

**Application of Pennsylvania-American Water Company for Acquisition of
the Wastewater Assets of the Township of Exeter
66 Pa. C.S. §1329
Application Filing Checklist – Water/Wastewater
Docket No. A-2018-_____**

20. Proof of Compliance. Provide proof of compliance with applicable design, construction and operation standards of DEP or of the county health department, or both, including:
- b. For **wastewater** system acquisitions, provide copies of the water quality management and National Pollution Discharge Elimination System (NPDES) permits for the utility plant.

RESPONSE:

- b. See enclosed NPDES and a water quality management permit for the wastewater influent pump replacements provided by the Township.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER SUPPLY AND WASTEWATER MANAGEMENT

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
DISCHARGE REQUIREMENTS FOR PUBLICLY OWNED
TREATMENT WORKS (POTWs)**

NPDES PERMIT NO. PA 0026972

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 *et seq.* ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 *et seq.*

**EXETER TOWNSHIP, BERKS COUNTY, AUTHORITY
4975 DEMOSS ROAD
READING, PA 19606**

is authorized to discharge from a facility located in **Exeter Township, Berks County** to the **Schuylkill River** in **Watershed 3-D** in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B, and C hereof.

THIS PERMIT SHALL BECOME EFFECTIVE ON MARCH 1, 2008.

THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON FEBRUARY 28, 2013.

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.
2. Failure to comply with the terms, conditions, or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
3. A complete application for renewal of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form.

In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application.

4. This NPDES permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit.

DATE PERMIT ISSUED FEB 21 2008

ISSUED BY 

DATE PERMIT AMENDMENT ISSUED _____

TITLE: **Lee A. McDonnell, P.E.
Water Management Program Manager**

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

I. A. For Outfall 001, Latitude 40°16'40", Longitude 75°50'30",

which receives wastewater from the east side of the wastewater treatment plant.

- a. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes, and Supplemental Information).
- b. The permittee is authorized to discharge during the period from March 1, 2008 through February 28, 2011.

INTERIM

Discharge Parameter	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
	Mass Units (lbs/day) ⁽¹⁾			Concentrations (mg/l)			Minimum ⁽³⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Inst. ⁽²⁾ Maximum		
Flow (mgd) ⁽⁴⁾	Monitor & Report	XXX	Monitor & Report	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	XXX	From 6.0 to 9.0 inclusive			1/day	Grab
D.O.	XXX	XXX	XXX	Minimum of 5.0 mg/l at all times			1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.40	XXX	0.90 ⁽⁵⁾	1/day	Grab
Total Suspended Solids	300	450	XXX	30	45	60	1/week	24-hour comp
CBOD ₅	250	400	XXX	25	40	50	1/week	24-hour comp
NH ₃ -N	Monitor & Report	XXX	XXX	Monitor & Report	XXX	XXX	1/week	24-hour comp
Total Copper	0.57	XXX	XXX	0.057	XXX	0.114	1/week	24-hour comp
Fecal Coliform (5/1 to 9/30)	XXX	XXX	XXX	200	XXX	XXX	1/week	Grab
Fecal Coliform (10/1 to 4/30)	XXX	XXX	XXX	10,000	XXX	XXX	1/week	Grab
Total PCBs	XXX	XXX	XXX	Monitor & Report	XXX	XXX	2/year	24-hour comp

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

I. B. For Outfall 002, Latitude 40°16'40", Longitude 75°50'30",

which receives wastewater from the west side of the wastewater treatment plant.

- a. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes, and Supplemental Information).
- b. The permittee is authorized to discharge during the period from March 1, 2008 through February 26, 2011.

INTERIM

Discharge Parameter	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
	Mass Units (lbs/day) ⁽¹⁾			Concentrations (mg/l)			Minimum ⁽³⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Inst. ⁽²⁾ Maximum		
Flow (mgd) ⁽⁴⁾	Monitor & Report	XXX	Monitor & Report	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	XXX	From 6.0 to 9.0 inclusive			1/day	Grab
D.O.	XXX	XXX	XXX	Minimum of 5.0 mg/l at all times			1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.40	XXX	0.90 ⁽⁵⁾	1/day	Grab
Total Suspended Solids	1,476	2,214	XXX	30	45	60	1/week	24-hour comp
CBOD ₅	1,230	1,968	XXX	25	40	50	1/week	24-hour comp
Total Copper	2.805	XXX	XXX	0.057	XXX	0.114	1/week	24-hour comp
Fecal Coliform (5/1 to 9/30)	XXX	XXX	XXX	200	XXX	XXX	1/week	Grab
Fecal Coliform (10/1 to 4/30)	XXX	XXX	XXX	10,000	XXX	XXX	1/week	Grab
Total PCBs	XXX	XXX	XXX	Monitor & Report	XXX	XXX	2/year	24-hour comp

b. The permittee is authorized to discharge during the period from March 1, 2011 through February 28, 2013.

FINAL

Discharge Parameter	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
	Mass Units (lbs/day) ⁽¹⁾			Concentrations (mg/l)			Minimum ⁽³⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Inst. ⁽²⁾ Maximum		
Flow (mgd) ⁽⁴⁾	Monitor & Report	XXX	Monitor & Report	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	XXX	From 6.0 to 9.0 inclusive			1/day	Grab
D.O.	XXX	XXX	XXX	Minimum of 5.0 mg/l at all times			1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.40	XXX	0.90 ⁽⁵⁾	1/day	Grab
Total Suspended Solids	300	451	XXX	30	45	60	1/week	24-hour comp
CBOD ₅	250	400	XXX	25	40	50	1/week	24-hour comp
NH ₃ -N	200	XXX	XXX	20	XXX	XXX	1/week	24-hour comp
Total Copper	0.570	XXX	XXX	0.057	XXX	0.114	1/week	24-hour comp
Fecal Coliform (5/1 to 9/30)	XXX	XXX	XXX	200	XXX	XXX	1/week	Grab
Fecal Coliform (10/1 to 4/30)	XXX	XXX	XXX	2,000	XXX	XXX	1/week	Grab
Total PCBs	XXX	XXX	XXX	Monitor & Report	XXX	XXX	2/year	24-hour comp

Effluent samples taken in compliance with the monitoring requirements shall be taken at the following location(s):

- Composite samples may be taken before or after disinfection.
- Grab samples shall be taken after disinfection.

b. The permittee is authorized to discharge during the period from March 1, 2011 through February 28, 2013

FINAL

Discharge Parameter	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
	Mass Units (lbs/day) ⁽¹⁾			Concentrations (mg/l)			Minimum ⁽³⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Maximum Daily	Average Monthly	Average Weekly	Inst. ⁽²⁾ Maximum		
Flow (mgd) ⁽⁴⁾	Monitor & Report	XXX	Monitor & Report	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	XXX	From 6.0 to 9.0 inclusive			1/day	Grab
D.O.	XXX	XXX	XXX	Minimum of 5.0 mg/l at all times			1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.40	XXX	0.90 ⁽⁵⁾	1/day	Grab
Total Suspended Solids	1,476	2,214	XXX	30	45	60	1/week	24-hour comp
CBOD ₅	1,230	1,968	XXX	25	40	50	1/week	24-hour comp
NH ₃ -N	984	XXX	XXX	20	XXX	40	1/week	24-hour comp
Total Copper	2.805	XXX	XXX	0.057	XXX	0.114	1/week	24-hour comp
Fecal Coliform (5/1 to 9/30)	XXX	XXX	XXX	200	XXX	XXX	1/week	Grab
Fecal Coliform (10/1 to 4/30)	XXX	XXX	XXX	2,000	XXX	XXX	1/week	Grab
Total PCBs	Monitor & Report	XXX	XXX	Monitor & Report	XXX	XXX	2/year	24-hr comp

Effluent samples taken in compliance with the monitoring requirements shall be taken at the following location(s):

- Composite samples may be taken before or after disinfection.
- Grab samples shall be taken after disinfection.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (Con't)

Additional Requirements:

1. Effective disinfection to control disease producing organisms from the period of May 1 to September 30 shall be the production of an effluent which will contain a concentration not greater than 200/100 ml of fecal coliform colonies as a geometric mean, nor greater than 1,000/100 ml of these colonies in more than 10 percent of the samples tested.
2. All discharges of floating materials, oil, grease, scum, sheen, and substances which produce color, tastes, odors, turbidity, or settle to form deposits shall be controlled to levels which will not be inimical or harmful to the water uses to be protected or to human, animal, plant, or aquatic life.
3. Except as otherwise specified in this permit, the 30-day average percent removal for BOD₅ or CBOD₅ and Total Suspended Solids shall not be less than 85 percent.

Footnotes:

1. Refer to the instructions following the DMR Supplemental Forms for directions regarding calculation of mass loading.
2. The Instantaneous Maximum Discharge Limitations are for compliance use by DEP only. Do not report instantaneous maximums on Discharge Monitoring Reports (DMRs) or supplemental DMRs, unless specifically required on those forms to do so.

This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.

4. All flows reported on DMRs and Supplemental Reporting forms shall include septage and all other hauled-in wastes. In addition, all hauled-in wastes shall be recorded on a daily basis on the Supplemental DMR.
5. This is an hourly maximum limit.

Supplemental Information:

1. The hydraulic design capacity of 1.2 million gallons per day at Outfall 001 and the hydraulic design capacity of 8.43 MGD at Outfall 002 for the treatment facility is used to prepare the annual Municipal Wasteload Management Report to determine whether a "hydraulic overload" condition exists, as defined in 25 Pa. Code Chapter 94.
2. The organic design capacity 20,289 lbs BOD₅ per day for the treatment facility is used to prepare the annual Municipal Wasteload Management Report to determine whether an "organic overload" condition exists, as defined in 25 Pa. Code Chapter 94.
3. The effluent limitations for this outfall were determined using an effluent discharge rate of 7.1 million gallons per day.
4. The following test methods shall be used for the listed parameters:

Parameters

40 CFR Part 136, Table 1B

Ammonia Nitrogen

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II. DEFINITIONS

At Outfall (XXX) means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line (XXX), or where otherwise specified.

Average refers to the use of an arithmetic mean, unless otherwise specified in this permit.

Average Monthly Discharge Limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

Average Weekly Discharge Limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution to surface waters of the Commonwealth. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

Calendar Week A seven day period beginning on a Sunday and ending on a Saturday with the results of the calendar week average reported in the month that has the majority of days of that week in it.

Composite Sample (for all except GC/MS volatile organic analysis) means a combination of individual samples (at least eight for a 24-hour period or four for an 8-hour period) of at least 100 milliliters, each obtained at spaced time intervals during the compositing period. The composite must be flow-proportional; either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval is proportional to the flow rates over the time period used to produce the composite.

