

**The Ohio EPA  
Division of Surface Water  
Presents:**

What You Need to Know About  
a Permit to Install (PTI)  
Application

January 18, 2006  
Pickerington, Ohio

**First things first.....**

A Brief Overview  
of the  
PTI Program

**Why offer training?**

- To better inform potential applicants
- To take some of the guess-work out of preparing a PTI application
- To reduce the PTI review time needed by Ohio EPA (better applications means fewer comment letters)
- To promote better working relationships

**OEPA Review Timeline & PTI Tracking**

- DSW Goal for PTI review is 60 days or less
- PTI law requires a decision within 180 days
- A new PTI tracking database for Ohio EPA internal use will soon be implemented, which will allow PTI's to be tracked state wide, in real time.

**Today's Main Topics:**

- I. PTI Survey Results
- II. Permit to Install (PTI) Applicability
- III. PTI Application (forms, detailed plans and supplemental information)
- IV. Guidance Documents
- V. DSW Program Updates
- VI. District Office Presentation & Closing Remarks

**PTI Survey Results**

Online Tracking/Electronic Forms

**Q: Will we have the ability to totally transmit the information and plans electronically and have the ability to check status of their PTI online?**

**A:** Ohio EPA is currently evaluating electronic submittal as a means to submit future PTI's. However, more research and work is still needed before an electronic submittal process can be implemented. The ability to check a PTI's status online is something Ohio EPA envisions for the future. Tracking database sets up the ability to place certain permit information online.

## PTI Survey Results



### PTI Design Issues

**Q:** Can Ohio EPA establish mandatory preliminary design meetings with Ohio EPA staff to determine if there are any problems prior to design completion and submittal for PTI's?

**A:** In cases where an applicant is unsure of design requirements or when a project may be controversial or difficult to implement, Ohio EPA recommends that the applicant schedule such a meeting with the appropriate district office. However, making a preliminary design meeting mandatory could add unnecessary costs and time to "typical" projects, such as sanitary sewer extensions. The need for this type of meeting is best evaluated on a case-by-case basis.

## II. PTI Applicability



- Why do I need a PTI?
- When do I need a PTI?

## Why do I need a PTI?



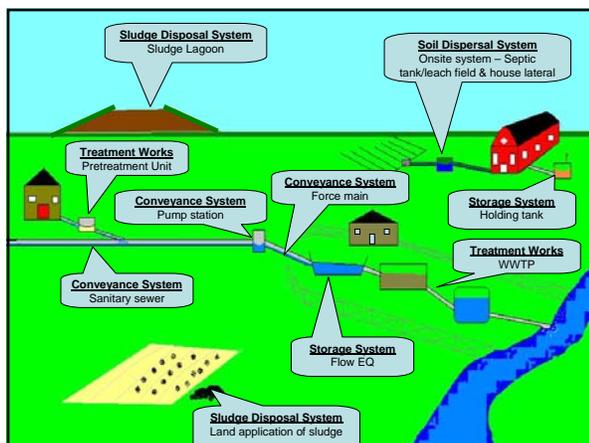
- Ohio Revised Code 6111.
  - 6111.03
  - 6111.44
  - 6111.45
- Ohio Administrative Code Chapter 3745-42

## When do I need a PTI?



A PTI is required for:

- Conveyance Systems
- Treatment Works
- Storage Systems (Holding Tanks & Flow Equalization Systems)
- Sludge Disposal Systems
- Septage Receiving Systems
- Soil Dispersal Systems (Leach Fields, Drip Irrigation Systems, Constructed Wetlands & Sand Mounds)



## PTI Applicability – When a PTI is NOT required.



- A PTI is typically not required for the following:
  - A house lateral serving one residential dwelling
  - Replacement of like-kind equipment
  - Storm Sewers
- Please contact your district office for site specific questions.







