



## Permit-to-Install/Plan Approval Application Instructions

A permit-to-install (PTI) from the Director of the Ohio Environmental Protection Agency (Ohio EPA) is required for new or modified sources of pollution to waters of the state of Ohio. An application cannot be considered complete unless all applicable questions are answered and the required information submitted. An application shall include plans for the storage, treatment or disposal system and issuance of the PTI shall constitute approval of those plans, in accordance with the Ohio Revised Code (ORC) Chapter 6111, Paragraphs 44 and 45.

### The Application Form

This application form contains four parts. Form A must always be submitted, along with the most appropriate of the B form(s), if applicable appropriate C form(s), and if applicable the antidegradation addendum. There are nine B forms, see the list on page 3 of Form A. For some projects, more than one B form may be needed. For instance, if the installation of a new wastewater treatment plant with pump stations and sewers is proposed as one project, then Form A plus Forms B1 and B4 would be submitted to Ohio EPA. If none of the B forms are appropriate for your proposal, attach a description of your project to Form A, including the types of information asked for on the B form most similar to your project type.

### B Forms

The nine B forms cover the projects that Ohio EPA's Division of Surface Water and Division of Environmental and Financial Assistance review most frequently. Following is a brief explanation of each B form:

#### Form B1:

Submit Form B1 for any proposals that include construction of sewers. Any type of sewer proposal (gravity sewers, force mains or pressure sewers) should include this form. Any pump station proposal (on the collection system) shall also submit the attachment to this form.

#### Form B2:

Submit Form B2 for any onsite sewage treatment systems such as septic tanks with mound, drip distribution or leach field systems that will not discharge to surface waters. Any onsite sewage treatment system that may receive any quantity of fluid from any industrial or commercial process other than strictly sanitary waste (whether through sinks, floor drains or other routes) is defined as a Class V injection well under rule 3745-34-04(E) of the Ohio Administrative Code (OAC). If fluids other than strictly sanitary wastes may enter a Class V injection well, a demonstration of the absence of any threat or danger to an underground source of drinking water is required to be made through a Class V permit as stated in OAC 3745-34-13(B). If the mound, drip distribution or leach field system receives fluids other than strictly sanitary wastes, contact Ohio EPA's Division of Drinking and Ground Waters' Underground Injection Control Unit at (614) 644-2752.

#### Form B3:

Submit Form B3 for any wastewater treatment facility construction where the system is sized to treat an average flow of less than 100,000 gallons per day. Any PTI application for a new facility of that size, or any upgrade of any existing facility of that size (such as addition of a clarifier) should include this form. Sections 1 through 8 and 28 through 32 should always be completed, but only those sections that pertain to the project being proposed need to be completed for Sections 9 through 27. If a lagoon is proposed as the main source of treatment, Form B4 should be submitted even for facilities less than 100,000 gpd instead of this form.

#### Form B4:

Submit Form B4 for any wastewater treatment facility construction where the system is sized to treat an average flow of 100,000 gallons per day or greater. Any PTI application for a new facility of that size, or any upgrade of any existing facility of that size (such as addition of a clarifier) should include this form. The first two pages must always be submitted for this form, but the eight attachments are project specific and only those that are pertinent need to be submitted. This form is also needed for any project where the main treatment process is a pond/lagoon, regardless of the size of the facility. If only tertiary/advanced treatment is provided by a pond/lagoon, then Form B3 can be used for facilities less than 100,000 gallons per day.

## Permit-to-Install/Plan Approval Application Instructions

### Form B5:

Submit Form B5 for applications for projects for industrial wastewater treatment facilities that discharge directly to waters of the state (not to sewers that carry the wastewater to other treatment facilities).

### Form B6:

Submit Form B6 for applications for projects for industrial wastewater treatment facilities that discharge to a publicly owned treatment works (for example, to sanitary sewers, not directly to a stream).

### Form B7:

Submit Form B7 for any application for installation of treatment facilities for the purpose of ground water remediation (typically related to petroleum storage). It applies to both permanent and mobile treatment works.

Under certain conditions, ground water remediation may warrant the subsurface injection of fluids. Examples where injection through Class V wells may be appropriate include; in situ bio-remediation; pumping and treating re-injection; contaminant plume control and air sparging. It is possible to apply for and receive an exemption from formal permitting procedures for Class V 5X26 aquifer remediation projects. Rather than completing Class V permit application, a work plan should be submitted to the Division of Drinking and Ground Waters' Underground Injection Control (UIC) Unit. For more information, contact the UIC unit at (614) 644-2752.