Composite Sample (for GC/MS volatile organic analysis) consists of at least four aliquots or grab samples collected during the sampling event (not necessarily flow proportioned). The samples must be combined in the laboratory immediately before analysis and then one analysis is performed.

Daily Average Temperature means the average of all temperature measurements made, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar day or during the operating day if flows are of a shorter duration.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Discharge Monitoring Report (DMR) means the form for the reporting of self-monitoring results by the permittee.

Estimated Flow means any method of liquid volume measurement based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters, and batch discharge volumes.

Geometric Average means the average of a set of n sample results given by the nth root of their product.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly selected time over a period not to exceed 15 minutes.

Hauled-In Wastes means any wastes that are hauled to the facility for further treatment or disposal, including septage, holding tank wastes, leachates, sludges, industrial wastes, etc.

Hazardous Substance means any substance designated under 40 CFR 116 pursuant to Section 311 of the Clean Water Act.

Immersion Stabilization (i-s) means a calibrated device is immersed in the wastewater until the reading is stabilized.

Industrial User or Indirect Discharger means an establishment that discharges or introduces industrial wastes into a Publicly Owned Treatment Works.

Maximum Any Time or Instantaneous Maximum means the level not to be exceeded at any time in any grab sample.

Maximum Daily Discharge Limitation means the highest allowable "daily discharge."

Measured Flow means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

Publicly Owned Treatment Works (POTW) means a device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature, which is owned by a state or municipality. The term includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Stormwater means the runoff from precipitation, snowmelt runoff, and surface runoff and drainage.

Stormwater Associated With Industrial Activity means the discharge from any conveyance which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing, or raw materials storage areas as defined at 40 CFR 122.26(b)(14).

Total Dissolved Solids means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR 136.

Toxic Pollutant means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains may, on the basis of information available to DEP, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in these organisms or their offspring.

III. SELF-MONITORING, REPORTING, AND RECORDS KEEPING

A. Representative Sampling

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. Records Retention

Except for records of monitoring information required by this permit related to the permittee's sludge use and disposal activities which shall be retained for a period of at least five years, all records of monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records), copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained by the permittee for three years from the date of the sample measurement, report, or application. The three-year period shall be extended as requested by DEP or the EPA Regional Administrator.

3. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date, and time of sampling or measurements.
- b. The person(s) who performed the sampling or measurements.
- c. The date(s) the analyses were performed.
- d. The person(s) who performed the analyses.
- e. The analytical techniques or methods used; and the associated detection level.
- f. The results of such analyses.

4. Test Procedures

Facilities that test or analyze environmental samples used to demonstrate compliance with this permit shall be in compliance with laboratory accreditation requirements of Act 90 of 2002 (27 Pa. C.S. §§4101-4113), relating to environmental laboratory accreditation. Unless otherwise specified in this permit, the test procedures for the analysis of pollutants shall be those approved under 40 CFR Part 136 (or in the case of sludge use or disposal, approved under 40 CFR Part 136, unless otherwise specified in 40 CFR Part 503 or Subpart J of 25 Pa. Code Chapter 271), or alternate test procedures approved pursuant to those parts, unless other test procedures have been specified in this permit.

5. Quality/Assurance/Control

In an effort to assure accurate self-monitoring analyses results:

- a. The permittee, or its designated laboratory, shall participate in the periodic scheduled quality assurance inspections conducted by DEP and EPA.
- b. The permittee, or its designated laboratory, shall develop and implement a program to assure the quality and accurateness of the analyses performed to satisfy the requirements of this permit, in accordance with 40 CFR 136.

B. Reporting of Monitoring Results

1. The permittee shall effectively monitor the operation and efficiency of all wastewater treatment and control facilities, and the quantity and quality of the discharge(s) as specified in this permit.
2. Unless instructed otherwise in PART C of this permit, a properly completed DMR must be received by the following address within 28 days after the end of each monthly report period:

Department of Environmental Protection
Water Management Program
909 Elmerton Avenue
Harrisburg, PA 17110-8200

3. The completed DMR Form shall be signed and certified either by the following applicable person, as defined in 40 CFR 122.22(a), or by that person's duly authorized representative, as defined in 40 CFR 122.22(b):
 - For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
 - For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
 - For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.

Permit

If signed by a person other than the above, written notification of delegation of DMR signatory authority must be submitted to DEP in advance of or along with the relevant DMR form.

4. If the permittee monitors any pollutant, using analytical methods described in PART A III A.4 herein, more frequently than the permit requires, the results of this monitoring shall be incorporated, as appropriate, into the calculations used to report self-monitoring data on the DMR.

C. Reporting Requirements

1. Planned Changes - The permittee shall give notice to DEP as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b).
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in this permit, nor to notification requirements under 40 CFR 122.42(a)(1).
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. Anticipated Noncompliance

The permittee shall give advance notice to DEP of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

3. Unanticipated Noncompliance or Potential Pollution Reporting

- a. Immediate Reporting - The permittee shall report incidents causing or threatening pollution in accordance with the requirements of 25 Pa. Code Section 91.33. If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify the Department by telephone of the location and nature of the danger and if reasonably possible to do so, notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger. The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.
- b. The permittee shall report any noncompliance which may endanger health or the environment in accordance with the requirements of 40 CFR 122.41(l) (6). These requirements include the following obligations:
 - (i) 24 Hour Reporting - The permittee shall orally report any noncompliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported within 24 hours under this paragraph:
 - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
 - (2) Any upset which exceeds any effluent limitation in the permit; and

(3) Violation of the maximum daily discharge limitation for any of the pollutants listed in the permit as being subject to the 24-hour reporting requirement. Note see 40 CFR 122.44(g)

(ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any noncompliance which may endanger health or the environment. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by the Department, the permittee shall submit a written report in accordance with this paragraph. 40 CFR 122.41(l)(6)(iii).

4. Other Requirements

The permittee shall report all instances of noncompliance not reported under paragraph C.3 of this section or specific requirements of compliance schedules, at the time DMRs are submitted. The reports shall contain the information listed in paragraph C.3.b.(ii) of this Section. 40 CFR 122.41(l)(7)

PART B

I. MANAGEMENT REQUIREMENTS

A. Compliance Schedules

1. The permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit.
2. The permittee shall submit reports of compliance or noncompliance, or progress reports as applicable, for any interim and final requirements contained in this permit. Such reports shall be submitted no later than 14 days following the applicable schedule date or compliance deadline.

B. Permit Modification, Termination, or Revocation and Reissuance

1. This permit may be modified, terminated, or revoked and reissued during its term in accordance with 25 Pa. Code Chapter 92.
2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
3. In the absence of DEP action to modify or revoke and reissue this permit, the permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time specified in the regulations that establish those standards or prohibitions.

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this permit.
3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to DEP, it shall promptly submit the correct and complete facts or information.
4. The permittee shall provide the following information in the POTW's annual Municipal Wasteload Management Report, required under the provisions of 25 Pa. Code Chapter 94.
 - a. A new introduction of pollutants into the POTW from an "Indirect Discharger" which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging pollutants.
 - b. A substantial change in the volume or character of pollutants being introduced into the POTW by an "Indirect Discharger" introducing pollutants into the POTW at the time of issuance of this permit.
 - c. Information on the quality and quantity of the effluent introduced into the POTW and the anticipated impact of the change in the quality and quantity of effluent to be discharged from the POTW.
 - d. The identity of the industrial users served by the POTW which are subject to pretreatment standards adopted under Section 307(b) of the Clean Water Act; the POTW shall also specify the total volume of discharge and estimated concentration of each pollutant discharged into the POTW by the industrial user.

D. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit.

E. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge, sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

F. Bypassing

1. Bypassing Not Exceeding Permit Limitations - The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are subject to the reporting and notification requirements of PART A III.C.4 (Other Noncompliance).
2. Other Bypassing - In all other situations, bypassing is prohibited and DEP may take enforcement action against the permittee for bypass unless:
 - a. A bypass is unavoidable to prevent loss of life, personal injury, or "severe property damage."
 - b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance.
 - c. The permittee submitted the necessary reports required in F.4.a and b below.
3. DEP may approve an anticipated bypass, after considering its adverse effects, if DEP determines that it will meet the conditions listed in F.2 above.
4. Notice
 - a. Anticipated Bypass – If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the bypass.
 - b. Unanticipated Bypass – The permittee shall submit notice of an unanticipated bypass as required in PART A III.C.3 (Unanticipated Noncompliance or Potential Pollution Reporting) and other bypass as required in PART A III.C.4 (Other Noncompliance).

II. PENALTIES AND LIABILITY

A. Violations of Permit Conditions

Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR §122.41(a)(2).

Any person or municipality, who violates any provision of this permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.

B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or
- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance) Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in 18 Pa.C.S.A § 4904 and 40 CFR §122.41(j)(5) and (k)(2).

C. Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance pursuant to Section 309 of the Clean Water Act or Sections 602, 603 or 605 of the Clean Streams Law.

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the Clean Water Act and the Clean Streams Law.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. 40 CFR 122.41(c)

III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Sections 5(b) and 305 of Pennsylvania's Clean Streams Law, and Title 25 Pa. Code Chapter 92 and 40 CFR §122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; 25 Pa. Code 92.51(3)(i) and 40 CFR 122.41(i) (1)
2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; 25 Pa. Code 92.51(3)(ii) and 40 CFR 122.41(i) (2)
3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and 40 CFR 122.41(i)(3)

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if this permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. 40 CFR 122.61(a)
2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; 25 Pa. Code 92.71a(1) and 40 CFR 122.61(b)(1)
 - b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; and 25 Pa. Code 92.71a(2) and 40 CFR 122.61(b)(2)
 - c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue this permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section. 25 Pa. Code 92.71a(3) and 40 CFR 122.61(b)(3)
 - d. The new permittee is in compliance with existing Department issued permits, regulations, orders and schedules of compliance, or that any noncompliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedule set forth in the permit), consistent with § 92.55 (relating to schedules of compliance) and other appropriate Department regulations. 25 Pa. Code 92.71a(4)
3. In the event DEP does not approve transfer of this permit, the new owner or controller must submit a new permit application.

C. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. 40 CFR 122.41(g)

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit. 40 CFR 122.21(d)

E. Other Laws

The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations.