Supplement to Form A

1. **Signage/Emergency Info:**

- Where will signage be posted at the site that identifies the nature of the waste stored?
- Who will be contacted in case of a spill?
- Emergency Contact Phone number: ( ) - ( ) - ( )

2. **PTM Receiving Worker:**

3. **Hauling Schedule:**

- Hauler:
- Annual Cost:
- Expected Pumping Frequency:

4. **Submittals:**

This application must include the following unless otherwise directed by the Title 59A district office:

- Four copies of the detailed plans including site plan, vicinity map, and detailed drawings of the project.
- One copy from the P.E. or P.E. applicant to accept the waste.
- Copy of the hauling contract.
- Copy of the contract between the hauler and the treatment/disposal facility.
- Two copies of the specifications.
- Two copies of this application including Form A and the appropriate B form(s).
- One check payable to "Treasury, State of Ohio".

5. **The foregoing data is a true statement of facts pertaining to this proposed on-site storage system.**

Date: \_\_\_\_\_ Signed: \_\_\_\_\_ Here Prepared By: \_\_\_\_\_ P.E.

EM/Rev. 07/05 88 (1888)

**Emergency Information**

**Who is the hauler?**

**Who receives the waste?**

**PE Signature Required**

**Please make sure that all the appropriate boxes are checked.**

## PTI Application – Detailed Plans

- Sanitary Sewer Extensions
- WWTP's
- Onsite Wastewater Treatment Systems
- Holding Tanks

### "The Highlights" Requirements for Detailed Plans When Designing A Sanitary Sewer Extension

- Detailed plans must be signed, stamped and dated by a P.E.
- A PTI Application must include four copies of the detailed plans.
- Detailed plans for sanitary sewers must include:
  - A Location Map
  - A Sewer Index Map
  - Cross Sections of Piping and any Appurtenant Bedding Material
  - A Site Plan
  - Plan and Profile Details for Each Sewer, Manhole & Lift Station
  - Manhole Locations
  - Location and Method of Stream Crossings
  - Sewer Authority Signature on Title Sheet

### "The Highlights" Requirements for Detailed Plans When Designing A Wastewater Treatment Plant

- Detailed plans must be signed, stamped and dated by a P.E.
- A PTI Application must include four copies of the detailed plans.
- Detailed plans for a wastewater treatment plant must include:
  - A Location Map
  - A Site Plan
  - Plan and Profile Details for Each Unit Process
  - A Hydraulic profile
  - The Ultimate Discharge Location
  - The Ultimate Location for Sludge Disposal
  - Dimensions and Elevations of All Structures

### "The Highlights" Requirements for Detailed Plans When Designing An Onsite Wastewater Treatment System

- Detailed plans must be signed, stamped and dated by a P.E.
- A PTI Application must include four copies of the detailed plans.
- Detailed plans for an onsite wastewater treatment system must include:
  - A Location Map
  - A Site Plan Showing Site Specific Soils & Contours
  - Plan & Profile Views of Each Unit Process
  - A Hydraulic profile
  - Set Aside Areas and Proper Setbacks
  - Cross Section of any Dispersal Piping & Appurtenant Bedding Material

### "The Highlights" Requirements for Detailed Plans When Designing A Holding Tank

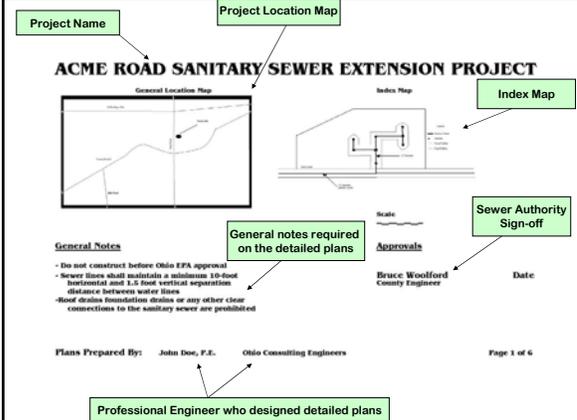
- Detailed plans must be signed, stamped and dated by a P.E.
- A PTI Application must include four copies of the detailed plans.
- Detailed plans for a holding tank must include:
  - A Location Map
  - A Site Plan
  - Plan and Profile Details
  - High water/audio-visual alarm system
  - A Hydraulic profile (on a case-by-case basis)
  - Dimensions and Elevations of All Structures
  - Material specifications for the tank
  - Proper Setbacks



