



Instructions for Completing Ohio EPA Form 2A

Application for a Permit to Discharge Wastewater

Publicly Owned Treatment Works

Overview

This form must be completed by all applicants who check “yes” to Item II-A in Form 1. This application form collects information from operators of publicly owned treatment works (POTWs) that discharge treated effluent to “waters of the State”. In addition to forms 1 and 2A, Form 2S “Ohio EPA Application For Sewage Sludge Use or Disposal” must be submitted by all POTWs.

For purposes of this form, “you” refers to the applicant. “This treatment works”, “your collection system”, and “this treatment plant” refer to the treatment works, collection system and treatment plant for which application information is being submitted. “Treatment works” should be interpreted to include the collection system and the treatment plant. The “entire collection system” refers to all of the collection systems served by the treatment plant.

Definitions

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions that accompany Form 1.

Which Parts of The Form Apply?

Form 2A is presented in a modular format, enabling information collection to be tailored to your treatment works. The form is divided into eight (8) sections. Your application will not be considered complete unless you answer every question on this form and on Form 1. If a particular question does not apply to your treatment works, write “N/A” (meaning “not applicable”) as your answer to that question.

Section I: Outfall Information

A. List all effluent outfalls, e.g. 001, through which sanitary wastewater is discharged. Provide the outfall number (if known), latitude and longitude, discharge point location, and receiving water for each effluent outfall. Indicate how latitude and longitude data was obtained

(e.g. USGS map, GPS). Do not include information on combined sewer overflows (CSO) or collection system/treatment works bypass points in this section.

B. Indicate whether this outfall is an intermittent or seasonal discharge. Discharges from holding ponds, lagoons, etc., may be included as intermittent or seasonal. Do not include discharges from bypass points or combined sewer overflows in your answer. List each month when discharge occurs. List the number of times per year a discharge occurs from this outfall. In addition, note the duration and quantity (in million gallons per day, MGD) of each discharge. If you do not have records of exact months in which such discharges occurred, provide an estimate based on the best available information.

Section II: Treatment Works Information

A. Population

For all the cities, towns, and unincorporated areas served by the treatment works, enter the number of people served by the treatment plant at the time you complete this form. If you do not know the population of each area, then only provide the total population served by this treatment works. If another collection system discharges into your plant, give the name of that collection system and the population it serves.

B. Collection System

B.1. Indicate what type of collection system conveys wastewater to your treatment plant. If you check both of the collection systems indicated on the form, you must also provide an estimate of the percentage (in terms of miles of pipe) of the entire collection system each type represents.

- “Separate sanitary sewer” means a system of pipes that only carries:
 - 1) Domestic wastewater from connections to houses, hotels, nonindustrial office buildings, institutions, or sanitary waste from industrial facilities.

2) Industrial wastewater received through connections to industrial plants or facilities. This consists of water that is used in the manufacturing processes conducted at the facility.

- “Combined storm and sanitary sewer” means a system of pipes that carries a mixture of storm water runoff and sanitary wastewater

B.2. Mark yes if the treatment plant superintendent is also responsible for the entire collection system. Mark no if the collection system is maintained by a separate department under a different superintendent or the treatment plant receives wastewater from more than one collection system. List the name, address, and telephone number of the person in charge of each collection system.

B.3. Enter the total number of lift stations in the separate system and/or the combined storm and sanitary system.

B.4. If your collection system has bypasses or overflows, indicate whether the discharges are:

- at a location specifically constructed to provide hydraulic relief to the collection system, and/or
- unintentional and beyond the reasonable control of the operator

For the bypasses and overflows that are “specifically constructed”, provide the discharge point location, latitude and longitude, receiving water, and type of treatment (settling, swirl concentrator, none, etc.) the wastewater receives before discharging.

A “bypass” is the intentional diversion of wastewater (e.g., through an arrangement of pipes, conduits, gates, and/or valves) from any portion of the treatment works to a discharge point before that wastewater is fully treated. An “overflow” is the unintentional diversion of wastewater from any portion of your treatment works not authorized by your NPDES permit. Bypasses and overflows are prohibited unless the criteria in 40 CFR 122.41 (m) are satisfied.

B.5. List potable water source type (surface water, ground water) for all sources used by the population tributary to the entire collection system. Provide the location and owner of the water supply source(s).

C. Inflow and Infiltration

Estimate, in gallons per day (gpd), the average amount of water that enters the treatment works through inflow and infiltration. Also explain any actions being taken to correct or decrease inflow and infiltration.

- “Inflow” generally refers to storm water that enters the sewer system through direct connections (e.g.

unsealed manhole covers, foundation drains, roof leaders, cellar drains, yard drains, or catch basins).