PART C

I. OTHER REQUIREMENTS

- A. No stormwater from pavements, areaways, roofs, foundation drains or other sources shall be admitted directly to the sanitary sewers associated with the herein approved discharge.
- B. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance and replacement of all sewers or sewerage structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.
- C. Collected screenings, slurries, sludges, and other solids shall be handled and disposed of in compliance with the Solid Waste Management Act (35 P.S. Sections 6018.101 - 6018.1003), and in a manner equivalent to the requirements indicated in Chapters 271, 273, 275, 283, and 285 (relating to permits and requirements for landfilling, land application, incineration, and storage of sewage sludge), Federal Regulation 40 CFR Parts 501 and 503, The Clean Streams Law, and the Federal Clean Water Act and its amendments.
- D. The permittee shall complete all Supplemental Reporting forms provided by the Department in this permit (or an approved equivalent), and submit the signed, completed forms to the Department on a monthly basis with the DMR, in accordance with PART A III.B of this permit.
- E. This permit is of interest to the U.S. Environmental Protection Agency (EPA) because it meets one or more of the following criteria:
 - 1. POTW with a design hydraulic flow of one mgd or more.
 - 2. POTW with a pretreatment requirement.
 - 3. Industrial Waste discharger not waived for review by the EPA/DEP Memorandum of Agreement.

A copy of the DMR shall be submitted to the EPA at the following address:

NPDES Discharge Monitoring Reports (3WP42)
Water Protection Division
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

- F. The permittee shall ensure that applied chlorine, used for disinfection or other purposes, is optimized to the degree necessary to minimize the total residual chlorine in the discharge. In doing so, the permittee shall consider relevant factors affecting chlorine dosage, such as wastewater characteristics, mixing and contact times, and desired result of chlorination.
- G. The permittee shall submit the results of Whole Effluent Toxicity (WET) tests with their next permit renewal application, as required in the federal regulation 40 CFR 122.21(j)(5). The permittee shall conduct WET tests in accordance with the Department's biomonitoring requirements. Prior to starting the WET tests, the applicant must contact the Department for current requirements.
- H. Influent samples shall be collected and analyzed once per week for BOD₅ and Total Suspended Solids. Influent samples shall be collected at a location that is representative of all flows and loadings received by the facility. The influent mass BOD₅ loading to the plant, including all hauled-in wastes, shall be used for the development of annual Chapter 94 Municipal Wasteload Management Reports. The Authority may sample hauled in waste separately from influent waste. The total organic loading to the plant for Chapter 94 purposes shall be calculated using both influent and hauled in wastes.

- I. Unless otherwise authorized under Part B of this permit, any discharge from any point other than a permitted treatment outfall or permitted combined sewer system outfall is prohibited. See e.g. Section 301 (b)(1)(B) and (C) of the Clean Water Act; 40 CFR 122.44 and 133.102 (relating to limitations, standards and permit conditions; and secondary treatment). In the event there is a prohibited discharge from a sewer conveyance system, report every such discharge to the Department within 24 hours of the discharge and on your monthly Discharge Monitoring Report (DMR) in the Remarks block. Indicate the date of discharge, action taken, and volume of discharge. 40 CFR 122.41(l)(6) and (7) (relating to reporting requirements).

J. SCHUYLKILL RIVER PCB TMDL

On April 7, 2007, the U.S. Environmental Protection Agency (EPA) Region III established a Total Maximum Daily Load (TMDL) for PCBs for the Schuylkill River, which was listed on Pennsylvania's 1996 303(d) list of impaired streams as impaired due to the presence of elevated PCB concentrations found in fish tissue. PCBs are a group of synthetic chemicals that consist of 209 individual compounds (known as Congeners). The Schuylkill River PCB TMDL was established using a water quality criteria of 0.044 ng/l for PCBs.

Implementation of the TMDL requires that permitted facilities that discharge directly to the Schuylkill River conduct monitoring for PCBs using analytical Method 1668A. The results of PCB monitoring will be evaluated to determine a need to develop and implement a PCB Waste Minimization and Reduction Program, also known as Pollution Minimization Plan (PMP). For information on how to develop a PMP go to Delaware River Basin Commission website at http://www.state.nj.us/drbc/PMP_info.htm per year during the permit cycle.

Implementation of the TMDL will be completed in two phases. Phase I implementation of the TMDL requires that this facility collect and analyze two samples per year during the permit cycle for PCBs utilizing Method 1668A. One sample shall be collected during a wet weather flow period as determined by the Authority. The second sample shall be collected during a dry flow period as determined by the Authority. The samples shall be collected from Outfall 001.

Sample collection techniques, identification analytical approaches and reporting requirements can be found at http://www.state.nj.us/drbc/PCB_info.htm

Upon review of the data collected in Phase I, individual facilities may be directed by the Department to commence Phase II involving development and implementation of a PMP.

II. INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION

- A. *General Requirement* -- The permittee shall implement an industrial pretreatment program in accordance with the federal Clean Water Act, The Pennsylvania Clean Streams Law, and the federal General Pretreatment Regulations (40 CFR 403). The program shall also be implemented in accordance with the pretreatment program, and any modifications submitted by the permittee and approved by the Approval Authority.
- B. *Annual Report and Other Requirements* -- The permittee shall submit an Annual Report by March 31 of each year to DEP and EPA that describes the permittee's pretreatment activities of the previous calendar year. The Annual Report shall include a description of pretreatment activities in all municipalities from which wastewater is received. The submission to DEP will be incorporated into the permittee's Annual Municipal Wasteload Management Report required by 25 Pa. Code, Chapter 94, of the Department's Rules and Regulations. The Annual Report shall contain the following:
1. *Control Mechanism Issuance* -- The Annual Report shall contain a summary of Significant Industrial User (SIU) control mechanism issuance, including a list of issuance and expiration dates for each SIU
 2. *Sampling and Inspection* -- The Annual Report shall contain a summary of the number and type of inspections and sampling of SIUs by the permittee, including a list of all SIUs either not sampled or not inspected, and the reason that the sampling and/or inspection was not conducted

3. *Significant Industrial User Compliance and POTW Enforcement* – The Annual Report shall contain a summary of the number and type of violations of pretreatment standards and requirements, local limits, and the actions taken by the permittee to obtain compliance, including civil penalty assessments and actions for injunctive relief. The report shall state whether each SIU was in significant noncompliance, as that term is defined in 40 CFR Part 403.8(f)(2)(viii).
 4. *Industrial Listing* – The Annual Report shall contain an updated industrial listing showing all current SIUs and the categorical standard, if any, applicable to each. In addition, the report shall contain a summary of any trucked or hauled wastewater accepted at the plant, including the source of the wastewater (domestic or industrial), the amount of wastewater received on a monthly basis, any controls imposed on the users, and the discharge point designated by the POTW for acceptance of such wastewater.
 5. *Summary of POTW Operations* – The Annual Report shall contain a summary of any interference, pass-through, or permit violations by the POTW that may be attributed to industrial users, and actions taken to address these events. The summary shall include sampling and analysis of treatment plant influent, effluent, and sludge for toxic and incompatible pollutants. The summary shall also include an analysis of any trends in such data over the past three years.
 6. *Pretreatment Program Changes* – The Annual Report shall contain a summary of any changes to the approved program and the date of submission to the Approval Authority.
- C. *Monitoring* – The permittee shall conduct monitoring at its treatment plant that, at a minimum, includes quarterly influent, effluent, and sludge analysis for all local limit parameters, and an annual priority pollution scan for influent and sludge.
- D. *Notification of Pass-Through or Interference* – The permittee shall notify EPA and DEP, in writing, of any instance of pass-through or interference related to an industrial discharge from an IU into the POTW. The notification shall be attached to the DMR submitted to EPA and DEP and shall describe the incident, including the date, time, length, cause (including responsible user if known), and the steps taken by the permittee and IU (if Identified) to address the incident. A copy of the notification shall be sent to the EPA at the address provided in Section H herein.
- E. *Headworks Analysis* – The permittee shall submit to EPA and DEP, a reevaluation of its local limits based on a headworks analysis of its treatment plant within one year of permit issuance. The list of pollutants to be evaluated, as well as a sampling plan for collection of necessary data, shall be submitted to EPA and DEP within three months of permit issuance. Within six months of acceptance of the headworks analysis by the Approval Authority, the permittee shall adopt the revised limits and notify all contributing municipalities of the need to adopt the revised limits.
- F. *Changes to Pretreatment Program* – DEP and EPA may require the permittee to submit for approval, changes to its pretreatment program if any one or more of the following conditions is present:
1. The program is not implemented in accordance with 40 CFR Part 403.
 2. Problems such as interference, pass-through or sludge contamination develop or continue.
 3. Federal, state, or local requirements change.
 4. Changes are needed to assure protection of waters of the Commonwealth.
- G. *Procedure for Pretreatment Program Changes* – Upon submittal by the permittee, and written notice of approval by the Approval Authority to the permittee of any changes to the permittee's approved pretreatment program, such changes are effective and binding upon the permittee, unless the permittee objects within 30 days of receipt of the written notice of approval. Any such objection must be submitted in writing to both the Department and EPA at the addresses shown below.

H. *Correspondence* – The Approval Authority shall be EPA at the following address:

Pretreatment Coordinator (3WP41)
Water Protection Division
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Copies of all correspondence and reports dealing with this program shall be sent to:

Department of Environmental Protection
Southcentral Regional Office
Water Management Program
909 Elmerton Avenue
Harrisburg, PA 17110-8200

III. REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

A. Prohibition of Non-stormwater Discharges

1. Except as provided in A.2, all discharges to Stormwater Outfalls 003, 004, 005, and 006 shall be composed entirely of stormwater.
2. The following non-polluting water discharges may be authorized, provided the discharge is in compliance with D.2.b: discharges from fire fighting activities; fire hydrant flushings, potable water sources including waterline flushings, irrigation drainage, lawn watering, routine external building washdown which does not use detergents or other compounds, pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used, air conditioning condensate, springs, uncontaminated groundwater, and foundation or footing drains where flows are not contaminated with process materials such as solvents.

B. Spills

This permit does not authorize the discharge of any polluting substances resulting from an on-site spill. Such spills shall be controlled through proper implementation of a PPC Plan as stated in Section D below.

- #### C. This permit does not authorize any discharge (stormwater or non-stormwater) containing any pollutant that may cause or contribute to an impact on aquatic life or pose a substantial hazard to human health or the environment due to its quantity or concentration.

D. Preparedness, Prevention and Contingency Plans

1. Development of Plan

Operators of facilities shall have developed a Preparedness, Prevention and Contingency (PPC) Plan in accordance with 25 Pa. Code § 91.34 and the "Guidelines for the Development and Implementation of Environmental Emergency Response Plans". The PPC Plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the facility. In addition, the PPC Plan shall describe the BMPs that are to be used to reduce the pollutants in stormwater discharges at the facility ensuring compliance with the terms and conditions of this permit.

2. Non-stormwater Discharges

- a. The PPC Plan shall contain a certification that the discharge has been tested or evaluated for the presence of non-stormwater discharges. The certification shall include the identification of potential significant sources of non-stormwater at the site, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing methods used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. Such certification may not be feasible if the facility operating the stormwater discharge does not have access to an outfall, manhole, or other point of access to the ultimate conduit that receives the discharge. In such cases, the source identification section of the PPC Plan shall indicate why the certification was not feasible. A discharger that is unable to provide the certification must notify the Department within 180 days of the effective date of this permit.
- b. Except for flows from fire fighting activities, sources of non-stormwater listed in A.2. (authorized non-stormwater discharges) that are combined with stormwater discharges must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge.