## Detailed Plans

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### An Brief Example



**Project Name** → ACME ROAD SANITARY SEWER EXTENSION PROJECT

**Project Location Map** → General Location Map

**Index Map** → Index Map

**General notes required on the detailed plans** → General Notes

**Approvals** → Approvals

**Sewer Authority Sign-off** → Sewer Authority Sign-off

**Professional Engineer who designed detailed plans** → Plans Prepared By: John Doe, P.E., Ohio Consulting Engineers

**General Notes:**

- Do not construct before Ohio EPA approval
- Sewer lines shall maintain a minimum 16-foot horizontal and 1.5 foot vertical separation distance between water lines
- Roof drains, foundation drains or any other clear connections to the sanitary sewer are prohibited

Scale: \_\_\_\_\_

Approvals: Bruce Woodford, County Engineer, Date: \_\_\_\_\_

Page 1 of 6



## Supplemental Information Requirements

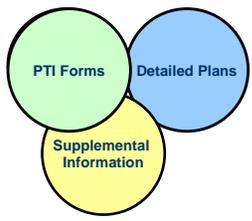
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Besides the “correct forms”, the “proper preparation of the detailed plans” and the appropriate fees, the following supplemental information may be required:

- Engineering Reports
- O&M Manuals
- Social Economic Justification Report
- Hydro-geologic Site Investigation Report
- Confirmation letter from local sewer authority on sewer availability

## The Big Picture: Mistakes Carry Over!!

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PTI Forms, Detailed Plans, Supplemental Information

## Time for Lunch!

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See you in 1 hour...



## Part IV. Guidance Documents

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## Guidance Documents



Searching for answers.....

- Sanitary Sewers
- Onsite Wastewater Treatment Systems

## Guidance Documents Continued...



### The "Greenbook"

WWTP < 100,000 gpd

Sewage: Collection, Treatment & Disposal Where Public Sewers Are Not Available (Green Book) is available on Ohio EPA's website at the following web link:

<http://www.epa.state.oh.us/dsw/guidance/guidance.html>

## Guidance Documents Continued.



### "Ten States Standards"

WWTP > 100,000 gpd

**Recommended Standards for Wastewater Facilities** (2004 ed.), also known as **10 State Standards** publication is available through the Health Education Services Website at: <http://www.hes.org/>.

## Guidance Documents Continued...



- Sanitary Sewers
  - Pipe Material Specifications
  - Pipe Installation Specifications
  - Ten State Standards
  - Greenbook

## Guidance Documents Continued...



### Onsite Wastewater Treatment Systems

- Soil and Site Evaluations<sup>1</sup>
- Sand Mounds<sup>1</sup>
- Wetlands
- Leach Fields
- Spray and Drip Irrigation<sup>2</sup>

<sup>1</sup> OSU offers training on this subject.

<sup>2</sup> Streamkey has offered training on this subject.

## Guidance Documents Continued...



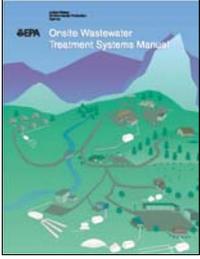
### OSU Guidance on Soil and Site Evaluations:

- Soil and Site Evaluation for Onsite Wastewater Treatment  
Bulletin 905  
Web Link: <http://ohioline.osu.edu/b905/>
- Suitability of Ohio Soils for Treating Wastewater  
Bulletin 896  
Web Link: <http://ohioline.osu.edu/b896/>



## Guidance Documents Continued...

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**Document:** EPA/625/R-00/008

