

The Permit-to-Install Process

WHAT IS A PTI?

What is a PTI?

- Permit to install wastewater collection, treatment or disposal system
- Issued by the state of Ohio

A PTI is not...

- Authorization to discharge wastewater to the sanitary sewer
- Authorization for anything else, including
 - Discharging to waters-of-the-state
 - Discharging air pollutants
 - Filling wetlands
 - Drilling wells for water supplies
 - Disturbing more than 1 acre of ground

PTI ≠ NEORSD AO

Ohio EPA

- Reviews PTI application
- PTI application includes NEORSD's acceptance of discharge
- Issues approval to install treatment system
- PTI conditions include design-related operating conditions

NEORSD

- Reviews PTI application
- Issues letter accepting industrial discharge
- Receives copy of approved PTI
- Issues discharge permit with discharge requirements

WHEN IS A PTI REQUIRED?

Ohio EPA Permit-to-Install Required:

ORC 6111.45 Plans for the disposal of the waste to be submitted to director of environmental protection.

No municipal corporation, ... corporation, or officer or employee thereof ... shall establish as proprietor, agent, ..., any garbage disposal plant, ... or business in the operation of which an industrial waste is produced, or make a change in or enlargement of a garbage disposal plant, ... or business whereby an industrial waste is produced or materially increased or changed in character, or install works for the treatment or disposal of any such waste until the plans for the disposal of the waste have been submitted to and approved by the director of environmental protection.

Ohio EPA Permit-to-Install Required:

ORC 6111.45 Plans for the disposal of the waste to be submitted to director of environmental protection.

As used in sections 6111.44 to 6111.46 of the Revised Code, "industrial waste" means sludge or sludge materials or a water-carried or liquid waste resulting from any process of industry, manufacture, trade, or business or development of any natural resource, but does not include storm water from any animal feeding facility, as defined in section 903.01 of the Revised Code, or manure, as defined in that section.

Ohio EPA Permit-to-Install Required:

OAC 3745-42-02(A)(1)(a)

Except as provided in paragraphs (B) to (D)(3) of this rule, no person shall cause, permit or allow the installation of a new disposal system or cause, permit or allow the modification of a disposal system without first obtaining an individual permit to install, a general permit to install or plan approval in accordance with this chapter and all other applicable rules and laws.

To Summarize:

- In general, any installation of any wastewater collection, treatment or disposal system requires a PTI (unless one of the exemptions applies)
- Includes industrial wastewater holding tanks
- *Note...*

RCRA Hazardous Wastewater

- “Domestic sewage exclusion” aka “WWTU exemption”
- If regulated by CWA, then RCRA doesn’t apply
- For CWA to apply, must discharge to sanitary sewer
- No discharge → hazardous waste storage or treatment unit

WHEN IS A PTI NOT REQUIRED?

PTI Exemptions OAC 3745-42-02(B)(2) through (23)

OAC 3745-42-02(B)(8)

- Oil / Water separator that meets all following requirements:
 - Volume does not exceed 1000 gallons,
 - Discharges to POTW,
 - Owner obtains approval from POTW acknowledging they are aware of the OWS,
 - Any industrial waste disposal in accordance with rules and laws.

OAC 3745-42-02(B)(11)

- A wastewater treatment works that meets all of the following requirements:
 - Located upstream of building drain,
 - Design flow not more than 500 gallons/day,
 - Utilized for industrial or commercial wastewater and will discharge to POTW with effective NPDES permit,
 - *and*

OAC 3745-42-02(B)(11)

- A wastewater treatment works that meets all of the following requirements (continued):
 - The treatment works is not subject to the national categorical pretreatment standards discharge limits, in accordance with subchapter (N) of Chapter 40 of the Code of Federal Regulations,
 - *and*

OAC 3745-42-02(B)(11)

- Wastewater treatment works limited to any of the following:
 - Neutralization
 - Silver recovery
 - Photo processing
 - Treating dental or medical office wastewater
 - Treating dry cleaning wastewater, or
 - Temporary activated carbon treatment for petroleum contaminated groundwater

OAC 3745-42-02(B)(16)

- Repair or replacement of component, media or equipment within a treatment works, if both conditions met:
 - Maintains treatment and serves same function as existing equipment;
 - Does not result in increased hydraulic capacity of treatment works or significantly alter flow through treatment works.