3. Comprehensive Site Compliance Evaluations and Record Keeping

Qualified personnel shall conduct site compliance evaluations at least once a year. Such evaluations shall include:

- a. Visual inspection and evaluation of areas contributing to a stormwater discharge for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural stormwater management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
- b. Based on the results of the inspection, the description of potential pollutant sources identified in the PPC plan, and pollution prevention measures and controls identified in the plan shall be revised as appropriate within 15 days of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 90 days after the inspection.
- c. A report summarizing the scope of the inspection, using the DEP's Annual Inspection Form shall be completed and made available upon request and retained as part of the PPC Plan for at least one year after coverage under this permit terminates.

E. Stormwater Management Best Management Practices (BMPs)

The permittee shall implement at least the following BMPs:

1. Manage sludge in accordance with all applicable permit requirements.
2. Store chemicals in secure areas on impervious surfaces away from storm drains.
3. Consider routing stormwater contaminated within the treatment facility to the treatment facility or cover exposed materials (i.e., from the following areas: grit, screenings and other solids handling, storage or

disposal areas; sludge drying beds; dried sludge piles, composite piles, septage or hauled waste receiving station).

4. Efficiently use pesticides for weed control; where practicable investigate use of the least toxic pesticides; do not apply during windy conditions.
5. The following table describes the outfall locations and drainage areas:

<u>Outfall No.</u>	<u>Latitude</u>	<u>Longitude</u>
003	40°16'40"	75°50'18"
004	40°16'39"	75°50'16"
005	40°16'38"	75°50'13"
006	40°16'42"	75°50'07"

IV. SCHEDULE OF COMPLIANCE

- A. The permittee shall achieve compliance with the final effluent limitations or terminate this discharge in accordance with the following schedule:

Compliance with effluent limitations

March 1, 2011

- B. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit to the Department a written notice of compliance or noncompliance with the specific schedule requirement(s). Each notice of noncompliance shall include the following information:
 1. A short description of the noncompliance.
 2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement.
 3. A description of any factors which tend to explain or mitigate the noncompliance.
 4. An estimate of the date that compliance with the elapsed schedule requirement will be achieved and an assessment of the probability that the next scheduled requirement will be met on time.

Wastewater Training and Instructional Videos
Department of Environmental Protection

Operators of wastewater treatment facilities and collection systems are required to be licensed and obtain continuing education by taking DEP-approved training.

The amount of required training contact hours is dependant on the class of license that the operator holds and the current license cycle of the operator as follows:

Cycle	Class					
	A	B	C	D	E	Grandparented
1 st 3-year cycle	15	15	15	8	8	8
Subsequent 3-year cycles	30	30	30	15	15	15

The current catalog of DEP-approved training can be located on the Web at the DEP Drinking Water and Wastewater Operator Information Center. The Drinking Water and Wastewater Operator Information Center can be found by:

- Logging onto the DEP website at www.depweb.state.pa.us
- Clicking on the "DEP Keywords" link
- Clicking on "O"
- Clicking on "Operators"

For more information concerning the continuing education requirements for licensed operators, contact DEP's Bureau of Water Standards and Facility Regulation, Division of Operations Monitoring and Training at 717-772-4018.

If an operator needs to become licensed, contact the State Board of Water and Wastewater Systems Operators at 717-787-5236. Several study modules are available to help prepare for the required examinations. Contact the Field Operations Regional Office listed below to obtain copies of the related modules.

Several free educational videos are available covering various topics related to wastewater treatment. These videos do not toward the continuing education requirement. The video catalog includes:

Catalog Number	Title / Description
L-01	Lab Set-Up for CBOD and Dissolved Oxygen
L-02	CBOD and Dechlorination Procedures
L-03	Dissolved Oxygen Procedure (Meter)
L-04	pH and Suspended Solids
L-05	Fecal Coliform Test
L-06	Lab Procedures
S-01	Sacramento Course Volume I, Introduction
S-02	Sacramento Course Volume I, Chapter 1, "The Treatment Plant Operator"
S-03	Sacramento Course Volume I, Chapter 2, "Why Treat Wastes"
S-04	Sacramento Course Volume I, Chapter 3, "Wastewater Treatment Facilities"
S-05	Sacramento Course Volume I, Chapter 4, "Racks, Screens, Comminutor & Grit Removal"
S-06	Sacramento Course Volume I, Chapter 5, "Sedimentation & Flootation"
S-07	Sacramento Course Volume I, Chapters 6 & 7, "Trickling Filters & RCBs"
S-08	Sacramento Course Volume I, Chapters 8 & 9, "Activated Sludge & Lagoons"
S-09	Sacramento Course Volume I, Chapter 10, "Disinfection & Dechlorination of Wastewater"
MWPP-01	Introduction to Wastewater Treatment and Pollution
MWPP-02	Energy Efficiencies in Wastewater Systems
	Water / Wastewater 101 for Emergency Responders & Law Enforcement
	Nitrification in Wastewater Systems
	Denitrification in Wastewater Systems
	So You Want to be an Operator

For copies of these videos, contact DEP's Bureau of Water Standards and Facility Regulation, Division of Technical and Financial Assistance at 717-787-0122.

Department of Environmental Protection
Southcentral Regional Office
 909 Elmerton Avenue
 Harrisburg, PA 17110
 717-705-4707

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT**

NAME:
ADDRESS:

FACILITY:
LOCATION:
WATERSHED:

PA (#)				OUTFALL (#)			
MONITORING PERIOD							
FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	2006	2	1		2006	2	28

This permit EXPIRES: ()
Renewal application DUE DATE: ()

NOTE: READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

PARAMETER	QUANTITY OR LOADING			UNITS	QUALITY OR CONCENTRATION		UNITS	NO EX	ANALYSIS FREQUENCY	SAMPLE TYPE
	Report Avg Mo	Report Max Daily	XXX		XXX	XXX				
FLOW			XXX	MGD	XXX	XXX	XXX	X	28/28	Meas
	Report Avg Mo	Report Max Daily	XXX		XXX	XXX				
pH	XXX	XXX	XXX	XXX	6.0 Minimum	9.0 Maximum	S.U.	X	1/day	Grab
	XXX	XXX	XXX		XXX	XXX				
DISSOLVED OXYGEN	XXX	XXX	XXX	XXX	5.0 Inst Min	XXX	mg/l	X	1/day	Grab
	XXX	XXX	XXX		XXX	XXX				
TOTAL RESIDUAL CHLORINE	XXX	XXX	XXX	XXX	Avg Mo	Report Maximum	mg/l	X	1/day	Grab
	XXX	XXX	XXX		XXX	XXX				
FECAL COLIFORM (5/1 TO 9/30)	XXX	XXX	XXX	XXX	200 30 Day Geo	XXX	No. 100 ml	X	2/month	Grab
	XXX	XXX	XXX		XXX	XXX				
FECAL COLIFORM (10/1 TO 4/30)	XXX	XXX	XXX	XXX	30 Day Geo	XXX	No. 100 ml	X	2/month	Grab
	XXX	XXX	XXX		XXX	XXX				
TOTAL SUSPENDED SOLIDS	Avg Mo	Avg Wkly	939 + 865 (MO 1 + MO 2)	lbs	Avg Mo	Avg Wkly	mg/l	X	2/month	8-hour comp
	XXX	XXX	XXX		XXX	XXX				
CBOD ₅	Avg Mo	Avg Wkly	1804	lbs	Avg Mo	Avg Wkly	mg/l	X	2/month	8-hour comp
	XXX	865	1804		3.9	XXX				
TOTAL NITROGEN	XXX	Report Total Mo	Report Total Ann	lbs	Report Avg Mo	XXX	mg/l	X	2/month	8-hour comp
	XXX	627	XXX		2.8	XXX				
TKN	XXX	Report Total Mo	XXX	lbs	Report Avg Mo	XXX	mg/l	X	2/month	8-hour comp
	XXX	238	XXX		1.1	XXX				
NO ₃ -NO ₂ as N	XXX	Report Total Mo	XXX	lbs	Report Avg Mo	XXX	mg/l	X	2/month	8-hour comp
	XXX	XXX	XXX		1.1	XXX				
NH ₃ -N (5/1 to 10/31)	XXX	Report Total Mo	XXX	lbs	Report Avg Mo	XXX	mg/l	X	2/month	8-hour comp
	18.6	521	XXX		2.4	XXX				
NH ₃ -N (11/1 to 4/30)	14.2	Report Total Mo	624	lbs	Report Avg Mo	XXX	mg/l	X	2/month	8-hour comp
	14.2	398	624		1.4	XXX				
TOTAL PHOSPHORUS	Avg Mo	Report Total Mo	Total Ann	lbs	Avg Mo	XXX	mg/l	X	2/month	8-hour comp
	XXX	XXX	XXX		XXX	XXX				

DISCHARGE MONITORING REPORT SUPPLEMENTAL FORM (S)

For the MONTH FEBRUARY

(PERMITTEE)
 (MUNICIPALITY), () County
 Watershed ()

NPDES Permit No. PA () Outfall No. ()
 Renewal application DUE DATE is (DATE).
 This permit will EXPIRE on (DATE).

DAY	Effluent										
	FLOW (MGD)	Total P mg/l	Total P lbs/day	NH ₃ -N mg/l	NH ₃ -N lbs/day	TKN mg/l	TKN lbs/day	NO ₃ -NO ₂ as N mg/l	NO ₃ -NO ₂ as N lbs/day	Total N (mg/l) TKN + NO ₂ + NO ₃	Total N (lbs/day) TKN + NO ₂ + NO ₃
1											
2											
3											
4	.75	0.7	4.4	3.0	18.8	3.5	21.9	1.5	9.4	5.0	31.3
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27	1.3	2.2	23.9	1.7	18.4	2.1	22.8	0.7	7.6	2.8	30.4
28											
29											
30											
31											
Avg		1.4	14.2	2.4	18.6	2.8	22.4	1.1	8.5	3.9	30.9
*Total lbs/mo	XXX	XXX	398	XXX	521	XXX	627	XXX	238	XXX	865

EXAMPLE

14.2 x 28 days

22.4 x 28 days

8.5 x 28 days

30.9 x 28 days

* Calculated by Avg (lbs/day) x total number of days discharged occurred.
 Assumes 28 days of discharge.