- “Infiltration” refers to extraneous water that enters the sewer system from the ground. Ground water enters the sewer system through defective pipes, pipe joints, connections, or manhole walls.

D. Flow

D.1. Provide the treatment plant’s current design daily influent flow rate. “Design daily influent flow rate” means the average amount of wastewater flow your plant was designed to receive on a daily basis. Enter the flow number in million gallons per day (MGD). Treatment works with a design flow less than 5 MGD must provide the design influent flow rate to three decimal places. Treatment works that are greater than or equal to 5 MGD must report this to 1 decimal place.

D.2. Enter the annual average daily flow rate, in MGD, that your plant actually treated this year and each of the past two years. Each year’s data must be based on a 12-month time period, with the 12th month of “this year” occurring no more than three months prior to this application submittal.

D.3. Indicate the type of flow monitoring device utilized at the treatment plant.

D.4. Provide the location, e.g. influent, effluent, etc. where the flow rate is recorded.

D.5. Provide information on any expansion to your treatment works currently planned. Include only those improvements that will effect wastewater treatment, effluent quality, or design capacity.

E. Treatment system Description

E.1. and E.2. Provide the approximate year that the treatment plant was constructed. Note the date of the last major modification to the treatment plant. A major modification is considered any construction activity requiring a Permit to Install (PTI).

E.3. List all treatment units used at the treatment plant. Treatment units should be listed, in order, by selecting the applicable code from Table 2A-1. Use “other” if no treatment code corresponds to a treatment unit you list. Provide the manufacturer’s name for each treatment unit. Do not include units for treating sewage sludge.

E.4. If the treatment plant has provisions for the bypassing of untreated or partially treated wastewater, provide the bypass location, station number (if applicable), bypass type (internal or external), and number of times it was used in the last year. Provide information on both wet weather and dry weather bypasses.

E.5. Provide information regarding the presence and use of backup generators or other emergency standby power sources at your plant.

E.6. Attach a line drawing, simple flow diagram, or narrative description to this form that shows how wastewater flows through the treatment plant. Label all discharge points with their station numbers.

F. Treatment Operation

F.1. List the number of employees that work in your collection system and the number of employees that work at the treatment plant (operators, maintenance, etc.). Do not list employees twice. Record the employee in the area where most time is spent.

F.2. Provide the name and certification level for the person in responsible charge of the treatment plant.

F.3. Provide the name and certification level, if known, for the person in responsible charge of each collection system in the treatment works.

F.4. If the treatment works has an operation and maintenance manual, indicate who developed it, the date developed and its last modification.

G. Improvements

If you are required by any Federal, State or Local authority to meet any implementation schedule for the construction, upgrading or operation of the wastewater treatment equipment, identify the condition, affected outfall, description of project and final compliance date.

H. Priority Pollutant Monitoring

POTWs with average daily design flows equal to or greater than 1 MGD must monitor their effluent for priority pollutants listed in 40 CFR 122, Appendix J. POTWs are required to sample for these pollutants a minimum of three times within the 4.5 years prior to the required date of permit application submission. POTWs with an approved pretreatment program are already required to submit this information within their annual reports and therefore are not required to complete this item.

H1. Indicate whether the design flow for your facility is equal to or greater than 1 MGD. If yes, proceed to H2. If no, check N/A in response to H2 and proceed to Section III.

H2. Indicate whether your facility has a pretreatment program approved by Ohio EPA. If yes or N/A, proceed to Section III. If no, please fill out the POTW Priority Pollutant Form and submit it with Form 2A.

- 1) If any analyses were performed by a contract laboratory or consulting firm, check "Yes" and

enter the entity's name, contact information, and which analyses were done. If all analyses were conducted by the permittee, check "No".

- 2) Record the date, time, and location of sample collection for each sampling event. Provide the type of sample (e.g. grab, composite, etc.) for each group of pollutants analyzed.
- 3) Provide a result for each pollutant analysis, utilizing the Data Substitution Codes where appropriate.

Section III: Combined Sewers System Information

A. If the treatment works has a combined sewer system, provide the outfall number, outfall description, latitude, longitude, and outfall receiving water for all combined sewer overflows. Indicate how latitude and longitude data was obtained (e.g. USGS map, GPS).

B. System Evaluation

List any studies that have been performed on the combined sewer system since the last permit application, including inflow/infiltration studies, engineering studies, hydraulic studies, water quality studies, etc..

C. Public Notification Plan

NPDES applicants with CSOs that are located in the Lake Erie Basin are required by 40 CFR 122.21(8)(iii) to submit a Public Notification (PN) Plan with their NPDES application. This plan should be available for public access. Provide the web address for the PN Plan, if applicable. If the PN Plan is not available online, provide instructions on how to access it.