### Form B8:

Submit Form B8 for any application proposing a holding tank. Refer to OAC 3745-42-11 for requirements and applicability.

### **Form B9: Sedimentation Ponds/Impoundments – COMING SOON**

*Form B9 must be included in any application for approval of sedimentation ponds/impoundments for landfills, mining operations, etc.*

### Form B12:

Form B12 should be used for any onsite sewage treatment system site evaluation. The form typically will be submitted prior to the submittal of a PTI application for a proposed onsite sewage treatment system.

### Form B13:

Form B13 should be used for any soil evaluation as part of an onsite sewage treatment system design. The form should be submitted as part of the PTI application package for a proposed onsite sewage treatment system.

## C Forms

The three C forms cover management plans required per Ohio Administrative Code 3745-42. Following is a brief explanation of each C form:

### Form C1:

Form C1 must be included in any application for approval of land application of waste other than animal manure/wastewater and any sludge management plan application. If the application for installation of a wastewater treatment system where the effluent is land applied contains the land application management proposal (and therefore this form) along with the detail plans for construction (and any appropriate B form(s), such as B3), the management plan approval will be included in the PTI approval, so no additional fee is required. If the proposal for land application is proposed individually, the \$100 application fee and \$100 plan review fee apply.

### Form C2:

Form C2 must be included in any application for approval of land application of treated sewage. If the application for installation of a wastewater treatment system where the effluent is land applied contains the land application management proposal (and therefore this form) along with the detail plans for construction (and any appropriate B form(s), such as B3), the management plan approval will be included in the PTI approval, so no additional fee is required. If the proposal for land application is proposed individually, the \$100 application fee and \$100 plan review fee apply.

### Form C3:

Form C3 must be included in any application for approval of a holding tank management plan. Refer to Ohio Administrative Code 3745-42-11 for applicability.

# Permit-to-Install/Plan Approval Application Instructions

## Antidegradation Addendum Form

The antidegradation addendum form must be included in any application where the project is subject to the Antidegradation Rule (Ohio Administrative Code 3745-1-05). Generally a project that will result in increased pollutant loadings to waters of the state is subject to antidegradation requirements.

### Stream Evaluation Addendum:

The stream evaluation addendum must be included in any application when there are proposed stream crossing(s) and/or installations parallel to a stream bank within 150 feet. A total score will be calculated for the proposed project to determine the potential water quality impact. To determine what appropriate measures must be taken based upon total impact, see the Stream Evaluation Addendum Worksheet that outlines recommended actions.

## Application Submittal

The completed applications must be submitted to the Ohio EPA District Office having jurisdiction over the county where the facility is to be located unless Water Pollution Control Loan Funds are requested for construction (in which case the application must be submitted to the Division of Environmental and Financial Assistance (DEFA)) or the application is for a mobile unit that will be located in more than one district area. The fee, two copies of the application form and four copies of the detail plans, engineering reports and any other attachments should be submitted unless the district office (or DEFA) has instructed you otherwise (for instance, some county health departments request copies of certain types of plans, so extra copies of the plans may be needed). Ohio EPA offices and their jurisdictions are:

### Central District Office:

50 West Town Street, Suite 700, P.O. Box 1049,  
Columbus, Ohio 43216-1049  
*Counties: Delaware, Fairfield, Fayette, Franklin, Knox, Licking, Madison, Morrow, Pickaway and Union.*

### Northeast District Office:

2110 Aurora Road, Twinsburg, Ohio 44087  
*Counties: Ashtabula, Carroll, Columbiana, Cuyahoga, Geauga, Holmes, Lake, Lorain, Mahoning, Medina, Portage, Stark, Summit, Trumbull, and Wayne.*

### Northwest District Office:

347 North Dunbridge Road, Bowling Green, Ohio 43402  
*Counties: Allen, Ashland, Auglaize, Crawford, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Lucas, Marion, Mercer, Ottawa, Paulding, Putnam, Richland, Sandusky, Seneca, Van Wert, Williams, Wood and Wyandot.*

### Southeast District Office:

2195 Front Street, Logan, Ohio 43138  
*Counties: Adams, Athens, Belmont, Coshocton, Gallia, Guernsey, Harrison, Hocking, Jackson, Jefferson, Lawrence, Meigs, Monroe, Morgan, Muskingum, Noble, Perry, Pike, Ross, Scioto, Tuscarawas, Vinton and Washington.*