Signature _____ Date: _____

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT**

NAME:
ADDRESS:

FACILITY:
LOCATION:
WATERSHED:

PA (#)				OUTFALL (#)			
MONITORING PERIOD							
FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	2006	1	1		2006	1	31

This permit EXPIRES: ()
Renewal application DUE DATE: ()

NOTE: READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

PARAMETER	QUANTITY OR LOADING			UNITS	QUALITY OR CONCENTRATION		UNITS	NO EX	ANALYSIS FREQUENCY	SAMPLE TYPE
	Report Avg Mo	Report Max Daily	XXX		XXX	XXX				
FLOW			XXX	MGD	XXX	XXX	XXX	X	31/31	Mcas
	Report Avg Mo	Report Max Daily	XXX		XXX	XXX				
pH	XXX	XXX	XXX	XXX	6.0 Minimum	9.0 Maximum	S.U.	X	1/day	Grab
	XXX	XXX	XXX		XXX	XXX				
DISSOLVED OXYGEN	XXX	XXX	XXX	XXX	5.0 Inst Min	XXX	mg/l	X	1/day	Grab
	XXX	XXX	XXX		XXX	XXX				
TOTAL RESIDUAL CHLORINE	XXX	XXX	XXX	XXX	Avg Mo	Report Maximum	mg/l	X	1/day	Grab
	XXX	XXX	XXX		XXX	XXX				
FECAL COLIFORM (5/1 TO 9/30)	XXX	XXX	XXX	XXX	200 30 Day Geo	XXX	No 100 ml	X	2/month	Grab
	XXX	XXX	XXX		XXX	XXX				
FECAL COLIFORM (10/1 TO 4/30)	XXX	XXX	XXX	XXX	30 Day Geo	XXX	No 100 ml	X	2/month	Grab
	XXX	XXX	XXX		XXX	XXX				
TOTAL SUSPENDED SOLIDS			XXX	lbs	Avg Mo	Avg Wkly	mg/l	X	2/month	8-hour comp
	Avg Mo	Avg Wkly	XXX		XXX	XXX				
CBOD ₅			XXX	lbs	Avg Mo	Avg Wkly	mg/l	X	2/month	8-hour comp
	Avg Mo	Avg Wkly	XXX		XXX	XXX				
TOTAL NITROGEN	XXX	939	939	lbs	3.0	XXX	mg/l	X	2/31	8-hour comp
	XXX	Report Total Mo	Report Total Ann		XXX	XXX				
TKN	XXX	713	XXX	lbs	2.3	XXX	mg/l	X	2/31	8-hour comp
	XXX	Report Total Mo	XXX		XXX	XXX				
NO ₃ -NO ₂ as N	XXX	226	XXX	lbs	0.8	XXX	mg/l	X	2/31	8-hour comp
	XXX	Report Total Mo	XXX		XXX	XXX				
NH ₃ -N (5/1 to 10/31)	XXX	XXX	XXX	lbs	XXX	XXX	mg/l	X	2/month	8-hour comp
	Avg Mo	Report Total Mo	XXX		XXX	XXX				
NH ₃ -N (11/1 to 4/30)	17.8	552	XXX	lbs	1.8	XXX	mg/l	X	2/31	8-hour comp
	Avg Mo	Report Total Mo	XXX		XXX	XXX				
TOTAL PHOSPHORUS	7.3	226	226	lbs	0.8	XXX	mg/l	X	2/month	8-hour comp
	Avg Mo	Report Total Mo	Total Ann		XXX	XXX				

DISCHARGE MONITORING REPORT SUPPLEMENTAL FORM (S)

For the MONTH January 2

(PERMITTEE)

NPDES Permit No. PA () Outfall No. ()

(MUNICIPALITY), () County

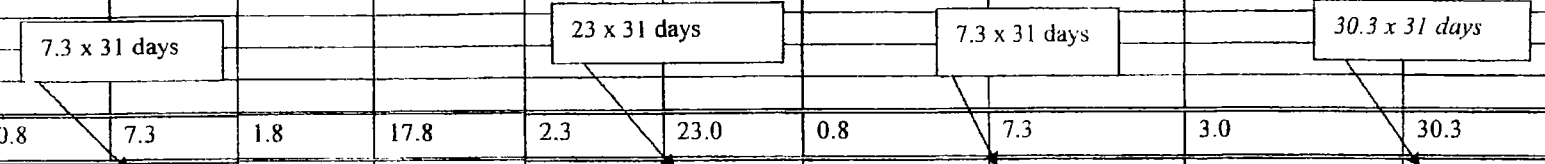
Renewal application DUE DATE is (DATE).

Watershed ()

This permit will EXPIRE on (DATE).

DAY	Effluent										
	FLOW (MGD)	Total P mg/l	Total P lbs/day	NH ₃ -N mg/l	NH ₃ -N lbs/day	TKN mg/l	TKN lbs/day	NO ₃ -NO ₂ as N mg/l	NO ₃ -NO ₂ as N lbs/day	Total N (mg/l) TKN + NO ₂ + NO ₃	Total N (lbs/day) TKN + NO ₂ + NO ₃
1											
2											
3											
4	1.0	1.0	8.3	2.0	16.7	2.5	20.9	1.0	8.3	3.5	29.2
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27	1.5	0.5	6.3	1.5	18.8	2.0	25.0	0.5	6.3	2.5	31.3
28											
29											
30											
31											
Avg		0.8	7.3	1.8	17.8	2.3	23.0	0.8	7.3	3.0	30.3
*Total lbs/mo	XXX	XXX	226	XXX	552	XXX	713	XXX	226	XXX	939

EXAMPLE



* Calculated by Avg (lbs/day) x total number of days discharged occurred.
Assumes 31 days of discharge.

Signature _____ Date: _____

NON-COMPLIANCE DISCHARGE REPORT FORM

Included with the DMR Supplemental Form is a Non-Compliance Discharge Report Form. This form, when properly completed, will suffice as the five-day letter as required in the permit. The following sections must be completed:

1. Describe what was discharged (sludge, raw influent, bypass, etc.) and the date(s) the non-compliance occurred.
2. Circle the applicable stream effects, or describe any unlisted impacts.
3. Explain the cause of the non-compliance. Use the reverse side of the paper or attach additional pages as necessary.
4. Fill in the date(s) and time(s) of the event. Indicate when the event will cease.
5. List here what has been done to reduce, eliminate, and prevent a recurrence of the non-complying discharge.
6. List here any special analyses performed and/or field tests conducted on the discharge and/or stream.
7. When and who did you notify of the non-complying discharge.
8. Your signature and title.

If you should have any questions, please contact the Water Quality Specialist who inspects your facility. The Specialists can be reached at:

Southcentral Field Office: 717-705-4707

Adams	Fulton	Lancaster (Western)	York
Cumberland	Huntingdon (Eastern)	Lebanon	
Dauphin	Juniata	Mifflin	
Franklin	Lancaster (Eastern)	Perry	

Altoona District Office: 814-946-7290

Bedford Blair Huntingdon (Western)

Reading District Office: 610-916-0100

Berks

Discharge Monitoring Report Supplemental for Bio-Solids

Biological treatment systems are designed to produce two main products: a liquid portion referred to as the *effluent* and a solid portion referred to as *bio-solids* or sludge. Bio-solid production is an important measurement of plant proficiency and performance. Properly prepared Bio-solids can be utilized as soil amendments, returning valuable soil nutrients to the soil environment. Two attached forms are to be used to track the production and utilization or disposal of Bio-Solids.

You are asked to provide the following information on the forms:

- Each form is to be filled out and submitted with the other DMR Supplemental forms. Attach any additional forms as necessary.
- Bio-Solid production information will be used to help evaluate plant performance. Please report only the Bio-Solids which have been removed from the plant digesters and other solids which have been **permanently** removed from the treatment process. Do **not** include Bio-Solids from other facilities, which are processed at your facility.
- In the **DISPOSAL SITE INFORMATION** section, report all Bio-Solids leaving your treatment plant for disposal or utilization. If your Bio-Solids are processed and disposed of at another facility, please provide that facility's name under other for type. If you receive Bio-Solids from another facility, include their tonnage in the **disposal site** section and provide their names and individual dry tonnage on the second page.
- If no Bio-Solids were removed during the month, please check the block in the upper left corner of the page.
- The **% Solids** of the liquid sludge or dewatered sludge must be determined by a laboratory test. Do not estimate or guess this value. An acceptable test method is the "Total Solids Dried at 103-105°C" procedure in **Standard Methods for the Examination of Water and Wastewater**, 18th edition. This test, number 2540 B, can be found on pages 2-54 and 2-55. Other references such as ASTM may have equivalent tests which are also acceptable.
- Enter the % Solids value without moving the decimal point. The conversion factor in the formula given will convert the percent solids to its decimal equivalent. For example:

Hauled as liquid sludge

Gallons	X % Solids	X Conv. Factor	= Dry Tons
2,500	X 3.4	X 0.0000417	= 0.35

In the above case, the percent solids were reported as 3.4%. 3.4 was used in the calculation. The decimal point was not shifted.

- Do not report the same sludge in both "**Hauled as liquid sludge**" and "**Hauled as dewatered sludge**".

- **NO₃-NO₂ mg/l.** Record the total Nitrate-Nitrite Nitrogen concentration of the effluent.
- **NO₃-NO₂ lbs.** Calculate and record the Nitrate-Nitrite Nitrogen in Pounds.
- **Total N mg/l.** Calculate the Total Nitrogen by summing the Kjeldahl Nitrogen, Nitrate Nitrogen, and Nitrite Nitrogen concentrations for each day.
- **Total N lbs.** Calculate and record the Total Nitrogen in pounds.

Calculate the average monthly lbs for P, NH₃-N, TKN, NO₃-NO₂, and Total N by summing those columns and dividing it by the number of entries in that column.

Calculate total monthly Phosphorus loading by multiplying the average monthly Total P lbs. x # days of the month that a discharge occurs. This method also applies to Total Nitrogen.

- **Total Monthly Loading (TML) (lbs)** - First you need to determine the Total N or P for the day on which you sampled = lbs/day. Add these individual results and divide the sum by the number of samples. This gives you the Average Monthly Loading (AML) (lbs/day). Example: I took two samples and have determined that the AML (lbs/day) is 100. To determine the **TML**, use the AML times the number of days there was a discharge in the month. Example: 100 lbs/day * 30 days/month = 3,000 lbs/month. If this is the first month that you calculated the TML then the TML = TAL.
- **Total Annual Loading (TAL) (lbs)** - Each month you will have a total pounds of Nitrogen and Phosphorus that was discharged (TML). You will add the total for each month and report this number. When you get to the 13th month number, you will drop off the 1st month and add the 13th. This is a running total. NOTE: This is not a calendar year.

Example: Month 1 reports 100 lbs (TML) of Total Nitrogen. You would report 100 lbs for the TAL for that month. On Month 2, it was determined that 200 lbs of Total Nitrogen (TML) was discharged. You would report 300 lbs (100 + 200). On Month 3, it was determined that 100 lbs was discharged. You would report 400 lbs for TAL (300 + 100).

