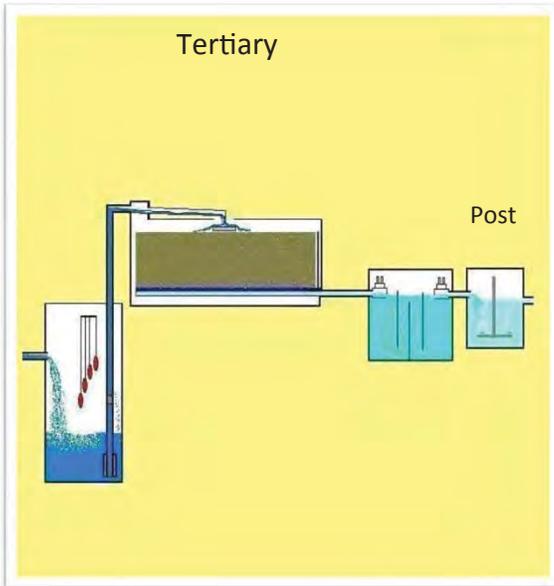
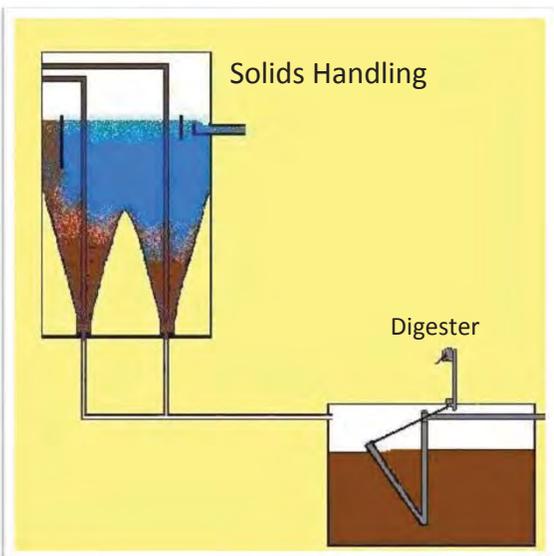


## Regulations

Everything leaving the treatment system needs to be monitored and measured. This includes the water discharging from the tertiary stage into the receiving stream and the digested sludge removed from the solids handling stage. It is important for the certified operator to be aware of the regulatory requirements for the treatment system in which they are in responsible charge of operating.



Final effluent samples are to be collected for analysis and reporting purposes at a specific location. Final effluent samples shall be collected following treatment and prior to direct discharge to the receiving stream. In the tertiary stage, the post aeration unit is typically the last treatment before discharge.



Excess bacteria generated in the secondary stage is stored in the digester of the solids handling stage. Eventually the digester becomes full and needs to be emptied. All sludge removed from the digester must be reported to the Ohio EPA. Most Class A systems are just required to report the total gallons removed annually from the digester.

In addition to these reporting requirements there are requirements, for reporting operational activities and time spent on site at the treatment system. It is also important for the certified operator to be aware of the requirements for obtaining and maintaining a valid operator certification to legally be classified as the operator in charge or more commonly known as the operator of record.

## Regulations: NPDES Permit

The document that allows you to discharge into Ohio's receiving streams is referred to as the NPDES permit. This National Pollutant Discharge Elimination System (NPDES) permit specifies the conditions by which you are allowed to discharge the treatment system's effluent into Ohio's waterways. The first page of the permit will look similar to this:

Ohio EPA Permit No:	5PGS0004
NPDES Permit No.	OHS00004
Page 1 of 23	
Effective Date:	January 1, 2015
Expiration Date:	December 31, 2019

**OHIO ENVIRONMENTAL PROTECTION AGENCY  
GENERAL PERMIT AUTHORIZATION TO DISCHARGE  
WASTEWATER FROM SEWAGE TREATMENT SYSTEMS DESIGNED TO TREAT AN  
AVERAGE FLOW OF 25,000 GALLONS PER DAY OR LESS UNDER THE NATIONAL  
POLLUTANT DISCHARGE ELIMINATION SYSTEM**

At the top, right hand side of the page will be an identification number you will use to communicate with the Ohio EPA. This number is referred to as your **Ohio EPA Permit Number** and should be included on all correspondence with the Ohio EPA. The second number used to identify your treatment facility is the **NPDES Permit Number**. This identification number is used for tracking by the US EPA and is your federal permit number. Most communication between you and the Ohio EPA will require the Ohio EPA Permit Number.

Permits are typically valid for a five year period. Your permit will state the **Effective Date** and an **Expiration Date** to indicate when the permit is valid.

Class A wastewater treatment systems are typically issued a **General Permit**, which has a standard requirement for sampling frequency and types of parameters to monitor. General permits can only be issued to systems which are designed to treat an average flow of 25,000 gallons per day or less.