### Southwest District Office:

401 East Fifth Street, Dayton, Ohio 45402  
*Counties: Brown, Butler, Champaign, Clark, Clermont, Clinton, Darke, Greene, Hamilton, Highland, Logan, Miami, Montgomery, Preble, Shelby and Warren.*

### Division of Environmental & Financial Assistance

**(DEFA):** 50 West Town Street, Suite 700, P.O. Box 1049,  
Columbus, Ohio 43216-1049  
*All counties, but only if WPCLF funds have been requested to fund the construction.*

### Division of Surface Water – Central Office (DSW):

50 West Town Street, Suite 700, P.O. Box 1049,  
Columbus, Ohio 43216-1049  
*All counties – for mobile units or other projects where statewide approval is necessary.*

## Signatures

This application must be signed in accordance with the Ohio Administrative Code, Chapter 3745, Section 42, Paragraph 03 or it can not be accepted. The official applicant signature must be placed on Page 3 of Form A in the last box. The code mandates that a PTI application shall be signed:

- 1) in the case of a corporation, by a principal executive officer of at least the level of vice-president, or his duly authorized representative (in writing), if such representative is responsible for the overall operation of the facility;
- 2) in the case of a partnership, by a general partner;
- 3) in the case of sole proprietorship, by the proprietor; or
- 4) in the case of a municipal, state, federal or other government facility, by the principal executive officer, the highest ranking elected official or other duly authorized employee.

Applications for plan approvals for land application of sludge shall be signed by the president, vice president or highest ranking corporate officer with offices located in the state of Ohio, or the owner of the entity planning to apply the material. In the case of a publicly owned treatment facility, the application shall be signed by the highest ranking public official of the governing body from which the material is generated (the city mayor in most cases). There is no provision for duly authorized representatives to sign sludge plan approval applications.

## Permit-to-Install/Plan Approval Application Instructions

The B forms must be signed by the person who prepares the detailed plans and/or the application. Typically, this would be the professional engineer for the project. In most cases the professional engineer should not be the applicant because they are not legally responsible for the operation of the facility.

The C forms must be signed by the person who prepares the detailed plans and/or the application. Typically, this would be the professional engineer for the project. In most cases the professional engineer should not be the applicant because they are not legally responsible for the operation of the facility.

### Fees

The Ohio Revised Code Chapter 3745 requires an application fee of \$100. It also requires a plan review fee of \$100 and 0.65 percent of the estimated project construction cost for permits to install. The fee must be submitted in the form of a check made payable to "Treasurer, State of Ohio." The total maximum fee is \$15,100. The application review fees are non-refundable and due at the time of application.

### Other Attachments to the Application

Detail plans (except pump stations and sewer extensions) should be accompanied by an engineering report, and where applicable, engineering specifications. The application for installation of any impoundment, unless it is concrete lined, shall include a hydrogeologic site investigation report that includes the following as a minimum:

- 1) well logs and material characteristics;
- 2) definition of the uppermost aquifer;
- 3) definition of geology/hydrogeology, and major aquifer(s) for water supply in the area of the proposed facility;
- 4) definition of depth to bedrock;
- 5) definition of saturated zone (high seasonal water table, perched zones, etc.), including interconnections and relationships between zones with surface dischargers (streams, seeps, springs, etc.);
- 6) data characterizing soil materials to be utilized in construction (if applicable); and
- 7) notation of all sources of drinking water, including wells and springs, within 1,000 feet of the limits of waste placement.

### General Instructions for All Forms

For all parts of the forms the following apply.

- Except for the signatures, all entries in this application should be printed or typed.
- Where units are not provided, **please** indicate units used.
- Place a check mark or an x in the appropriate spaces or boxes prior to yes, no or not applicable (N/A) in response to questions.
- The signature on the B & C forms should match the *Application/Plans Prepared By* space in the first box of the B & C form.
- Attach additional sheets wherever there is not enough room provided on the form.