OAC 3745-42-02(B)(17)

- Modifications within existing treatment works intended to increase operational flexibility or efficiency.
- Includes, but not limited to:
 - Piping and valves to provide variable modes of treatment, provided changes do not result in possibility to bypass any treatment unit.
 - Internal structures in treatment tanks such as floating screens or baffles to improve efficiency.

OAC 3745-42-02(B)(19)

- A treatment works pilot study, if all following conditions met:
 - Utilizes portion of the wastewater stream from the existing treatment train,
 - Treated effluent recombines with treatment works effluent before discharge,
 - *and*

OAC 3745-42-02(B)(19)

- A treatment works pilot study, if all following conditions met:
 - Does not exceed twelve (12) months,
 - Not intended to be permanent structure.
 - If choose to incorporate pilot study components, must obtain a PTI.

OAC 3745-42-02(B) Exemptions

- (B)(20) Install on-line monitoring or process control equipment such as supervisory control and data acquisition (SCADA).
- (B)(21) Install odor control equipment on a disposal system provided equipment does not modify or change the treatment works or sewage characteristics.
- (B)(22) Remodel or replace treatment works buildings or laboratories.

OAC 3745-42-02(B)(23)

- Filtration systems, ion exchange systems, and oil skimmers installed at or in process tanks that directly serve manufacturing equipment, provided all following conditions met:
 - Intended to extend life of process solution or to conserve water,
 - Operates continuously,
 - Not installed at or in process tank that discharges to a sanitary or storm sewer.

WHAT CAN BE DONE BEFORE PTI APPROVAL?

OAC 3745-42-02(B)(1)

- Any activities at owner's risk
- PTI may not be approved
- Design changes may be required
- Additional costs are owner's responsibility

OAC 3745-42-02(B)(1)(b)

- General prohibitions and restrictions
 - Must comply with all other applicable rules and laws, including Antidegradation Rule
- Must obtain required:
 - 401 Water Quality Certification
 - Isolated Wetlands Permit
 - Construction Site Storm Water Permit

OAC 3745-42-02(B)(1)(b)

- Prohibited site activities include
 - Construction of buildings or structures directly related to installation of treatment works
 - Construction of tankage and other equipment to store, process, treat or test wastewater
 - Construction of structure or building to convey sewage to disposal system

OAC 3745-42-02(B)(1)(c)

- What can be done before a PTI is issued
- Site activities *not* directly related to installation of treatment works

WHAT MUST A PTI APPLICATION CONTAIN?

PTI Webpage

<http://www.epa.state.oh.us/dsw/pti/index.aspx>

- **Forms**
- **OAC 3745-42 and ORC 6111**
- **PTI Tracking**

PTI Requirements

- Found in OAC 3745-42-03
- Application package
 - Two sets forms (Form A and Form B6)
 - Four sets detail plans
 - Engineering Report
 - Fee check
 - POTW letter

PTI Requirements Include:

- Detail plans must be stamped, hand signed, hand dated by licensed Ohio P.E.
- Minimum detail plan size is 11 x 17 inches
- Project identification information, vicinity map and site map
- Engineering Report

Common Omissions

- Treatability information (“jar tests”)
- Ohio P. E. original stamp, signature, hand date
- Detail plans cover sheet with project info, vicinity map, site plan
- PID, plan view, profile/elevation view
- Equipment dimensions and specifications

Common Mistakes

- Application forms original signatures
- Forms signatures don't meet rule requirements
- Construction schedule
- Can't tell what PE stamp covers
- Detail plans won't make good PDFs
- Confidential/Trade Secret statements

Voice of Experience

- **Purchasing a treatment system before testing the water is like buying a car without turning it on and driving it**
- **When buying a treatment system, make sure the company has a licensed Ohio P.E. on staff/retainer**

Voice of Experience

- **If hiring an Ohio P.E., ask them if they have experience completing industrial wastewater treatment system PTI applications**
- **Industrial waste treatment ≠ septic systems**
- **Industrial waste treatment ≠ sewer extensions**
- **Engineering Report**

WHAT IS NEORSD'S ROLE IN THE PTI APPROVAL PROCESS?

Program “Approval” Letter

- Required by OAC 3745-42-03(I)(1)
- Check box on B6 to include
- PTI application not complete without it
- 180 day processing clock starts when PTI application is received and accepted as administratively complete

Program “Approval” Letter

- Can submit PTI applications to NEORSD and Ohio EPA concurrently
- NEORSD and Ohio EPA can discuss contents
- PTI will not be finalized without letter

HOW DOES OHIO EPA REVIEW AND PROCESS THE PTI APPLICATION?