Example: You have added all of the individual TMLs for Months 1 through 12 and have a number of 1,000 lbs. The first month you had 100 lbs and the 13th month you had 200 lbs. The number (TAL) you would report on the 13th month is 1,000 - 100 + 200 = 1,100 lbs.

Quarterly Monitoring: If you were required to monitor nutrients once a quarter, the calculated daily load (lbs/day) would also be your Average Monthly Load. Multiply the determined Average Monthly Load by the number of days that a discharge occurred in the monitoring period to determine TML. The next month you use the same Average Monthly Load times the number of days a discharge occurred in that month. Use the same Average Monthly Load for the third month times the number of days a discharge occurred in that month. The next quarterly sample results would be used to determine the daily load or Average Monthly Load for calculations of TML for this quarter.

****See Example Supplemental and DMR forms****

Supplemental Form (W)

This form is used for many industrial dischargers and in conjunction with Supplemental Form (S) for some sewage facilities. The column headings in Form (W) are matched to individual permit requirements.

- There are a great number of possible column headings for Form (W). Let us know if the abbreviations used are not clear.

We ask that you call us immediately in the event of any equipment breakdown, chemical spill, or shock loading to your influent. Call us also if operational problems result in a failure to achieve your treatment requirements. This includes treatment facility bypasses, pump station failures, and collection system overflows. Violations of effluent limitations for toxic constituents should also be reported. A written report should follow within five (5) days of the event. Refer to your permit for a complete description of the monitoring and reporting responsibilities.

In this example, Z would be 8. The equation would look like the following:

$$GM = \sqrt[8]{120 \times 80 \times 40 \times 120 \times 70 \times 100 \times 30 \times 180}$$

(*If any value equals 0, substitute 1 for that value.)

$$GM = \sqrt[8]{1.74 \times 10^{15}}$$

$$GM = 80.38$$

For this example, the Geometric Mean is **80.38** and would be reported in the averages column as **80** (significant figures).

These calculations are far easier using an electronic calculator with a second function key.

- **CBOD.** Carbonaceous BOD₅ is a change from the BOD₅ in older permits. The test uses a nitrification inhibitor. Make sure your lab or contract lab is aware of this. However, if your permit still specifies BOD₅, test accordingly. BOD₅ is still specified for influent sampling.
- **Total Suspended Solids (TSS).** Report TSS concentration (mg/l) and quantity (lb/day).
- **Total Residual Chlorine (TRC).** Record the TRC content of the effluent. If dechlorination is required, sample after dechlorination.
- **pH.** Record the pH of the effluent.
- **Dissolved Oxygen (D.O.).** Record the D.O. content of the effluent.

Weather. Record the weather conditions. Precipitation totals should be recorded here. An onsite rain gauge would yield useful information.

- Report effluent parameters at least as often as specified in the permit. Report any influent and process control data as you perform them.
- You may use a computer-generated report for the Supplemental DMR only. Please use the same format as ours. Please contact this office concerning use of your own forms.
- Indicate any outside laboratory use at the bottom of the form. Mark with an **X** if all of the testing is done in-house at your facility.
- Please do **not** send laboratory report forms from your testing laboratory. Do not send your bench sheet or other records, which should be kept at your facility.

Supplemental Form (S) Phosphorus and Nitrogen

- **Flow.** Report in million gallons (MG) only for the day that N & P samples are taken.
- **Total P mg/l.** Record the Total Phosphorus concentration of the effluent.
- **Total P lbs.** Calculate and record the Total Phosphorus in Pounds. [Flow for sample day (MG) x mg/L x 8.34.]
- **NH₃-N mg/l.** Record the total Ammonia-Nitrogen concentration of the effluent.
- **NH₃-N lbs.** Calculate and record the Ammonia-Nitrogen in Pounds.
- **TKN mg/l.** Record the Total Kjeldahl Nitrogen concentration of the effluent.

TKN lbs. Calculate and record the Total Kjeldahl Nitrogen in Pounds.

SUPPLEMENTAL FORMS

Supplemental Form (S)

This form is used for all sewage treatment facilities and certain industrial waste treatment facilities such as food processing. Column headings are standard on all Form (S) reports. Some of the headings may not apply to your facility.

- **Influent.** Municipal facilities must perform influent sampling for Chapter 94 wasteload management reporting. Analyze BOD₅ (not CBOD₅) and Total Suspended Solids (TSS) in the effluent at the minimum frequency specified in the permit. The sampling must be conducted at a location representative of all flows and loads received by the facility.

$$\text{Total Flow during day of sampling (MGD)} \times \text{Influent BOD}_5 \text{ (mg/l)} \times 8.34$$

- **Process Control.** For the column titled "Sludge Wasted," specify the volume (gallons) of sludge wasted for each day to holding tanks, drying beds, digesters, or other onsite retention facilities. Do not include the volume of sludge taken off-site, as off-site sludge usage or disposal should be reported on the Supplemental Biosolids Report (page 3). For the column titled "Aeration MLSS," indicate the mixed liquor suspended solids (MLSS) concentration in mg/l for your biological treatment facilities. There is no monitoring requirement in the permit; however, it is strongly recommended that MLSS be monitored weekly or more frequently depending on the size of the treatment plant. If you are utilizing other methods to evaluate biological process performance (e.g., settleometer measurements, centrifuge spin, etc.) you should convert these measurements to MLSS concentrations for reporting purposes.
- **Flow.** Report in million gallons (MG). For example: 13,000 gallons = 0.013 MG; 7,500 gallons = 0.0075 MG; 540 gallons = 0.00054 MG; if no flow, indicate by printing "NO FLOW".
- **Sludge Wasted.** Show daily sludge wasting in gallons to holding tanks, sludge drying beds, or digesters. Record the amounts of sludge wasted under Process Control.
- **Aeration Solids.** Indicate the results of either *mixed liquor suspended solids* in mg/l, *settleometer reading* in ml/l, or *centrifuge spin* in percent (%). Indicate which units you are using in the column.
- **Fecal Coliform Bacteria.** Report fecal coliform bacteria/100 ml. Average is **Geometric Mean**. A calculator for determining Geo Mean is available on the Department's Water/Wastewater information site:

<http://www.dep.state.pa.us/dep/deputate/waterops/index.htm>

Enter the site and click on: Water/Wastewater Calculators.

Calculation of Geometric Mean for Fecal Coliform

The *average* requested on both the DMR and the Supplemental form is Geometric Means or averages. This is not the typical average obtained by adding all of the fecal results and dividing by the number of samples. Below is the formula for calculating the **Geometric Mean**:

$$GM = \sqrt[Z]{N_1 \times N_2 \times N_3 \times \dots \times N_z}$$

Where:

N = sample value, Z = the number of samples

As an example, eight (8) fecal coliform samples were collected and analyzed. The results of the analyses were as follows:

N1=	120	N5=	70
N2=	80	N6=	100
N3=	40	N7=	30
N4=	120	N8=	180

Discharge Monitoring Reports & Supplemental Report Forms (Instructions and helpful hints for their completion)

Please find attached your Discharge Monitoring Report (DMR) and Supplemental Report forms. These forms are used in the self-monitoring program as required by your NPDES permit. You should make copies of these forms for your use. The reporting period is generally a calendar month. Your reports must be received by the 28th day of the following month. Please see that all treatment facility personnel are aware of the permit and DMR form. We seek your assistance in preventing errors and reporting mistakes.

DISCHARGE MONITORING REPORTS (DMRs)

- Inspect the form and contact us immediately if you find errors or omissions. Do not change or add information yourself.
- Complete all blocks where we have listed an entry under Permit Condition. This includes the FREQUENCY OF ANALYSIS and SAMPLE TYPE columns. Do not complete any other blocks.
- Make sure your reports are neat and legible.
- Report in the same significant figures as shown on Effluent Limitations, Monitoring, Recordkeeping, and Reporting Requirements page.
- Report in the same units shown on the DMR.
- List the number of times a particular permit condition has been exceeded under the NO EX column. This would include daily, weekly, and monthly limitations. If there were none for that month, enter zero (0). This does not apply to flow.

If there was no discharge for a particular outfall, a DMR must still be submitted. Write "NO DISCHARGE" on the FLOW line or on the first parameter line if FLOW is not listed.

- If a particular parameter is conditional on other parameters (such as FLOW or TEMPERATURE), it may not always be reportable. If this is the case, write "NO DISCHARGE" on that parameter line and provide an explanation.
- If you have **quantity** limits (loadings) listed on the DMR, you will need to calculate the **quantity** in lb/day. To do this, use the following formula:

$$\text{mg/l (concentration)} \times \text{MGD (Flow)} \times 8.34 \text{ lb/gal} = \text{lb/day}$$

- The monthly average lb/day is the sum of all the daily lb/day results divided by the number of days you sampled. Do not use monthly average flow and monthly average concentration in the above formula.
- All effluent samples taken using approved methods must be recorded on the Supplemental form and reported on the DMR.
- For every day you sample the effluent, you should record the sample result for that day. The discharge flow should be recorded in million gal/day for that day, (a 24-hour period). Use these figures to calculate the lb/day in the formula above.
- Use > (greater than), < (less than) - the method detection limit to report results that are above or below the detection limit and cannot be quantified. Use the method detection limit for calculating loadings if values are less than detection limit.

Non-Compliance Discharge Report - NPDES Permit PA 0026972

Exeter Township, Berks County Authority 3-D Watershed
Exeter Township, Berks County

1. A non-compliance discharge of _____
occurred on this (these) dates: _____

2. The impact on the receiving water was (circle those that apply): 1. **Foam** 2. **Sheen** 3. **Discoloration** 4. **Odors** 5. **Solids deposited** 6. **Fishkill**
7. **Did not determine** 8. **Other** (describe): _____

3. The cause of the non-compliance discharge was: _____

4. The non-compliance discharge continued from the period of (date) _____ and (time) _____
to (date) _____ and (time) _____ or will continue until (date) _____
and (time) _____

5. The following action is being taken to **prevent** a recurrence or another non-compliance discharge of this nature: _____

6. The following analyses were made to determine the impact and the extent of the impact upon the receiving waters (effluent, stream, other): _____

7. The Department of Environmental Protection was notified of the non-compliance on (date) _____ at (time) _____
The person(s) contacted was (were): _____

Signature _____ Title _____ Date _____

Bio-Solids received from other sources

Source Name: Include the specific treatment facility name	Gallons Received	% Solids	Dry Tons
Totals Received =			

Comments:

Discharge Monitoring Report - Supplemental Bio-Solids Report

Check here if Bio-Solids were not removed this month.