**Regulations: NPDES Permit, Part 1**

Your NPDES permit will have six parts to the document. Part 1 defines which wastewater treatment systems are covered under this permit. Based on Ohio Revised Code 6111 " . . . anyone which discharges pollutants from a point source (i.e. pipe) to waters of the state of Ohio are unlawful, unless authorized by an NPDES permit."

"Entities who are eligible for coverage under this permit and who submit a Notice of Intent (NOI) in accordance with Part 2 of this permit are in compliance with the NPDES application requirements for such wastewater dischargers."

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**Part I. COVERAGE UNDER THIS PERMIT**

A. Permit Area. This permit covers the entire state of Ohio.

B. Applicability. Ohio Revised Code Chapter 6111 provides that discharges from a point source to waters of the state are unlawful, unless authorized by an NPDES permit. Entities that are eligible for coverage under this permit and that submit a Notice of Intent application (NOI) in accordance with the requirements of Part II of this permit are in compliance with the NPDES application requirements for such wastewater discharges.

C. Eligibility.

**NPDES Permit: Part II**

Part 2 of the permit defines the requirements for Notice of Intent (NOI). Part 2 provides information of NOI deadlines, content required, where to submit, and how to notify the Ohio EPA if you desire to terminate the NPDES permit due to the elimination of the discharge.

The NPDES permit is effective for a 5 year period. In order to receive authorization to discharge beyond the expiration date of the general permit the permittee shall notify the Ohio EPA and submit the necessary forms to have the permit renewed.

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**Part II. NOTICE OF INTENT REQUIREMENTS****A. Deadlines for Notification.**

1. No NOIs will be accepted prior to the effective date of this permit.
2. Coverage under the general permit is transferable. Ohio EPA must be notified in writing at least 60 days prior to any proposed transfer of the general permit (see Part V.E. for transfer requirements).

**B. Contents of Notice of Intent. The applicant shall complete and submit an approved**

### NPDES Permit: Part III

Part 3 of the NPDES permit lists the limitations and monitoring requirements of the final effluent. The table below is designated for a treatment system which is not a lagoon type system; which treats a design flow of 5,000 gallon per day, but less than 25,000 gallons per day. The monitoring requirements in this table are for systems that do not discharge directly to the Ohio River.

This sampling location is referred to in this permit as Final Outfall 001. The table lists the specific parameter to be measured, the concentration or discharge limit for the specific parameter and the frequency of monitoring.

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5PGS00004

#### TABLE III A. 1.-FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGES OTHER THAN LAGOON SYSTEMS-DESIGN FLOW 5000 GALLONS PER DAY OR MORE THAT DO NOT DISCHARGE DIRECTLY TO THE OHIO RIVER

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements.

Table – Final Outfall – 001 – Final

Effluent Characteristics Parameter	Discharge Limitations Concentration Specified Units				Monitoring Requirements		
	Max	Min	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
Flow Rate-GPD	-	-	-	-	1/Day	Total Estimate	All
Color, Severity – Units	-	-	-	-	1/Day	Estimate	All
Dissolved Oxygen – mg/l	-	6.0	-	-	1/Quarter	Grab	Quarterly
Total Suspended Solids – mg/l	-	-	18	12	1/Quarter	Grab	Quarterly
Nitrogen, Ammonia (NH3) – mg/l	-	-	4.5	3.0	1/Quarter	Grab	Winter-Qtrly
Nitrogen, Ammonia (NH3) – mg/l	-	-	1.5	1.0	1/Quarter		
Odor, Severity – Units	-	-	-	-			
Turbidity, Severity – Units	-	-	-	-			

### NPDES Permit: Part III

Understanding when to sample and the discharge limits are critical for staying in compliance. Lets walk through a few of the sampling parameters and their monitoring frequency to prevent reporting violations of the NPDES permit.

To begin, the parameter which requires monitoring is **Flow Rate-GPD**. This requires the flow which the treatment system received during a 24 hour period is reported in gallons per day. We see that there is no **Discharge Limitations**, only that the flow is reported **1/Day** (daily).

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#### TABLE III A. 1.-FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGES OTHER THAN LAGOON SYSTEMS-DESIGN FLOW 5000 GALLONS PER DAY OR MORE THAT DO NOT DISCHARGE DIRECTLY TO THE OHIO RIVER

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements.

Table – Final Outfall – 001 – Final

Effluent Characteristics Parameter	Discharge Limitations Concentration Specified Units				Monitoring Requirements		
	Max	Min	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
Flow Rate-GPD	-	-	-	-	1/Day	Total Estimate	All

Acceptable methods for estimating flow are, in order of preference:

- (1) elapsed time meters on sand filter dosing pumps;
- (2) elapsed time meters on influent pumps
- (3) water use records; and
- (4) bucket and stop watch.

There are several acceptable methods for estimating the daily flow. At the bottom of the table is a list of methods for estimating daily flow through the treatment system. In the Controlling section we have discussed how to estimate flow based on (1) elapsed time meters on sand filter dosing pumps. This is the preferred method because it is simple to implement and the most accurate measurement of flow through the treatment system, however, other acceptable methods can be used to determine flow for reporting purposes. Flow is required to be reported daily and for each month of the year.