# Permit-to-Install/Plan Approval Application Instructions

## Form A - Detailed Instructions

- Item 1** Enter the name of the project, being as descriptive as possible.
- Item 2** Enter the name, address and phone number of the legal applicant for the permit. Where applicable, the name should be that of the company, partnership or municipality (not the individual - they should be listed as the contact). That name will appear on the approval letter.
- Item 3** Name, address, etc. of the person preparing the plans and/or application. Where applicable, the name should be that of the company or partnership. The individual person responsible for the project preparation should be listed as the contact person.
- Item 4** If any invoices should be sent to a different address than that of the applicant, enter the appropriate name, phone number and address. If the invoice is to be sent to the applicant, leave this area blank or enter **N/A**.
- Item 5** If the system to be installed will ultimately be owned by someone other than the applicant, enter the name, phone number and address of the ultimate owner. If the system will not change ownership, leave this area blank or enter **N/A**.
- Item 6** If the project location has a mailing address, enter that into the project location. If it does not, enter a descriptive location (such as the SE corner of the intersection of North & South Roads).
- Item 7** Briefly state what the proposal is. If it is an expansion or modification of an existing system, include an overview of what is proposed.
- Item 8** If more than one acre of land will be disturbed during construction of this project, check **Yes**. If less than one acre of land will be disturbed, check **No**. If **Yes**, enter the dates that the Notice of Intent (NOI) for coverage under the general construction storm water permit was submitted to Ohio EPA and the date coverage was granted. If the NOI has not yet been submitted, leave the date areas blank. For more information about the construction storm water NPDES permit, go to: <http://www.epa.state.oh.us/dsw/storm/index.html>.
- Item 9** Will any wetlands be disturbed during the construction of the project? If so, proof of a 401/404 must be provided which may include the permit number.
- Item 10** a. If you have discussed this project with the district office and it was determined that the best method of obtaining approval for the system was to submit an application to cover more than one aspect of the project (for example, both air pollution sources and wastewater sources in one permit), check **Yes**. If the project is specific to water pollution control, check **No**.  
b. Check **Yes** if an application for a Class V injection well permit has been submitted to Ohio EPA's Division of Drinking and Ground Waters and enter the date that it was submitted. If no application has been submitted, check **No**.
- Item 11** Will the project connect into a collection/treatment system with an existing NPDES permit? If **Yes**, check and fill in the federal (OH#) and state (for example, 4PR00215) permit numbers. If no NPDES permit has been obtained, check **No**. If a permit has been applied for, but not yet obtained, check **No**. Please note that for any sewer extension project, the NPDES permit number(s) for the receiving waste water treatment plant/collection system should be entered.  
b. Check the appropriate answer and if **Yes**, enter the effective date of the schedule signed by the Director or the Attorney General's Office.
- Item 12** Does the project form with all 208 planning areas? If marked **Yes**, provide documentation of compliance.
- Item 13** Is the project located within 1,000 feet of an Ohio Wild, Scenic and Recreational River? <http://ohiodnr.com/?TabId=985> provides a link to the Ohio Department of Natural Resources website listing out all the designated rivers in Ohio.
- Item 14** Provide an estimate of the project schedule.
- Item 15** The installation/construction cost should include engineering/design costs. If the operation/maintenance cost is not applicable (such as for sewer extensions), enter **N/A** in the space provided.
- Item 16** Enter the number of copies of each of the items included with the application package. Blanks will be assumed to be zero.
- Item 17** Check which B & C forms are attached. See page 1 of these instructions for a brief explanation of each form.
- Item 18** Enter the installation/construction cost listed in item 14 multiplied by 0.0065 into line c. Add that to the two \$100 fees and enter the total in line d. For land application plan approvals (Form B9 only), enter \$200 in line c.
- Item 19** Is this project subject to the Antidegradation Addendum Rule (OAC 3745-1-05)? If any boxes are checked **Yes**, an antidegradation addendum form must be submitted along with the application package.
- Item 20** Denote the number of copies of each appropriate form that are included with the PTI application packet.
- Item 21** The signature here must be that of the official applicant in accordance with the Ohio Administrative Code, Chapter 3745-42 and must match the name of the applicant in the second box on the first page of the form.

# Permit-to-Install/Plan Approval Application Instructions

## Form B1 Question 3 – Additional Instructions

### **\*Start-up Flows \***

This is existing flow at the project site plus the flow that will be generated when this particular project is completed. The peak hourly flow should be at least 3 times the average daily flow unless the engineer has indicated why.

### **\*The average daily start-up flow\***

This should equal (Start-Up people x gal/cap/d) + Start-Up non-residential flow) and the average daily design flow should and the average daily design flow should adhere to requirements from the Design flow rule, OAC 3745-42-05.

### **\*Design Flows\***

This is all start-up flows that will be generated from this project, plus any flows that will be introduced to the sewer from expected future expansions/projects. If there is no expected development beyond this particular project, this flow will equal the start-up flow. Again, peak hourly flow should be at least 3 times the average daily flow.

### **\*Hydraulic Capacity of Sewer\***

Exactly what it says, but there only needs to be a number in one of the columns. This is the peak flow that the sewer can handle and should be at least as much as the peak design flow. If the peak design flow is at 75% of the sewer capacity, the engineer may want to size a larger pipe if possible.

