

Synthetic Minor Determination and/or **Netting Determination**

Permit To Install **14-05172**

Permit to Install Synthetic Minor Write-up
PTI 14-05172

A. Emissions Units Description

This Permit to Install (PTI 14-04931) covers one 910 KW Peak Shaving Diesel Generator (emissions unit P001).

B. Facility Emissions and Attainment Status

The emissions unit covered by this PTI is the only emissions unit at this facility. This permit will incorporate federally enforceable limitations limiting the NOx emissions to 24.0 TPY. Hamilton County is attainment for all criteria pollutants.

C. Source Emissions

Potential emissions were calculated based on maximum capacity and 8760 hrs/yr of operation. The potential emissions from this emissions unit in the absence of a federally enforceable PTI would be 131.6 TPY NOx.

The hours of operation limitation outlined in this PTI will limit NOx emissions to 24.0 TPY as a rolling, 12-month summation. The facility will maintain monthly records and submit quarterly reports as described in the PTI to ensure compliance with the hours of operation limit.

D. Conclusion

The terms and conditions in this PTI will limit the NOx emissions to less than 100 TPY. The permittee will maintain records and submit reports as outlined in the additional terms and conditions for this emissions unit to demonstrate compliance. As this is a minor new facility, Title V does not apply.



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 14-05172

Application Number: 14-05172
APS Premise Number: 1431244104
Permit Fee: **To be entered upon final issuance**
Name of Facility: Village of Indian Hill Water Plant
Person to Contact: Jim Fox
Address: 6525 Drake Road
Cincinnati, OH 452432700

Location of proposed air contaminant source(s) [emissions unit(s)]:
**7100 Glendale Milford Road
Columbia Township, Ohio**

Description of proposed emissions unit(s):
910 KW Peak Shaving Diesel Generator.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Village of Indian Hill Water Plant

Facility ID: 1431244104

PTI Application: 14-05172

Issued: To be entered upon final issuance

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any

Village of Indian Hill Water Plant

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information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may

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lead to such sanctions

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and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete

Village of Indian Hill Water Plant**Facility ID: 1431244104****PTI Application: 14-05172****Issued: To be entered upon final issuance**

Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	0.5
PM-10	0.5
SO ₂	3.8
VOC	0.7
NO _X	24.0
CO	6.4

Village of Indian Hill Water Plant
PTI Application: 14-05172
Issued: To be entered upon final issuance

Facility ID: 1431244104

Villa
PTI

Emissions Unit ID: P001

Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P001 - 910 KW (9.39 MMBtu/hour) Peak Shaving Diesel Generator	OAC rule 3745-17-11(B)(5)(b) OAC rule 3745-31-05(A)(3) OAC rule 3745-18-06

OAC rule 3745-35-07(B)
Synthetic Minor to Avoid Title V

OAC rule 3745-17-07(A)(1)

Villa;**PTI;**Emissions Unit ID: **P001****Issued: To be entered upon final issuance**

<u>Applicable Emissions Limitations/Control Measures</u>	MMBtu/hour pursuant to OAC rule 3745-18-06(B).
0.6 lb PM-10/hr, 4.7 lbs/hr SO ₂ , 0.9 lb VOC/hr, 30.1 lbs NO _x /hr 8.0 lbs CO/hr,	
The requirements of this rule also include compliance with the requirements of OAC rules 3745-35-07(B), 3745-17-07(A)(1), 3745-17-11(B)(5)(b), and 3745-18-06.	
0.5 TPY PM/PM-10* 3.8 TPY SO ₂ * 0.7 TPY VOC* 24.0 TPY NO _x * 6.4 TPY CO*	
See term B.1.	
Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule	
0.062 lb PM/MMBtu actual heat input	
* Based on a rolling, 12-month summation	
Exempt from this rule because the emissions unit's rated heat input capacity is less than ten	

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emission limitations, the use of #2 fuel oil and hours of operation limitation.
- 2.b** The hourly emission limitations outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 1600 hours per year, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Operating Hours</u>
1	134
1-2	268
1-3	402
1-4	536
1-5	670
1-6	804
1-7	938
1-8	1072
1-9	1206
1-10	1340
1-11	1474
1-12	1600

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

Villa

PTI

Issued: To be entered upon final issuance

Emissions Unit ID: P001

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of following information:
 - a. The operating hours for each month.
 - b. Beginning after the first 12 calendar months of operation following the issuance of the permit, the rolling, 12-month summation of the operating hours.

Also, during the first 12 calendar months of operation following the issuance of the permit, the permittee shall record the cumulative operating hours for each calendar month.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation following the issuance of the permit, all exceedances of the maximum allowable cumulative operating hours limitation.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports which specify the total NO_x emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. Compliance with the emissions limitations in term A.1 shall be determined based on emissions factors from AP-42, Tables 3.4-1 and 3.4-2, Revised 10/96 and the recordkeeping requirements specified in term C.1.
2. Compliance with the visible particulate emissions limitation shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.
3. Compliance with the hours of operation limit in term B.1 shall be determined by the recordkeeping requirements specified in term C.1.