### NPDES Permit: Part III

The next parameter in the table is **Color, Severity-Units**. Similar to the Flow Rate measurement there are no **Discharge Limitations** required. The frequency of monitoring is daily and is an estimate.

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**TABLE III A. 1.-FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGES OTHER THAN LAGOON SYSTEMS-DESIGN FLOW 5000 GALLONS PER DAY OR MORE THAT DO NOT DISCHARGE DIRECTLY TO THE OHIO RIVER**

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements.

Table – Final Outfall – 001 – Final

Effluent Characteristics Parameter	Discharge Limitations Concentration Specified Units				Monitoring Requirements		
	Max	Min	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
Flow Rate-GPD	-	-	-	-	1/Day	Total Estimate	All
Color, Severity – Units	-	-	-	-	1/Day	Estimate	All

Color, Odor, and Turbidity – See Part IV, Item E.

At the bottom of the table is a comment for estimating Color, Odor and Turbidity. The comment directs you to Part IV, item E of the NPDES permit.

Part IV SPECIAL CONDITIONS

E. For turbidity, odor, and color, use the following table to determine the value between 0 and 4 that is reported.

REPORTED SEVERITY VALUE	DESCRIPTION	TURBIDITY	ODOR	COLOR
0	None	Clear	None	Colorless
1	Mild			
2	Moderate	Light Solids	Musty	Grey
3	Serious			
4	Extreme	Heavy Solids	Septic	Black

### NPDES Permit: Part III

Use this table to estimate which values to report for turbidity, odor and color. Estimate which conditions best reflect the final effluent sample. Interpolate between descriptive phases.

The next monitoring parameter is Dissolved Oxygen, mg/L. The permit indicates there is no maximum concentration limit required, however, the final effluent must maintain a minimum dissolved oxygen concentration of 6 mg/L. Maximum and minimum concentrations are specific measurements never to be exceeded and sample results can not be averaged together.

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**TABLE III A. 1.-FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGES OTHER THAN LAGOON SYSTEMS-DESIGN FLOW 5000 GALLONS PER DAY OR MORE THAT DO NOT DISCHARGE DIRECTLY TO THE OHIO RIVER**

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements.

Table – Final Outfall – 001 – Final

Effluent Characteristics Parameter	Discharge Limitations Concentration Specified Units				Monitoring Requirements		
	Max	Min	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
Flow Rate-GPD	-	-	-	-	1/Day	Total Estimate	All
Color, Severity – Units	-	-	-	-	1/Day	Estimate	All
Dissolved Oxygen – mg/l	-	6.0	-	-	1/Quarter	Grab	Quarterly

These “absolute limits”, maximum and minimum, shall be determined from any single value for effluent samples measured.

Thus, according to the permit above, any final effluent sample measured for dissolved oxygen concentration must be above 6.0 mg/L or it is a violation of the NPDES permit. This should never be an issue if the treatment system is performing well and the post aeration unit is in operation.

There are three categories under **Monitoring Requirements**: Measuring Frequency, Sampling Type and Monitoring Months. Measuring Frequency indicates how often a sample is required to be collected for analysis, Sampling Type determines how the sample is to be collected and Monitoring Months indicate which specific months of the year sample collection and analysis is required.

Monitoring for final effluent dissolved oxygen requires at least one sample collected during the quarter. You may measure final effluent dissolved oxygen more frequently than the permit requires, however, if you are sampling from an approved sample location (i.e. Station 001) and you use an approved method for performing the analysis, the permit requires the results must be reported.

## NPDES Permit: Part III

The dissolved oxygen **Sample Type** is a grab sample.

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### TABLE III A. 1.-FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGES OTHER THAN LAGOON SYSTEMS-DESIGN FLOW 5000 GALLONS PER DAY OR MORE THAT DO NOT DISCHARGE DIRECTLY TO THE OHIO RIVER

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements.

Table – Final Outfall – 001 – Final

Effluent Characteristics  Parameter	Discharge Limitations				Monitoring Requirements		
	Concentration		Specified Units		Measuring	Sampling	Monitoring
	Max	Min	Weekly	Monthly	Frequency	Type	Months
Flow Rate-GPD	-	-	-	-	1/Day	Total Estimate	All
Color, Seventy – Units	-	-	-	-	1/Day	Estimate	All
Dissolved Oxygen – mg/l	-	6.0	-	-	1/Quarter	Grab	Quarterly

Part IV B of the permit defines what is a grab sample.

#### Part IV. SPECIAL CONDITIONS

A. This permit may be modified, or alternatively, revoked and reissued to the permit holder, to comply with any applicable standards or regulations.

B. Grab samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's performance.

C. Samples taken in compliance with the effluent monitoring requirements shall be collected following treatment (if provided) and prior to either direct to the receiving water or via storm sewer discharge to the receiving stream.