### **\*Residential Population at \_\_\_gal/home\***

This is the flow that is designed for each home that the sewer will serve if it is in a residential area. 120 gallons/bedroom in accordance w/ OAC 3745-42-05 should be used unless additional information is submitted.

### **\*Residential Population at \_\_\_gal/cap/d\***

This is the flow that is designed for each person that the sewer will serve if it is in a residential area (usually 100gal/cap/d).

### **\*Computer Flow Modeling Results\***

This is flows generated using modeling software. The explanation and data should be provided for justification of usage.

### **\*Non-residential flows Start-Up\***

This is all flows other than residential that will be served by this particular project and sewer.

### **\*Non-residential flows Design\***

This is all start-up non-residential flow plus any non-residential flow from future projects.

### **\*Start-Up Homes\***

This is the total number of homes the sewer is designed to serve if it is being installed in a residential area.

### **\*Start-Up People\***

This is the total number of people the sewer is designed to serve if it is being installed in a residential area.

### **\*Design Home\***

This is the total number of homes the sewer is designed to serve in this particular project plus any residential areas from expected future expansions that will flow through this sewer.

### **\*Design People\***

This is the total number of people the sewer is designed to serve in this particular project plus any residential areas from expected future expansions that will flow through this sewer.

# Permit-to-Install/Plan Approval Application Instructions

## Acronyms

The following acronyms are used throughout the application forms:

<b>ADF</b>	average daily flow
<b>ADDF</b>	average daily design flow
<b>BOD<sub>5</sub></b>	five-day biochemical oxygen demand
<b>CBOD<sub>5</sub></b>	carbonaceous biochemical oxygen demand (five day)
<b>CFM/cfm</b>	cubic feet per minute
<b>CFR</b>	code of federal regulations
<b>DAF</b>	dissolved air flotation
<b>DO</b>	dissolved oxygen
<b>GLUMRB</b>	<i>Recommended Standards for Wastewater Facilities, Great Lakes - Upper Mississippi River</i> Board of State Public Health and Environmental Managers, 2004.
<b>GPD/gpd</b>	gallons per day
<b>GPM/gpm</b>	gallons per minute
<b>HP</b>	horse power
<b>MGD/mgd</b>	million gallons per day
<b>mg/l</b>	milligrams per liter
<b>MLSS</b>	mixed liquor suspended solids (usually in mg/l)
<b>MSL/msl</b>	mean sea level
<b>N/A</b>	not applicable
<b>NPDES</b>	National Pollutant Discharge Elimination System (discharge permit)
<b>PHF</b>	peak hydraulic flow
<b>POTW</b>	publicly owned treatment works
<b>PSI</b>	pounds per square inch
<b>RAS</b>	return activated sludge
<b>RPM</b>	revolutions per minute
<b>SCFM</b>	standard cubic feet per minute
<b>TKN</b>	total kjeldahl nitrogen
<b>TDH</b>	total dynamic head
<b>TSS</b>	total suspended solids
<b>WAS</b>	waste activated sludge
<b>WWTP</b>	wastewater treatment plant

## References

For information to use in preparing the submittals to Ohio EPA, the following are recommended:

*Ohio Administrative Code (OAC) 3745-42-03* – Requirements for applications and engineering plans

*Interim Onsite Sewage Treatment Systems Guidance Document*, Ohio EPA, 2008, Guidance Document No. 4

*Sewage: Collection, Treatment and Disposal Where Public Sewers are not Available*, Ohio EPA, 1993, Policy No. 0400.001 (a.k.a. "the Greenbook")

*Recommended Standards for Wastewater Facilities, Great Lakes-Upper Mississippi River Board (GLUMRB) of State Public Health and Environmental Managers, 2004*, (a.k.a. "Ten States Standards ")

*Small Subsurface Flow Constructed Wetlands with Soil Dispersal Systems*, Ohio EPA, 2007, Guidance Document No. 3

*Drip Distribution Systems*, Ohio EPA, 2008, Guidance Document No. 5

*Mound Systems for On-Site Wastewater Treatment: Siting, Design and Construction in Ohio*, Ohio Cooperative Extension Service, The Ohio State University, Bulletin 813, 2004.

*Suitability of Ohio Soils for Treating Wastewater*, Ohio Cooperative Extension Service, The Ohio State University, Bulletin 896, 2002.

*Soil & Site Evaluation for Onsite Wastewater Treatment*, Ohio Cooperative Extension Service, The Ohio State University, Bulletin 905, 2005.