Exeter Township, Berks County Authority 3-D Watershed

Exeter Township, Berks County

For the MONTH _____

20____

NPDES Permit PA 0026972

Bio-Solids (Sludge) Production Information (prior to incineration)

Hauled as liquid sludge				Hauled as dewatered sludge				
Gallons	X % Solids	X Conv. Factor	= Dry Tons	Tons dewatered sludge	X % Solids	X 0.01	= Dry Tons	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
	X	X 0.0000417	=		X	X 0.01	=	
TOTAL				=	TOTAL			
=				=	=			

DISPOSAL SITE INFORMATION: Please list all sites, even if they were not used this month.

	SITE 1	SITE 2	SITE 3	SITE 4
Site Name:				
County:				
Permit Number:				
Dry Tons Disposed:				
Type: (Check one)				
Agricultural Utilization				
Composting				
Landfill				
Other (explain)				

For Bio Solids that have been incinerated:
 Pre-incineration weight = _____ dry tons
 Post-incineration weight = _____ dry tons

 Signature Title

 Telephone Date

DISCHARGE MONITORING REPORT SUPPLEMENTAL FORM (S)

Exeter Township, Berks County Authority 3-D Watershed

Exeter Township, Berks County

NPDES Permit PA 0026972 for Outfalls 001 and 002

For the MONTH 20

Renewal application DUE DATE is SEPTEMBER 2, 2012.

This permit will EXPIRE on FEBRUARY 28, 2013.

DAY	Influent			Process Control		Effluent								PCB	Weather		
	FLOW (MGD)	BOD ₅ mg/l	TSS mg/l	Aeration Wasted	Aeration Solids	CBOD ₅		TSS		Cu. mg/l	NH ₃ N mg/l	pH. S.U	D.O. mg/l			Fecals /100 ml	TRC mg/l
						mg/l	lbs/day	mg/l	lbs/day								
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
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21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	
Avg														*			

Laboratory Name: _____ In house? _____

Signature _____

REMARKS: * Fecal coliform average is reported as Geometric Mean.

Telephone: _____

- Check here if no biosolids were removed from the plant during the month (otherwise, attach page 2).
- Check here if no biosolids were received from other sources during the month (otherwise, attach page 3).
- Check here if there were no noncompliance discharges during the month (otherwise, attach page 4)

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT
FINAL**

AME: Exeter Township, Berks County Authority
 ADDRESS: 4975 DeMoss Road
 Reading, PA 19606
 FACILITY: Exeter Township WTP
 LOCATION: Exeter Township, Berks County
 WATERSHED: 3-D

PA 0026972					OUTFALL 002		
MONITORING PERIOD							
FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY

This permit **EXPIRES: FEBRUARY 28, 2013**
 Renewal application **DUE DATE: SEPTEMBER 2, 2012**

NOTE: READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	ANALYSIS FREQUENCY	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
FLOW	SAMPLE MEASUREMENT				XXX	XXX	XXX			X	
	PERMIT REQUIREMENT	Report Avg Mo	Report Max Daily	MGD	XXX	XXX	XXX	XXX		X	Continued Meas
pH	SAMPLE MEASUREMENT	XXX	XXX			XXX					
	PERMIT REQUIREMENT	XXX	XXX	XXX	6.0 Minimum	XXX	9.0 Maximum	S.U.		X	1/day Grab
DISSOLVED OXYGEN	SAMPLE MEASUREMENT	XXX	XXX			XXX	XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	5.0 Inst Min	XXX	XXX	mg/l		X	1/day Grab
TOTAL RESIDUAL CHLORINE	SAMPLE MEASUREMENT	XXX	XXX								
	PERMIT REQUIREMENT	XXX	XXX	XXX	Report Minimum	0.4 Avg Mo	Report Maximum	mg/l		X	1/day Grab
FECAL COLIFORM (5/1 to 9/30)	SAMPLE MEASUREMENT	XXX	XXX		XXX		XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	200 30 Day Geo	XXX	No. 100 ml		X	1/week Grab
FECAL COLIFORM (10/1 to 4/30)	SAMPLE MEASUREMENT	XXX	XXX		XXX		XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	2,000 30 Day Geo	XXX	No. 100 ml		X	1/week Grab
TOTAL SUSPENDED SOLIDS	SAMPLE MEASUREMENT				XXX						
	PERMIT REQUIREMENT	1,476 Avg Mo	2,214 Avg Wkly	lb/day	XXX	30 Avg Mo	45 Avg Wkly	mg/l		X	1/week 24-hr comp
CBOD ₅	SAMPLE MEASUREMENT				XXX						
	PERMIT REQUIREMENT	1,230 Avg Mo	1,968 Avg Wkly	lb/day	XXX	25 Avg Mo	40 Avg Wkly	mg/l		X	1/week 24-hr comp
NH ₃ N	SAMPLE MEASUREMENT		XXX		XXX		XXX				
	PERMIT REQUIREMENT	984 Avg Mo	XXX	lb/day	XXX	20 Avg Mo	XXX	mg/l		X	1/week 24-hr comp
TOTAL COPPER	SAMPLE MEASUREMENT		XXX		XXX		XXX				
	PERMIT REQUIREMENT	2.805 Avg Mo	XXX	lb/day	XXX	0.057 Avg Mo	XXX	mg/l		X	1/week 24-hr comp
TOTAL PCB	SAMPLE MEASUREMENT	XXX	XXX			XXX	XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	Report	XXX	XXX	Mg/l		X	2/year 24-hr comp

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 gathering the information. The information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
 TYPED OR PRINTED

SIGNATURE OF PRINCIPAL EXECUTIVE
 OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (PLEASE USE SEPARATE SHEET OF PAPER IF NECESSARY).

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT
INTERIM**

PAGE 1 OF 1

NAME: Exeter Township, Berks County Authority
ADDRESS: 4975 DeMoss Road
Reading, PA 19606
FACILITY: Exeter Township WTP
LOCATION: Exeter Township, Berks County
WATERSHED: 3-D

PA 0026972				OUTFALL 002			
MONITORING PERIOD							
FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY

This permit **EXPIRES: FEBRUARY 28, 2013**
Renewal application **DUE DATE: SEPTEMBER 2, 2012**

NOTE: READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	ANALYSIS FREQUENCY	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
FLOW	SAMPLE MEASUREMENT				XXX	XXX	XXX		X		
	PERMIT REQUIREMENT	Report Avg Mo	Report Max Daily	MGD	XXX	XXX	XXX	XXX	X	Continued	Meas
pH	SAMPLE MEASUREMENT	XXX	XXX			XXX					
	PERMIT REQUIREMENT	XXX	XXX	XXX	6.0 Minimum	XXX	9.0 Maximum	S.U.	X	1/day	Grab
DISSOLVED OXYGEN	SAMPLE MEASUREMENT	XXX	XXX			XXX	XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	5.0 Inst Min	XXX	XXX	mg/l	X	1/day	Grab
TOTAL RESIDUAL CHLORINE	SAMPLE MEASUREMENT	XXX	XXX								
	PERMIT REQUIREMENT	XXX	XXX	XXX	Report Minimum	0.4 Avg Mo	Report Maximum	mg/l	X	1/day	Grab
FECAL COLIFORM (5/1 to 9/30)	SAMPLE MEASUREMENT	XXX	XXX		XXX		XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	200 30 Day Geo	XXX	No. 100 ml	X	1/week	Grab
CAL COLIFORM (10/1 to 4/30)	SAMPLE MEASUREMENT	XXX	XXX		XXX		XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	10,000 30 Day Geo	XXX	No. 100 ml	X	1/week	Grab
TOTAL SUSPENDED SOLIDS	SAMPLE MEASUREMENT				XXX						
	PERMIT REQUIREMENT	1,476 Avg Mo	2,214 Avg Wkly	lb/day	XXX	30 Avg Mo	40 Avg Wkly	mg/l	X	1/week	24-hr comp
CBOD ₅	SAMPLE MEASUREMENT				XXX		XXX				
	PERMIT REQUIREMENT	1,230 Avg Mo	1,968 Avg Wkly	lb/day	XXX	25 Avg Mo	XXX	mg/l	X	1/week	24-hr comp
TOTAL COPPER	SAMPLE MEASUREMENT		XXX		XXX		XXX				
	PERMIT REQUIREMENT	0.57 Avg Mo	XXX	lb/day	XXX	0.057 Avg Mo	XXX	mg/l	X	1/week	24-hr comp
TOTAL PCB	SAMPLE MEASUREMENT	XXX	XXX			XXX	XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	Report	XXX	XXX	Mg/l	X	2/year	24-hr comp

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 gathering the information. The information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See Pa. C.S. § 4904 (relating to unsworn falsification).

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TYPED OR PRINTED

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (PLEASE USE SEPARATE SHEET OF PAPER IF NECESSARY).

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT
FINAL**

NAME: Exeter Township, Berks County Authority
 ADDRESS: 4975 DeMoss Road
 Reading, PA 19606
 FACILITY: Exeter Township WTP
 LOCATION: Exeter Township, Berks County
 WATERSHED: 3-D

PA 0026972				OUTFALL 001			
MONITORING PERIOD							
FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY

This permit EXPIRES: FEBRUARY 28, 2013
 Renewal application DUE DATE: SEPTEMBER 2, 2012

NOTE. READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	ANALYSIS FREQUENCY	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
FLOW	SAMPLE MEASUREMENT				XXX	XXX	XXX		X		
	PERMIT REQUIREMENT	Report Avg Mo	Report Max Daily	MGD	XXX	XXX	XXX	XXX	X	Continued	Meas
pH	SAMPLE MEASUREMENT	XXX	XXX			XXX					
	PERMIT REQUIREMENT	XXX	XXX	XXX	6.0 Minimum	XXX	9.0 Maximum	S.L	X	1/day	Grab
DISSOLVED OXYGEN	SAMPLE MEASUREMENT	XXX	XXX			XXX	XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	5.0 Inst Min	XXX	XXX	mg/l	X	1/day	Grab
TOTAL RESIDUAL CHLORINE	SAMPLE MEASUREMENT	XXX	XXX								
	PERMIT REQUIREMENT	XXX	XXX	XXX	Report Minimum	0.40 Avg Mo	Report Maximum	mg/l	X	1/day	Grab
FECAL COLIFORM (5/1 to 9/30)	SAMPLE MEASUREMENT	XXX	XXX		XXX		XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	200 30 Day Geo	XXX	No. 100 ml	X	1/week	Grab
FECAL COLIFORM (10/1 to 4/30)	SAMPLE MEASUREMENT	XXX	XXX		XXX		XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	2,000 30 Day Geo	XXX	No. 100 ml	X	1/week	Grab
TOTAL SUSPENDED SOLIDS	SAMPLE MEASUREMENT				XXX						
	PERMIT REQUIREMENT	300 Avg Mo	450 Avg Wkly	lb/day	XXX	30 Avg Mo	45 Avg Wkly	mg/l	X	1/week	24-hr comp
CBOD ₅	SAMPLE MEASUREMENT				XXX						
	PERMIT REQUIREMENT	250 Avg Mo	400 Avg Wkly	lb/day	XXX	25 Avg Mo	40 Avg Wkly	mg/l	X	1/week	24-hr comp
NH ₃ N	SAMPLE MEASUREMENT		XXX		XXX		XXX				
	PERMIT REQUIREMENT	200 Avg Mo	XXX	lb/day	XXX	20 Avg Mo	XXX	mg/l	X	1/week	24-hr comp
TOTAL COPPER	SAMPLE MEASUREMENT		XXX		XXX		XXX				
	PERMIT REQUIREMENT	0.570 Avg Mo	XXX	lb/day	XXX	0.057 Avg Mo	XXX	mg/l	X	1/week	24-hr comp
TOTAL PCB	SAMPLE MEASUREMENT	XXX	XXX			XXX	XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	Report	XXX	XXX	Mg/l	X	2/year	24-hr comp

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TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY

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SIGNATURE OF PRINCIPAL EXECUTIVE
 OFFICER OR AUTHORIZED AGENT

COMMENT AND EXPLANATION OF ANY VIOLATIONS (PLEASE USE SEPARATE SHEET OF PAPER IF NECESSARY).