A grab sample is never a composite of several samples collected throughout the day, but one sample collected and analyzed for the specific parameter required in the permit. A grab sample is never a "selective" sample which occurs only when the system is performing well, but a sample that represents the actual treatment system's performance.

### NPDES Permit: Part III

Monitoring months for dissolved oxygen are listed as Quarterly in the permit. Part VI of the permit defines quarterly specifically as the months of March, June, August and December.

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#### TABLE III A. 1.-FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGES OTHER THAN LAGOON SYSTEMS-DESIGN FLOW 5000 GALLONS PER DAY OR MORE THAT DO NOT DISCHARGE DIRECTLY TO THE OHIO RIVER

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements.

Table – Final Outfall – 001 – Final

Effluent Characteristics Parameter	Discharge Limitations				Monitoring Requirements		
	Concentration Specified		Units		Measuring	Sampling	Monitoring
	Max	Min	Weekly	Monthly	Frequency	Type	Months
Flow Rate-GPD	-	-	-	-	1/Day	Total Estimate	All
Color, Seventy – Units	-	-	-	-	1/Day	Estimate	All
Dissolved Oxygen – mg/l	-	6.0	-	-	1/Quarter	Grab	Quarterly

The system can report sampling data for other months, however, if a sample is not reported for the required months, it will result in a violation of the permit. The system is required to sample at least one time during the months of March, June, August and December.

#### Part VI - DEFINITIONS

"Quarterly sampling frequency" means the sampling shall be done in the months of March, June, August, and December.

Also note the required sampling months are not evenly spaced through out the year. The sampling months are the 3rd, 6th, 8th and 12th month of the year. A sample reported for the 9th month, September, will not meet the permit requirement of quarterly reporting.

### NPDES Permit: Part III

The next parameter listed on the permit is **Total Suspended Solids– mg/L**. The **Monitoring Requirements** for total suspended solids are the same as the dissolved oxygen parameter, however, the **Discharge Limitations** are different. Unlike the minimum dissolved oxygen discharge limits, total suspended solids has weekly and monthly concentrations which need to be achieved.

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**TABLE III A. 1.-FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGES OTHER THAN LAGOON SYSTEMS-DESIGN FLOW 5000 GALLONS PER DAY OR MORE THAT DO NOT DISCHARGE DIRECTLY TO THE OHIO RIVER**

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements.

Table – Final Outfall – 001 – Final

Effluent Characteristics Parameter	Discharge Limitations Concentration Specified Units				Monitoring Requirements		
	Max	Min	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
Flow Rate-GPD	-	-	-	-	1/Day	Total Estimate	All
Color, Seventy – Units	-	-	-	-	1/Day	Estimate	All
Dissolved Oxygen – mg/l	-	6.0	-	-	1/Quarter	Grab	Quarterly
Total Suspended Solids – mg/l	-	-	18	12	1/Quarter	Grab	Quarterly

In Part III General Conditions of the NPDES permit weekly and monthly frequencies are defined as:

- Week 1      1st through 7th of calendar month
- Week 2      8th through 14th of calendar month
- Week 3      15th through 21st of calendar month
- Week 4      22nd through 28th of calendar month
- Monthly      1st day of calendar month through last day of calendar month

The permit requires at least one sample collected during the quarterly monitoring month (March, June, August, December), however additional samples can be collected for analysis if desired. Any sample collected from an approved sample site (i.e. Final effluent) and analyzed by approved methods must be reported. Weekly and monthly concentrations are individual measurements, but can be averaged together. Only one sample is required to be taken during the monitoring month. If only one sample is analyzed, it must meet both the weekly and monthly discharge requirement of the permit.

### NPDES Permit: Part III

Here is an example to assist in understanding the effluent limitations for total suspended solids (TSS) required to achieve compliance with the NPDES permit.

Since June is a specified sampling month, at least one sample must be collected and analyzed for meeting the reporting requirement of the permit. On June 2, a sample is collected and submitted to the lab for analysis which results in a TSS concentration of 15 mg/L. If this the only sample reported during the month of June the system would be in compliance for the weekly TSS limit because the reported value is less than 18 mg/L. However, the system would be in violation of the monthly TSS limit, because the reported value is greater than 12 mg/L.

<u>Sample Date</u>	<u>TSS Result</u>	<u>Weekly Limit</u>	<u>Monthly Limit</u>
June 2	15 mg/L	<b>compliance</b>	<b>violation</b>
Permit Limit	(15 mg/L)	18 mg/L	12 mg/L

Because of this potential monthly violation, the operator decides to collect another sample for analysis. Additional samples can be collected, but must be averaged together for weekly and monthly calculations. The second sample results in a TSS value of 5 mg/L being report from the lab.

<u>Sample Date</u>	<u>TSS Result</u>	<u>Weekly Limit</u>	<u>Monthly Limit</u>
June 2	15 mg/L		
June 4	5 mg/l	<b>compliance</b>	<b>compliance</b>
Permit Limit	(10 mg/L)	18 mg/L	12 mg/L

Since the 2nd and the 4th sample dates are within the designated window of Week 1 (1st-7th) these two values can be averaged to determine compliance with weekly limits. The average of the two samples reported is 10 mg/L which is in compliance with both the weekly and monthly limit.