F. Miscellaneous Requirements

Villa;

PTI /

Issued: To be entered upon final issuance

Emissions Unit ID: **P001**

1. The following terms and conditions of this permit are federally enforceable: A - E.

NEW SOURCE REVIEW FORM B

PTI Number: 14-05172 Facility ID: 1431244104

FACILITY NAME Village of Indian Hill Water Plant

FACILITY DESCRIPTION 9.39 MMBtu/hr diesel fired electrical generator CITY/TWP Columbia Township

SIC CODE 4941 SCC CODE 2-02-001-02 EMISSIONS UNIT ID P001

EMISSIONS UNIT DESCRIPTION 910 KW Peak Shaving Diesel Generator

DATE INSTALLED 6/15/01

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.6 lb/hr	0.5	0.6 lb/hr	0.5
PM ₁₀	attainment	0.6 lb/hr	0.5	0.6 lb/hr	0.5
Sulfur Dioxide	attainment	4.7 lb/hr	3.8	4.7 lb/hr	3.8
Organic Compounds	attainment	0.9 lb/hr	0.7	0.9 lb/hr	0.7
Nitrogen Oxides	attainment	30.1 lbs/hr	24.0	30.1 lbs/hr	24.0
Carbon Monoxide	attainment	8.0 lbs/hr	6.4	8.0 lbs/hr	6.4
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emission limitations, the use of #2 fuel oil and hours of operation limitation.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES X NO

IDENTIFY THE AIR CONTAMINANTS: NA

NEW SOURCE REVIEW FORM B

PTI Number: 14-05172 Facility ID: 1431244104

FACILITY NAME Village of Indian Hill Water Plant

FACILITY DESCRIPTION 9.39 MMBtu/hr diesel fired electrical generator CITY/TWP Columbia Township

Ohio EPA Permit to Install Information Form Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to airpti@epa.state.oh.us

Please fill out the following. If the checkbox does not work, replace it with an 'X'

	<u>Electronic</u>	<u>Additional information File Name Convention (your PTI # plus this letter)</u>	<u>Hard Copy</u>	<u>None</u>
<u>Calculations (required)</u>	<input type="checkbox"/>	0000000c.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Modeling form/results</u>	<input type="checkbox"/>	0000000s.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>PTI Application (complete or partial)*</u>	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>BAT Study</u>	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Other/misc.</u>	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

Permit Review Narrative
14-05172

Village of Indian Hill
7100 Glendale-Milford Road
Cincinnati, OH 45111

Facility ID: 1431244104

The Village of Indian Hill proposes to install one diesel fired peak shaving electrical generator to be installed at the Columbia Township Water Treatment Plant. The emissions unit covered by this PTI is a 910 KW Peak Shaving Diesel Generator (P001). The emissions expected are combustion emissions from the use of diesel as fuel.

The applicable regulations are OAC rules 3745-31-05(A)(3) (BAT), 3745-15-07, 3745-17-07(A) and 3745-17-11(B)(5).

The detailed emissions calculations are attached. The potential to emit for this facility is above the Title V major source thresholds. The actual emissions are below the major source thresholds and this PTI contains federally enforceable limitations limiting the potential emissions below the major source thresholds. The permit allowable emissions are 0.5 TPY PM-PM10, 3.8 TPY SO₂, 0.7 TPY VOCs, 24.0 TPY NO_x and 6.4 TPY CO. Hours of operation limits are placed in the permit to limit the emissions so that Title V does not apply and state new source review modeling is not required.

BAT is satisfied by compliance with emission limitations and hours of operation limitation. The emissions unit will be in compliance with all applicable regulations. A draft synthetic minor PTI should be issued for this emissions unit.

NEW SOURCE REVIEW FORM B

PTI Number: 14-05172 Facility ID: 1431244104

FACILITY NAME Village of Indian Hill Water Plant

FACILITY DESCRIPTION	9.39 MMBtu/hr diesel fired electrical generator	CITY/TWP	Columbia Township
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Permit Fee: P001: \$200 (based on min. PWR)

Prepared by: Tom Wittekind

Date Prepared: June 19, 2001

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text): **Synthetic Minor Determination and/or** **Netting Determination**Permit To Install **ENTER PTI NUMBER HERE**Permit to Install Synthetic Minor Write-up
PTI 14-05172A. Emissions Units Description

This Permit to Install (PTI 14-04931) covers one 910 KW Peak Shaving Diesel Generator (emissions unit P001).

B. Facility Emissions and Attainment Status

The emissions unit covered by this PTI is the only emissions unit at this facility. This permit will incorporate federally enforceable limitations limiting the NOx emissions to 24.0 TPY. Hamilton County is attainment for all criteria pollutants.

C. Source Emissions

Potential emissions were calculated based on maximum capacity and 8760 hrs/yr of operation. The potential emissions from this emissions unit in the absence of a federally enforceable PTI would be 131.6 TPY NOx.

The hours of operation limitation outlined in this PTI will limit NOx emissions to 24.0 TPY as a rolling, 12-month summation. The facility will maintain monthly records and submit quarterly reports as described in the PTI to ensure compliance with the hours of operation limit.

D. Conclusion

The terms and conditions in this PTI will limit the NOx emissions to less than 100 TPY. The permittee will maintain records and submit reports as outlined in the additional terms and conditions for this emissions unit to demonstrate compliance. As this is a minor new facility, Title V does not apply.

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

NEW SOURCE REVIEW FORM B

PTI Number: 14-05172 Facility ID: 1431244104

FACILITY NAME Village of Indian Hill Water Plant

FACILITY DESCRIPTION 9.39 MMBtu/hr diesel fired electrical CITY/TWP Columbia Township
generator

Please complete:

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	0.5
PM-10	0.5
SO2	3.8
VOC	0.7
NOX	24.0
CO	6.4