PTI Review Process

- Industry submits copy to NEORSD (POTW)
- Submit with fee to Ohio EPA NEDO
- NEDO administrative review
 - Necessary forms (A and B6) and plans
 - Fee check correct
 - PTI number assigned

PTI Review Process

- Technical review
 - Deficiencies with requirements in OAC 3745-42-03
 - Technical review questions and comments
 - Prepare summary report, including any special conditions
 - Determine standard conditions
- Review by manager / licensed Ohio P.E.

Ohio EPA Permit-to-Install:

ORC 6111.45 Plans for the disposal of the waste to be submitted to director of environmental protection.

In granting an approval, the agency may stipulate modifications, conditions, and rules that the public health and welfare may require. Any action taken by the director shall be a matter of public record and shall be entered in the director's journal. Each period of thirty days that a violation of this section continues, after a conviction of the violation, constitutes a separate offense.

PTI Review Process

- NEDO makes recommendation for approval (or denial)
- NEDO sends package to Ohio EPA Central Office with recommendation
- Approvals or denials are actions of the Director
- Final processing, approval (denial) issued by Central Office

Director's action

- Not antidegradation: Recommendation for approval is final (appealable) action of the Director
- Antidegradation: Director's action dependent on related NPDES permit action
- Recommendation for denial is proposed action of the Director
- All are public noticed

<http://www.epa.state.oh.us/Actions.aspx>

Approved PTI Documents

- Copy of PTI Approval and approved detail plans sent to:
 1. Applicant
 2. Applicant's Engineer (Form A "application/plans prepared by")
 3. NEORSD
 4. Copy kept by Ohio EPA to make PDF

PTI review time?

- Typically initial review within 30 days
- Total review and approval time depends on quality of application
- **Allow enough time between submittal and construction start**

PTI approval is not indefinite

- Construction must begin within 18 months of PTI approval
- Applicant can request a 12 month extension
 - MUST be received before PTI approval expires, preferably at least 30 days

A PTI is a permit to install

- Treatment system must be installed exactly as approved
- No changes to approved system authorized without Ohio EPA review, PTI approval
- PTI transfer not required for installed equipment

There are no surface water PTOs

- Permits-to-operate
- There are air PTIOs; there are not surface water PTIOs
- Surface water “PTO” is permit based on where the water discharge goes
 - NPDES general permit
 - NPDES individual permit
 - UIC permit
 - Program permit
 - IDP

HOW DO I CHANGE SOMETHING?

PTIs for Modifications

- Change in treatment system configuration
- Adding or removing tanks or capacity
- Significant changes in treatment chemistry
- Changes in wastewater flows or pollutant concentrations

PTIs for Modifications

- No modification procedure for significant changes in treatment system configuration
- Submit a complete PTI application referencing former PTI approval

PTIs for Modifications

- Detail plans clearly show what has changed
- Details / specifications for new equipment only *unless*
 - Treatment system never received PTI approval
 - Treatment system modified without PTI approval

New Flow to an Existing System

- **PTI standard condition:** No liquids, sludges, or toxic or hazardous substances other than those set forth in the approved permit shall be accepted for disposal without the prior written approval of the Ohio Environmental Protection Agency.
- **Generally start with letter exchange**

New Flow to an Existing System

New PTI Required

- New Pollutants
- Requires additional treatment steps and/or equipment
- Wastewater pollutant concentrations significantly higher
- Hydraulic load equals or exceeds design capacity

Documentation w/o new PTI

- No new/additional pollutants
- No additional treatment or equipment
- Pollutant concentrations similar to existing wastewater
- Hydraulic capacity available

PTI Transfer

- Necessary for:
 - Construction hasn't started
 - Currently being installed
 - Currently undergoing a continuing program of modification
 - PTI contains operating conditions
- Form filed at least 60 days before transfer
- Transfer form available on PTI webpage

Administrative Changes / Minor Modifications

- Only for:
 - Correcting typos
 - Updating administrative info, like names and addresses
 - Correcting technical errors that affected conditions
 - Changing a term or condition that does not modify or alter the treatment system
- PTI Administrative Change Letter form available on PTI webpage

Remember:

- **Do not make changes to operations before considering impact on wastewater and wastewater treatment system**

Questions?



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