### NPDES Permit: Part III

The system is therefore in compliance with the reporting requirements and effluent limitations of the NPDES permit. However, if another sample was collected and analyzed using approved analytical methods, that value must also be reported. If another sample was analyzed with a reported value of 40 mg/L TSS the compliance situation would change.

<u>Sample Date</u>	<u>TSS Result</u>	<u>Weekly Limit</u>	<u>Monthly Limit</u>
June 2	15 mg/L		
June 4	5 mg/L		
June 7	40 mg/L	<b>violation</b>	<b>violation</b>
Permit Limit	(20 mg/L)	18 mg/L	12 mg/L

The last sample reported causes the average TSS value to increase to 20 mg/L, which is a violation of the weekly and monthly permit limit. Thus, it is possible to have more than one violation of a single parameter during a monitoring period. If the system was experiencing difficulty with TSS all month and samples were collected and analyzed by approved methods there could be five violations of the permit; four weekly, one monthly.

#### Part V. STANDARD PERMIT CONDITIONS

##### L. Reporting.

5. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified below, the results of such monitoring shall be included in the calculation and reporting of the values required in the reports specified above.

Additional sampling is allowed to bring systems into compliance, but failure to report valid data is considered falsification and consequence move from the civil to the criminal arena with steeper penalties.

### NPDES Permit: Part III

A review of the next parameter listed in the permit indicates two different effluent limits for **Nitrogen, Ammonia (NH<sub>3</sub>)-N– mg/L**. The reason for the two different limits is due to the monitoring months. Some parameters have different limits depending on the month of the year. Some parameters like Coliform and Chlorine Residual are monitored only during the summer months.

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**TABLE III A. 1.-FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGES OTHER THAN LAGOON SYSTEMS-DESIGN FLOW 5000 GALLONS PER DAY OR MORE THAT DO NOT DISCHARGE DIRECTLY TO THE OHIO RIVER**

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements.

Table – Final Outfall – 001 – Final

Effluent Characteristics  Parameter	Discharge Limitations Concentration Specified Units				Monitoring Requirements		
	Max	Min	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
Flow Rate-GPD	-	-	-	-	1/Day	Total Estimate	All
Color, Severity – Units	-	-	-	-	1/Day	Estimate	All
Dissolved Oxygen – mg/l	-	5.0	-	-	1/Quarter	Grab	Quarterly
Total Suspended Solids – mg/l	-	-	18	12	1/Quarter	Grab	Quarterly
Nitrogen, Ammonia (NH <sub>3</sub> ) – mg/l	-	-	4.5	3.0	1/Quarter	Grab	Winter-Qtrly
Nitrogen, Ammonia (NH <sub>3</sub> ) – mg/l	-	-	1.5	1.0	1/Quarter	Grab	Summer-Qtrly

Nitrogen ammonia reporting is required both in the winter and summer monitoring periods. Samples reported for nitrogen ammonia in March and December have a permit limit of 4.5 mg/L weekly and 3.0 mg/L monthly and in June and August the limit is more stringent at 1.5 mg/L weekly and 1.0 mg/L monthly.

Sampling and reporting for once per quarter for all months is required in March, June, August and December.

Sampling and reporting for once per quarter in winter months is March and December.

Sampling and reporting for once per quarter in summer months is June and August.

Your permit will contain more parameters for monitoring than discussed here. However, you should be able to apply the same interpretation of the monitoring requirements to these other parameters. If you have additional question contact your Ohio EPA District office for assistance.

## NPDES Permit: Part III

Part III of the NPDES permit contains reporting requirements for the final effluent into the receiving stream and also sludge hauled from the treatment system. Class A treatment systems which have the sludge hauled from the Solids Handling Stage to another wastewater treatment system need to report the total volume removed. The station code used to designate this location is **Final Outfall-588**.

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### TABLE III C. SLUDGE MONITORING REQUIREMENTS

1. All permittees shall monitor the treatment works' final sludge and report to the Ohio EPA in accordance with the following table.

Report data using station designation 588.

Table - Final Outfall - 588 - Final

Effluent Characteristics Parameter	Discharge Limitations Concentration Specified Units				Monitoring Requirements		
	Max	Min	Weekly	Monthly	Measuring Frequency	Sampling Type	Monitoring Months
Sludge Volume, Gallons - Gals	-	-	-	-	1/Year	Total	December

- The total sludge volume transferred to another NPDES permit holder for the entire year shall be reported on the December Discharge Monitoring Report (DMR).

-See Part IV, Item D.

Every load that is hauled out of the sludge holding tank (i.e. digester) and transported to another wastewater treatment system needs to be recorded. At the end of the calendar year the total gallons removed from the Solids Handling Stage is reported to the Ohio EPA.