**Web Link:** [www.epa.gov](http://www.epa.gov)

ohioline.ig.ohio-state.edu -- your Link to Information, News, and Education



## Bulletin

Extension

**OSU Mound System Guidance:**

- Mound System: Pressure Distribution of Wastewater Design and Construction in Ohio  
Bulletin 829  
<http://ohioline.osu.edu/b829/>
- Mound Systems for On-site Wastewater Treatment Siting, Design and Construction in Ohio  
Bulletin 813  
<http://ohioline.osu.edu/b813/>



## Guidance Documents Continued...

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### USEPA's Constructed Wetland Guidance

**Web Link:** <http://www.epa.gov/owow/wetlands/pdf/sub.pdf>

United States Environmental Protection Agency      Office of Water (4202)

EPA 822-R-01-008  
June 1999



**Subsurface Flow Constructed Wetlands For WasteWater Treatment**

A Technology Assessment

ohioline.ig.ohio-state.edu -- your Link to Information, News, and Education



## Bulletin

Extension

**OSU Guidance on Spray and Drip Irrigation:**

- Reuse Of Reclaimed Wastewater Through Irrigation For Ohio Communities  
Bulletin 860  
Web Link: <http://ohioline.osu.edu/b860/>



## Part V. DSW Program Updates

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- PTI Forms
- DSW Website
- PTI Rules



## PTI Forms Update

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- Check our website for new forms
  - New Form B8, for holding tanks (in part due to new PTI rules under OAC 3745-42)
  - Updates of existing Forms A, B1 & B2



## DSW Website Update

- The DSW website is being designed to better guide applicants. It will include:
  - A quick walk through of how to obtain a PTI;
  - A list of common mistakes; and
  - Contacts for all districts and central office.
- It will also include:
  - A calendar of events, including conferences, training sessions, rules' comment period, etc.;
  - A "notification request" for email updates of changes to PTI program; and
  - In the future, Ohio EPA guidance documents.



## PTI Rules Update

- **Effective Rules**  
New and amended rules under OAC 3745-42 for PTI application requirements, sand filters, holding tanks, general permits, etc., will be effective December 1, 2005.
- **Draft Rules**  
The following draft rule packages are "under construction". Ohio EPA will request input from the general public, though an "interested party review period" prior to proposing any rule packages for filing with the Joint Committee on Agency Rule Review (JCARR).
  - Requirements for design flows w/ BOD loading
  - Requirements for campgrounds
  - Requirements for fats, oils & greases exterior interceptors
  - Requirements for Onsite Wastewater Treatment & Dispersal Systems



## PTI Program Update

- Division of Surface Water
- Agency



## Web Links

Some web links of interest:

State of Ohio: <http://www.ohio.gov/>

Ohio EPA: <http://www.epa.state.oh.us/>

DSW Rules & Laws: <http://www.epa.state.oh.us/dsw/rules/index.html>

DSW PTI Web Link: <http://www.epa.state.oh.us/dsw/pti/index.html>

JCARR: <http://www.jcarr.state.oh.us/>

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## Questions or Comments for OEPA Central Office????



Next.....



## Part VI. District Office Presentation & Closing Remarks



## PTI Rules: Holding Tanks



Ohio Administrative Code 3745-42-11

- Sanitary sewers not available at the facility but are currently being constructed or plans have been approved
- Existing Facility's on-lot system is failing and causing nuisance
- Existing Facility's on-lot has un-permitted discharge to waters
- Use holding tank prior to shipping or hauling sewage off-site

## PTI Rules: Holding Tanks



Exemptions:

- Tanks regulated by OAC 3745-55-(90-99) or 3745-66-(90-101)
- Underground storage tanks regulated by OAC 1301:7-9-06
- Portable toilets & vault privies w/ no water supply
- Portable Units for storage of sewage that are dropped off
- Tanks used for 1 occurrence of less than 20 consecutive days
- Tanks used to store less than 25 gallons per day

## PTI Rules: Holding Tanks



Holding Tanks also discuss.....

- Design of holding tanks for sewage or industrial waste
- Secondary containment
- Record keeping
- Decommissioning requirements