Section IV: Industrial Users Information

All treatment works receiving discharges from industrial users must complete Section IV.

A "categorical industrial user" is an industrial user that is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N, which are technology-based standards developed by EPA setting industry-specific effluent limits. (A list of Industrial Categories subject to Categorical Pretreatment Standards is included in Appendix A.)

A "significant industrial user" is defined in 40 CFR 403.3(t) as an industrial user that:

- is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and

- is any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (excluding sanitary, non-contact cooling and boiler blowdown wastewater); contributes a process waste stream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment works; or is designated as such by the Control Authority as defined in 40 CFR 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the treatment works operation or for violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].

An “industrial user” means any industrial or commercial entity that discharges wastewater that is not domestic wastewater. Domestic wastewater includes wastewater from connections to houses, hotels, nonindustrial office buildings, institutions, or sanitary waste from industrial facilities. The number of “industrial users” is the total number of industrial and commercial users that discharge to the treatment works. For the purposes of completing the application form, please provide information on non-categorical SIUs and categorical industrial users separately.

A. Number of Industrial Users

Provide the number of industrial users, SIUs, and categorical industrial users that discharge to your treatment works.

B. Average Daily Flow From Industrial Users

Provide an estimate of the daily flow of wastewater, in MGD, received from all industrial users, significant industrial users only, and categorical industrial users only.

C. Pretreatment Program

Indicate whether the treatment works has an approved pretreatment program. An “approved pretreatment program” is a program administered by a treatment works that meets the criteria established in 40 CFR 403.8 and 403.9 and that has been approved by Ohio EPA. If the treatment works does not have an approved pretreatment program, note if technically-based local limits are applied.

Section V: Remediation Waste Clean Up Information

Indicate whether the treatment works receives RCRA Waste, RCRA Corrective Action Waste, or other waste from remediation clean-up sites (CERCLA, BUSTR, VAP). Provide type of waste action, waste origin and a description of the waste.

Section VI: Laboratory Contractor Information

Indicate whether any of the laboratory analytical results reported for the effluent quality or toxicity test data are performed by a contract laboratory or consulting firm. Provide the name, telephone number, complete mailing address, and pollutants analyzed for each contract laboratory.

Section VII: Biological Toxicity Test Data

Treatment works meeting one or more of the following criteria must submit the results of whole effluent toxicity testing:

- Treatment works with a design influent flow rate greater than or equal to 1 MGD; or
- Treatment works with an approved pretreatment program (as well as those required to have one); or
- Treatment works otherwise required by the permitting authority to submit the results of whole effluent toxicity testing.

Applicants completing this section must submit the results from a whole effluent toxicity test conducted during the past three years for each outfall discharging effluent to the waters of the state and must follow Ohio EPA testing protocol. An explanation must be provided if data is not submitted with this form.

Minimum Requirements for Toxicity Tests

- 1) A 48 hour screening test for acute toxicity in 100 percent effluent using two test organisms, Ceriodaphnia dubia and Fathead Minnows (Pimephales promelas), will be the minimum requirement for whole effluent toxicity testing for NPDES permit applications.
- 2) If the results of the screening test show greater than 50 percent mortality for either test organism in 100 percent effluent, an additional definitive acute toxicity test using the same two test organisms shall be conducted to determine the LC50 of the effluent.
- 3) At the permittee’s option, the screening test may be omitted and a definitive test used to fulfill the application requirement, providing the two test organisms are used.
- 4) Chronic toxicity testing will be required under the following conditions:
 - a) If review of the acute toxicity data submitted with the application indicates that there may be a need for chronic toxicity data, Ohio EPA

will request that chronic toxicity data be submitted prior to the public notice of a draft permit.

- b) If Ohio EPA notifies the permittee in writing prior to submittal of the application that chronic toxicity data is necessary to fulfill the application requirement.

- 5) At the permittee's option, the results of toxicity tests conducted by Ohio EPA may be submitted to fulfill the application requirements as long as the tests were conducted during the past three years and meet the minimum requirements listed above.

Section VIII: Certification

Note: All permit applications must be signed and certified in accordance with 40 CFR Part 122.22 and Ohio Administrative Code, Chapter 3745-33-03.