The gallons reported does NOT include trash trap pump outs or any other pumping within the treatment system, only the total gallons of digested sludge is reported.



## Annual Sludge Report

In addition to reporting the total gallons of sludge hauled from the treatment system on the December discharge monitoring report, an Annual Sewage Sludge Report is also required to be submitted. The Annual Sewage Sludge Report forms are available on the Ohio EPA's web-site.



**Division of Surface Water**  
Annual Sewage Sludge Report 2013

**General Information**

Facility name:		
Ohio NPDES permit No:	County:	
Mailing address:		
City:	State:	Zip:

**Mark box with an "X" if no sewage sludge has been removed from the facility for the year 2013.**

If no sewage sludge was removed from the facility during 2013, on what date was sewage sludge last removed from the facility?

Date: \_\_\_/\_\_\_/\_\_\_

**Mark box with an "X" if sewage sludge has never been removed from the facility.**

**Certification Statement**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for

The first page of the **Annual Sludge Report** requires general information to identify the Class A system where the sludge was removed. This includes the system's Ohio NPDES permit Number located on the first page of the permit.

This general information page also requires a signature certifying the data being submitted is valid.

### Annual Sludge Report

The second page to the Annual Sewage Sludge Report again requires the facility name and the Ohio NPDES Permit number where the sludge was removed. The typical Class A permit requires that the total gallons removed be reported. Enter the gallons removed in the row designated with the Station Code 588 and the column with a reporting category designated 80991.

**Division of Surface Water**  
Annual Sewage Sludge Report 2013

**Stations 585, 586, 588, and Transfer to PPG Lime Lakes – Sewage Sludge/Biosolids Disposal**

Facility name:	Ohio NPDES permit #:
----------------	----------------------

**Table 3 – Sewage Sludge/Biosolids Disposal Methods**

Disposal Method	Sewage Sludge Fee Weight (Dry Tons) DMR Reporting Code <b>51129</b>	Sewage Sludge Weight (Dry Tons) DMR Reporting Code <b>70316</b>	Sewage Sludge Volume (Gallons) DMR Reporting Code <b>80991</b>
Incineration (Station 585)			
Landfill (Station 586)			
Transferred to Another NPDES Permit Holder (Station 588)			
Transferred to PPG Lime Lakes			

If transferring sewage sludge to another NPDES permit holder, you must also provide the name and NPDES Permit Number of the wastewater treatment system receiving the sewage sludge.

**If the facility is reporting with Station 588, provide the following information:**

Name of receiving NPDES permittee:	
Receiving permittee's Ohio NPDES Permit #:	
If receiving permittee is located outside the State of Ohio, the receiving permittee's USEPA NPDES Permit #:	

## NPDES Permit: Part V

Part V of the NPDES permit contains conditions which are requirements in all general permits. Item M discusses the methods approved for sampling and analysis.

### Part V. STANDARD PERMIT CONDITIONS

M. Sampling and Analytical Methods. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored flow. Test procedures for the analysis of pollutants shall conform to regulation 40 CFR 136, "Test Procedures For The Analysis of Pollutants" unless other test procedures have been specified in this permit. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to insure accuracy of measurements.

Samples collected for analysis and reporting must be representative of the treatment system's discharge. Sample collection and analysis must also conform to 40 CFR 136, which is the federal regulation for testing pollutants which are used for reporting purposes of an NPDES permit.

The guidelines establish that samples are required to be collected in a specific container, may require a specific preservative, and/or possess a specific holding time, which can not be exceeded. Violation of any of these requirements would invalidate sample results and would require resampling and analysis.

#### Title 40: Protection of Environment

##### PART 136—GUIDELINES ESTABLISHING TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS

###### Contents

- [§136.1 Applicability.](#)
- [§136.2 Definitions.](#)
- [§136.3 Identification of test procedures.](#)
- [§136.4 Application for and approval of alternate test procedures for nationwide use.](#)
- [§136.5 Approval of alternate test procedures for limited use.](#)
- [§136.6 Method modifications and analytical requirements.](#)
- [§136.7 Quality assurance and quality control.](#)

AUTHORITY: Secs. 301, 304(h), 307 and 501(a), Pub. L. 95-217, 91 Stat. 1566, *et seq.* (33 U.S.C. 1251, *et seq.*) (the Federal Water Pollution Control Act Amendments of 1972 as amended by the Clean Water Act of 1977).

Class A systems typically use a contract laboratory to perform the analysis for reporting requirements. These contract laboratories will provide the specific container, necessary preservative and instructions on sample collection. The critical issue if you are collecting the sample for reporting purposes is to use clean sampling equipment. Don't use the same sampling device to collect effluent samples that are also used for collecting influent or in-plant process monitoring.



## NPDES Permit: Part V



Another critical issue in sample collection is the Chain of Custody form associated with the samples collected. The Chain of Custody is a paper trail detailing when the sample is collected, where the sample is collected, and by whom is the sample collected. If the Chain of Custody forms are not completed, the test results will be unusable for reporting purposes. The contract laboratory performing the analysis should provide the forms.

