capacity MMBtu/hr	Potential Throughput mmBtu/yr
2.3	19885.2

2.27 mmBtu/hr backup Blower Engine #3- Internal combustion engine - Natural Gas

	PM*	PM10*	SO2	NOx	VOC	CO
Natural Gas Emission Factor in lb/mmBtu	0.01	0.00	0.00	4.08	0.118	0.317
Natural Gas Potential Emission in tons/yr	**0.09**	**0.00**	**0.01**	**40.57**	**1.17**	**3.15**
Worst Case Potential Emission in tons/yr	**0.27**	**0.27**	**0.01**	**40.57**	**1.17**	**3.15**

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

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 for Digester Gas Combustion are from USEPA - Fire 6.23, SCC Code 5-01-004-21
Emission Factors for Natural Gas Combustion are from USEPA - Fire 6.23, SCC Code 2-02-002-54
Emission (tons/yr) = Throughput (mmBtu/yr) x Emission Factor (lb/mmBtu)/2,000 lb/ton
Worst Case potential Emissions = Assumes worst case fuel combusted 8760 hours /year

Appendix A: Emissions Calculations
Digester Gas Combustion -Engines

Company Name: **Mishawaka Wastewater Treatment Plant**
Address City IN Zip: **1020 Lincolnway West, Mishawaka, IN 46544**
CP: **141-24394-00177**
Reviewer: **Summer Keown**
Date: **June 20, 2007**

HAPs - Organics -Natural Gas Combustion

	Acetaldehyde	Acrolein	Benzene	1,3 Butadiene	Carbon Tetrachloride
Emission Factor in lb/mmBtu	8.36E-3	5.14E-3	440.0E-6	267.0E-6	36.7E-6
Potential Emission in tons/yr	0.08	0.05	0.00	0.00	0.00

	Chlorobenzene	Chloroform	1,3 Dichloropropene	Ethylbenzene	Ethylene Dibromide
Emission Factor in lb/mmBtu	3.04E-05	2.85E-05	2.64E-05	3.97E-05	4.43E-05
Potential Emission in tons/yr	0.00	0.00	0.00	0.00	0.00

	Ethylene Dichloride	Formaldehyde	Napthalene	Propylene Dichloride	Styrene
Emission Factor in lb/mmBtu	2.36E-05	5.28E-02	7.44E-05	2.69E-05	2.36E-05
Potential Emission in tons/yr	0.00	0.52	0.00	0.00	0.00

	1,1,2,2, Tetrachloroethane	Toluene	1,1,2 Trichloroethane	Xylene	Vinyl Chloride
Emission Factor in lb/mmBtu	4.00E-05	4.08E-04	3.18E-05	1.84E-04	1.49E-05
Potential Emission in tons/yr	0.00	0.00	0.00	0.00	0.00

Total HAPs emissions = 0.68

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 for Natural Gas Combustion are from USEPA - Fire 6.23, SCC Code 2-02-002-54
Emission (tons/yr) = Throughput (mmBtu/yr) x Emission Factor (lb/mmBtu)/2,000 lb/ton
Worst Case potential Emissions = Assumes worst case fuel combusted 8760 hours /year

Appendix A: Emissions Calculations
Digester Gas Combustion - Flare

Company Name: **Mishawaka Wastewater Treatment Plant**
Source Location: **1020 Lincolnway West, Mishawaka, IN 46544**
Permit Number: **141-24394-00177**
Reviewer: **Summer Keown**
Date: **June 20, 2007**

Digester Gas Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
11.0	96.4

11.00 mmBtu/hr Digester Waste Gas Flare

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	17.00	17.00	0.00	40.00	0.00	750.00
Potential Emission in tons/yr	0.82	0.82	0.00	1.93	0.00	36.14

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 for Digester Gas Combustion are from USEPA - Fire 6.25, SCC Code 5-01-004-10
Emission (tons/yr) = Throughput (mmBtu/yr) x Emission Factor (lb/mmBtu)/2,000 lb/ton