An application submitted by a municipality, State, Federal, or other public agency must be signed by either a principal executive officer or ranking elected official. A principal executive officer of a Federal agency includes:

- (1) The chief executive officer of the agency, or
- (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

Appendix A: Industrial Categories Subject to National Categorical Pretreatment Standards

Industrial Categories With Pretreatment Standards in Effect:

Aluminum Forming
Asbestos Manufacturing
Battery Manufacturing
Builder's Paper and Board Mills
Carbon Black Manufacturing
Coil Coating
Copper Forming
Electrical and Electronic Components
Electroplating
Feedlots
Ferroalloy Manufacturing
Fertilizer Manufacturing
Glass Manufacturing
Grain Mills Manufacturing
Ink Formulating
Inorganic Chemicals
Iron and Steel Manufacturing
Leather Tanning and Finishing
Metal Finishing
Metal Molding and Casting
Nonferrous Metals Forming and Metal Powders
Nonferrous Metals Manufacturing
Organic Chemicals, Plastics and Synthetic Fibers
Paint Formulating
Paving and Roofing
Pesticide Manufacturing
Petroleum Refining
Pharmaceutical Manufacturing
Porcelain Enameling
Pulp, Paper and Paperboard
Rubber Manufacturing
Soap and Detergents Manufacturing
Steam Electric Power Generating
Sugar Processing
Timber Products Manufacturing

Industrial Categories With Effluent Guidelines Currently Under Development (Proposed and Final Action Dates)

Pulp, Paper, and Paperboard (12/17/93-TBD)
Pesticide Formulating, Packaging, and Repackaging (4/14/94-8/95)
Centralized Waste Treatment (12/15/94-9/96)
Pharmaceutical Manufacturing (2/95-8/96)
Metal Products and Machinery, Phase I (3/95-9/96)
Industrial Laundries (12/96-12/98)
Transportation Equipment Cleaning (12/96-12/98)
Landfills and Incinerators (3/97-3/99)
Metal Products and Machinery, Phase II (12/97-12/99)

Table 2A-1 Treatment Handling Codes		
Preliminary or Primary Treatment	Influent Pumping	01
	Bar Screen	02
	Grit Removal	03
	Comminution	04
	Scum Removal	05
	Flow Equalization	06
	Primary Sedimentation	08
	Imhoff Tank	09
	Preaeration	07
	Other Preliminary or Primary Treatment	10
Biological Treatment	Stabilization Pond	11
	Aerated Lagoon	12
	Total Containment Pond	13
	Aquaculture/Wetland/Marsh System	14
	Trickling Filter – Rock Media	15
	Trickling Filter – Plastic Media	16
	Trickling Filter – Redwood Slats	17
	Trickling Filter – Other Media	18
	Rotating Biological Contactor (RBC)	20
	Sequencing Batch Reactor	D7
	Activated Sludge - Conventional	22
	Activated Sludge – High Rate	23
	Activated Sludge – Contact Stabilization	24
	Activated Sludge – Pure Oxygen	26
	Activated Sludge – Other Mode	27
	Activated Sludge – Extended Aeration	25
	Oxygen Ditch	28
	Biological Nitrification – Separate Stage	29
	Combined Biological Nitrification and BOD	30
	Biological Denitrification	31
	Biological Phosphorus Removal	32
	Activated Bio-filter (ABF)	19
	Other Attached Growth Process	21
	Other Suspended Growth Process	33
	Overland Flow System	34
	Rapid Infiltration System	35
	Slow Rate System	36
Other Land Treatment System	37	
Physical/Chemical Treatment	Microstrainer – Primary	40
	Microstrainer – Secondary	41
	Sand Filter	42
	Mixed Media Filter	43
	Pressure Filter	44

Table 2A-1 Treatment Handling Codes		
Physical/Chemical Treatment (continued)	Rock Filter	45
	Other Filtration	46
	Activated Carbon - Granular	47
	Activated Carbon - Powdered	48
	Carbon Regeneration	49
	Recarbonation	55
	Single Stage Primary Lime Treatment	50
	Single Stage Tertiary Lime Treatment	51
	Two Stage Primary Lime Treatment	52
	Two Stage Tertiary Lime Treatment	53
	Recalcination	54
	Alum Addition -Primary	57
	Alum Addition - Secondary	58
	Alum Addition - Tertiary	59
	Ferric-Chloride Addition - Primary	60
	Ferric-Chloride Addition - Secondary	61
	Ferric-Chloride Addition - Tertiary	62
	Polymer Addition	63
	Other Chemical Addition	64
	Post Aeration	71
	Clarification Using Tube Settlers	38
	Secondary Clarification	39
	Neutralization	56
	Ion Exchange	65
	Breakpoint Chlorination	66
	Ammonia Stripping	67
	Electrodialysis	68
	Reverse Osmosis	69
	Other Physical/Chemical	74
	Dechlorination	70
Chlorination	71	
Ozonation	76	
Ultraviolet	77	
Other Disinfection	78	
Miscellaneous	Septic Tank	79
	Leach Field	80
	Mound System	81
	Sand Filter	84
	Evaportranspiration Field	82
	Other Treatment	87
	Outfall Pumping	72
	Outfall Diffuser	73
Package Plant	D4	