Part V. Item O under the Standard Permit Conditions requires all records pertaining to the wastewater treatment works be retained for a minimum of three years. Required reports are any sampling and/or analytical records. This will include all process control data and maintenance records.

### Part V. STANDARD PERMIT CONDITIONS

O. Records Retention. The permittee shall retain all of the following records for the wastewater treatment works for a minimum of three years, including:

1. All sampling and analytical records (including internal sampling data not reported);
2. All original recordings for any continuous monitoring instrumentation;
3. All instrumentation, calibration and maintenance records;
4. All plant operation and maintenance records;
5. All reports required by this permit; and
6. Records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report, or application.

A log book or journal can be used to enter daily information and should be kept on site for review by EPA inspectors.



## NPDES Permit: Part V

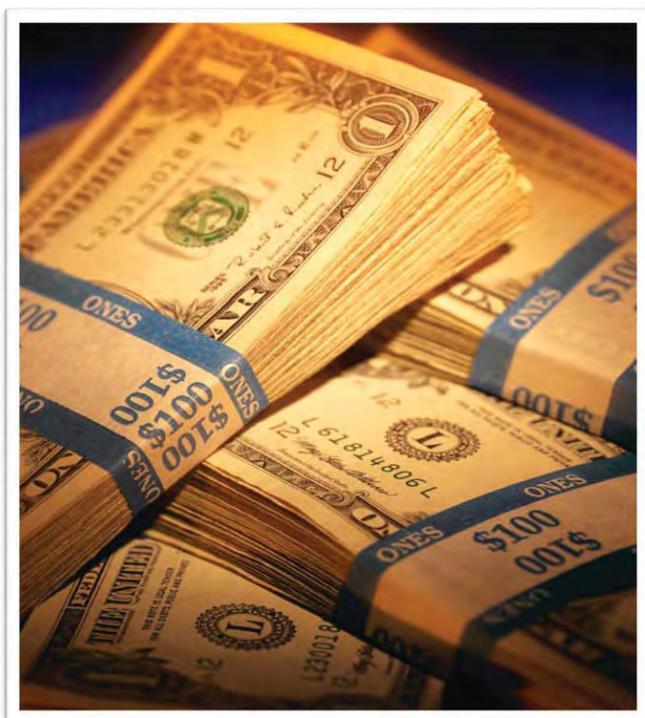
Authority to assess penalties for violations of the NPDES permit are found in the Ohio Revised Code.

### Part V. STANDARD PERMIT CONDITIONS

#### AF. Penalties for Violations of Permit Conditions.

4. ORC 6111.99 provides that any person who violates Sections 6111.04, 6111.042., 6111.05., or division (A) of Section 6111.07 of the Revised Code shall be fined not more than twenty-five thousand dollars or imprisoned not more than one year, or both.

ORC 6111 states anyone who knowingly submits false information, knowingly makes false statements or violates other sections of the code can be fined up to \$25,000, imprisoned up to one year or both.



## Ohio Administrative Code 3745-07

The NPDES permit determines the sampling frequency and effluent discharge limits which need to be achieved to maintain compliance. The NPDES permit requires an operator that is certified to be in operational control of the treatment system.

The process by which operators are certified in Ohio is contained in the Ohio Administrative Code 3745-7. OAC 3745-7 are the rules which classify treatment systems as to the certification level that is required, lists the eligibility requirements for anyone desiring to be certified and rules on maintaining a valid certificate upon successfully passing an examination.

**OhioEPA**  
**FACT SHEET**  
 Division of Drinking and Ground Waters  
 January 2014

**How to Become a Certified Water or Wastewater Operator**

*Serve your community by helping ensure people receive safe drinking water and wastewater is discharged in an environmentally safe manner.*

**Eligibility**  
 To become a certified Class A, I, II, III or IV Water Supply, Water Distribution, Wastewater Treatment or Wastewater Collection operator in the State of Ohio, you must apply for and pass the state operator certification exam and document the appropriate level of hands on work experience

**3745-7-04 Treatment works and sewerage system classification and staffing requirements.**

(C) Staffing.

(1) The operator of record shall, at a minimum, be physically present at the treatment works and fulfill the time requirements in the following table and perform technical operation as assigned by the permittee of the treatment works.

**Minimum staffing requirements for the operator of record**

<u>System Classification</u>	<u>Staffing requirements</u>
Class A	2 days per week for a minimum of 1 hour per week

OAC 3745-7-04 specifies the staffing requirements of a Class A wastewater treatment system. Class A systems require a certified operator to be on site two days per week for a total of one hour.

This is a minimum requirement and additional time should be spent on site to maintain proper operation and maintenance. An uncertified operator can perform additional site visits for monitoring and maintenance, however, the

certified operator of record must be on site for two visits per week for at least one hour.

OAC 3745-7-09 lists the recordkeeping responsibilities of a certified operator. A log-book needs to be maintained for the system and retained on site. The log should contain a minimum of the following: location of treatment system, date and time of arrival and departure, operational and maintenance activities performed, test results (both reportable NPDES and non-reportable process control data) and identification of the person making the entry into the log book.

**3745-7-09 Recordkeeping requirements and responsibilities of a certified operator.**

(A) "The owner and operator of record . . . shall maintain or cause to be maintained operation and maintenance records . . ."

(3) At a minimum, the following information shall be recorded:

- (a) Identification of sewerage system . . .
- (b) Date and times of arrival and departure . . .
- (c) Specific operation and maintenance activities . . .
- (d) Results of tests performed and samples taken . . .
- (e) Performance of preventative maintenance and repairs . . .
- (f) Identification of person making entry

**Ohio Administrative Code 3745-07****3745-7-09 Recordkeeping requirements and responsibilities of a certified operator.**

(A) "The owner and operator of record . . . shall maintain or cause to be maintained operation and maintenance records . . ."

(4) The records **shall be** kept up to date, contain a minimum of the previous three months of data at all times, and be **maintained for at least three years**.

One other requirement of OAC 3745-7-09 is the recorded data needs to be maintained for at least three years.

In addition to the potential of fines and jail time for violation of ORC 6111, violations of 3745-7-12 could lead to suspension or revocation of your Class A certification.

Actions which can lead to suspension or revocation are fraudulent, negligent or incompetent activity.

Operating a treatment system in a manner which would endanger the public's health could also lead to suspension or revocation. As an environmental steward of Ohio's waterways, you have a significant impact on the public exposure to health hazards.

**3745-7-12 Suspension or revocation of certification.**

(A) The director **may suspend or revoke** the certificate of an operator, issued under this chapter, upon finding that the operator has:

- (1) **Fraudulently** obtained any certificate or renewal . . .
- (2) Perform duties of an operator in a **negligent** or **incompetent** manner,
- (3) Knowingly or negligently submitted misleading, **inaccurate reports**,
- (4) Operate in manner **endangering** the public health . . .
- (5) **Violation** of 6109 or 6111
- (6) **Represent** self as certified without valid certificate . . .

**3745-7-12 Suspension or revocation of certification.**

(E) Revocation of an operator's certificate **shall be** permanent.

A wastewater treatment system's effluent can have a significant impact on the public's health.

Because of this level of responsibility any certified operator who has had their certification revoked will be unable to reapply for certification.



## Ohio Administrative Code 3745-07

Becoming certified as a Class A operator indicates at a point in time you have successfully demonstrated the basic knowledge level to be in responsible charge of a Class A wastewater treatment system. However, as in any other aspect in life, things change. New regulations, treatment technology and skills are required to continue to maintain compliance with the NPDES permit discharge limits. To insure certified operators are keeping up, each certified operator is required to complete eight approved contact hours to keep their individual certificates valid. Class A certificates are valid for a two year period. Thus, a certified operator must obtain eight contact hours within this two year period. Each certified operator is required to maintain documentation of contact hours received and be able to provide this documentation if requested by the Ohio EPA.

### 3745-7-15 Expiration and renewal of operator certification.

#### (D) Contact hours.

(1) The minimum number of contact hours that **shall be** completed by operators holding a single certificate as a :

(a) Class A or a limited Class A is **eight hours** of director-approved contact hours;

The Ohio Administrative Code 3745-07 contains the rules which pertain to the certification of operators of wastewater treatment systems in Ohio. Become familiar with these rules so that you can qualify for admission into the examination, be successful in passing the examination, and to insure you maintain a valid certificate after passing the examination.

Ohio EPA Permit No: 5PGS0004 NPDES Permit No. OHS00004 Page 1 of 23
Effective Date: January 1, 2015 Expiration Date: December 31, 2019
<p><b>OHIO ENVIRONMENTAL PROTECTION AGENCY</b>  <b>GENERAL PERMIT AUTHORIZATION TO DISCHARGE</b>  <b>WASTEWATER FROM SEWAGE TREATMENT SYSTEMS DESIGNED TO TREAT AN</b>  <b>AVERAGE FLOW OF 25,000 GALLONS PER DAY OR LESS UNDER THE NATIONAL</b>  <b>POLLUTANT DISCHARGE ELIMINATION SYSTEM</b></p>

The NPDES permit is the document which establishes the effluent quality that needs to be achieved to discharge into Ohio's waterways.

 Division of Surface Water Annual Sewage Sludge Report 2013 <u>General Information</u>		
Facility name:		
Ohio NPDES permit No:	County:	
Mailing address:		
City:	State:	Zip:
<input type="checkbox"/> Mark box with an "X" if no sewage sludge has been removed from the facility for the year 2013.		

The Annual Sludge Report is the document which monitors the amount of sludge produced in a year's time and where the sludge was disposed.

These three documents identify the rules and regulations required to operate within to maintain compliance and should be reviewed and understood for those in responsible charge of Class A treatment systems.