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT
INTERIM**

NAME: Exeter Township, Berks County Authority
 ADDRESS: 4975 DeMoss Road
 Reading, PA 19606
 FACILITY: Exeter Township WTP
 LOCATION: Exeter Township, Berks County
 WATERSHED: 3-D

PA 0026972					OUTFALL 001		
MONITORING PERIOD							
FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY

This permit EXPIRES: FEBRUARY 28, 2013
 Renewal application DUE DATE: SEPTEMBER 2, 2012

NOTE: READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	ANALYSIS FREQUENCY	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
FLOW	SAMPLE MEASUREMENT				XXX	XXX	XXX		X		
	PERMIT REQUIREMENT	Report Avg Mo	Report Max Daily	MGD	XXX	XXX	XXX	XXX	X	Continued	Mcas
pH	SAMPLE MEASUREMENT	XXX	XXX			XXX					
	PERMIT REQUIREMENT	XXX	XXX	XXX	6.0 Minimum	XXX	9.0 Maximum	S.U.	X	1/day	Grab
DISSOLVED OXYGEN	SAMPLE MEASUREMENT	XXX	XXX			XXX	XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	5.0 Inst Min	XXX	XXX	mg/l	X	1/day	Grab
TOTAL RESIDUAL CHLORINE	SAMPLE MEASUREMENT	XXX	XXX								
	PERMIT REQUIREMENT	XXX	XXX	XXX	Report Minimum	0.40 Avg Mo	Report Maximum	mg/l	X	1/day	Grab
FECAL COLIFORM (5/1 to 9/30)	SAMPLE MEASUREMENT	XXX	XXX		XXX		XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	200 30 Day Geo	XXX	No. 100 ml	X	1/week	Grab
FECAL COLIFORM (10/1 to 4/30)	SAMPLE MEASUREMENT	XXX	XXX		XXX		XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	10,000 30 Day Geo	XXX	No. 100 ml	X	1/week	Grab
TOTAL SUSPENDED SOLIDS	SAMPLE MEASUREMENT				XXX						
	PERMIT REQUIREMENT	300 Avg Mo	450 Avg Wkly	lb/day	XXX	30 Avg Mo	45 Avg Wkly	mg/l	X	1/week	24-hr comp
CBOD ₅	SAMPLE MEASUREMENT				XXX						
	PERMIT REQUIREMENT	250 Avg Mo	400 Avg Wkly	lb/day	XXX	25 Avg Mo	40 Avg Wkly	mg/l	X	1/week	24-hr comp
NH ₃ N	SAMPLE MEASUREMENT		XXX		XXX		XXX				
	PERMIT REQUIREMENT	Monitor & Report	XXX	lb/day	XXX	Monitor & Report	XXX	mg/l	X	1/week	24-hr comp
TOTAL COPPER	SAMPLE MEASUREMENT		XXX		XXX		XXX				
	PERMIT REQUIREMENT	0.570 Avg Mo	XXX	lb/day	XXX	0.057 Avg Mo	XXX	mg/l	X	1/week	24-hr comp
TOTAL PCB	SAMPLE MEASUREMENT	XXX	XXX			XXX	XXX				
	PERMIT REQUIREMENT	XXX	XXX	XXX	Report	XXX	XXX	Mg/l	X	2/year	24-hr comp

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TELEPHONE		DATE		
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COMMENT AND EXPLANATION OF ANY VIOLATIONS (PLEASE USE SEPARATE SHEET OF PAPER IF NECESSARY).



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

FILE

MAY 26 2017

CERTIFIED MAIL NO. 9171 9690 0935 0133 7724 06

John Granger
Exeter Township
4975 DeMoss Road
Reading, PA 19606-9060

Re: WQM Permit – Sewage – 3G
Exeter Township WWTP Birdsboro
Permit No. 0692402 A-3
Authorization ID No. 1171784
Exeter Township, Berks County

Dear Mr. Granger:

Your Water Quality Management (WQM) permit amendment is enclosed. You must comply with all Standard and Special Conditions attached to this Permit. Construction must be done in accordance with the permit application and all supporting documentation. Please review the permit conditions and the supporting documentation submitted with your application before starting construction.

Please note that you are responsible for securing all other required permits, approvals and/or registrations associated with the project, if applicable, under Chapters 102 (erosion and sedimentation control), 105 (stream obstructions and encroachments) and 106 (floodplains) of DEP's regulations. Construction may not proceed until all other required permits have been obtained.

Enclosed is the "Water Quality Management Post Construction Certification" form. A Pennsylvania-registered Professional Engineer must sign and complete this form prior to startup of the facilities. You or your authorized representative must also sign the form. This certification and other post-construction documentation must be submitted to DEP within 30 days of completion of the project and must be received by DEP prior to commencing operation of the facilities.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717.787.3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The

Mr. John Granger

- 2 -

appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717.787.3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717.787.3483) FOR MORE INFORMATION.

During construction or upon completing construction, please contact Bonnie J. Boylan at 717.705.4813 or bboylan@pa.gov so that an inspection of the facilities may be conducted, at DEP's discretion.

Sincerely,



Maria D. Bebenek, P.E.
Environmental Program Manager
Clean Water Program

Enclosures

cc: Eric McCracken, Great Valley Consultants
DRBC, Water Resources Management, Project Review
PADEP Central Office, Operations Section
PADEP SCRO, Clean Water Operations

Mr. John Granger

- 3 -

Eric McCracken
Great Valley Consultants
75 Commerce Drive
Wyomissing, PA 19610-3323

Delaware River Basin Commission
P.O. Box 7360
25 Cosey Road
West Trenton, NJ 08628-0360



WATER QUALITY MANAGEMENT PERMIT

<p>A. PERMITTEE (Name and Address): CLIENT ID#: 51184 Exeter Township Berks County 4975 DeMoss Road Reading, PA 19606-9060</p>	<p>B. PROJECT/FACILITY (Name): Exeter Township WWTP Birdsboro</p>
--	--

<p>C. LOCATION (Municipality, County): Exeter Township, Berks County</p>	<p>SITE ID#: 454828</p>
---	--------------------------------

D. This permit amendment approves the construction/modification of sewage facilities consisting of:

Replacement of existing raw wastewater influent pumps with three suction pumps, 100 hp each, 4500 gpm each at 65' TDH, with one of the 3 pumps serving as a redundant pump;
 as well as force main piping and associated fittings and appurtenances within the influent pump station, sump pump, HVAC fans and motors, new hoist and trolley, wet well level transducer with float back-up, pump controls and electrical panels, Variable Frequency Drives, and alarms

<p>Pump Stations: <u>WWTP Influent</u> Design Capacity: 4500 GPM per pump, 13 MGD combined</p>	<p>Manure Storage: Volume: _____ MG Freeboard: _____ inches</p>	<p>Sewage Treatment Facility: Annual Average Flow: _____ MGD Design Hydraulic Capacity: 9.63 MGD Design Organic Capacity: _____ lb/day</p>
--	---	--

E. APPROVAL GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING:

1. **Amendments:** All construction, operations and procedures shall be in accordance with the Water Quality Management Permit Amendment application dated 2/3/2017 and its supporting documentation and addendums dated 5/16/2017, which are hereby made a part of this amendment. Except for any herein approved modifications, all terms, conditions, supporting documentation and addendums approved under Water Quality Management Permit No. 0692402 shall remain in effect.
2. Permit Conditions Relating to Sewerage are attached and made part of this permit.
3. Special Conditions N/A are attached and made part of this permit.

F. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS:

1. If there is a conflict between the application or its supporting documents and amendments and the attached conditions, the attached conditions shall apply.
2. Failure to comply with the rules and regulations of DEP or with the terms or conditions of this permit shall void the authority given to the permittee by the issuance of this permit.
3. This permit is issued pursuant to the Clean Streams Law Act of June 22, 1937, P.L. 1987, as amended 35 P.S. §691.1 *et seq.* Issuance of this permit shall not relieve the permittee of any responsibility under any other law.

<p>PERMIT AMENDMENT ISSUED: MAY 26 2017</p>	<p>BY: <u>Maria D. Bebenek</u> Maria D. Bebenek, P.E. Clean Water Program Manager Southcentral Regional Office</p>
---	---



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

PERMIT CONDITIONS RELATING TO SEWERAGE
For use in Water Quality Management Permits

(Check boxes that apply)

General

- 1. The Department of Environmental Protection (DEP) considers the licensed Professional Engineer whose seal is affixed to the design documents to be fully responsible for the adequacy of all aspects of the facility design.
- 2. The permittee shall adopt and enforce an ordinance requiring the abandonment of privies, cesspools or similar receptacles for human waste and onlot sewage disposal systems on the premises of occupied structures accessible to public sewers. All such structures must be connected to the public sewers.
- 3. The outfall sewer or drain shall be extended to the low water mark of the receiving body of water. Where necessary to ensure proper mixing and waste assimilation, an outfall sewer or drain may be extended with appurtenances below the low water mark and into the bed of a navigable stream provided that the permittee has secured an easement, right-of-way, license or lease from DEP in accordance with Section 15 of the Dam Safety and Encroachments Act, the Act of November 26, 1978, P.L. 1375, as amended.
- 4. The approval is specifically made contingent on the permittee acquiring all necessary property rights, by easement or otherwise, providing for the satisfactory construction, operation, maintenance and replacement of all sewers or sewerage structures in, along or across private property with full rights of ingress, egress and regress.
- 5. When construction of the approved sewerage facilities is completed and before they are placed in operation, the permittee shall notify DEP in writing so that a DEP representative may inspect the facilities.
- 6. The approval of the plans, and the authority granted in this permit, if not specifically extended, shall cease and be null and void 2 years from the issuance date of this permit unless construction or modification of the facilities covered by this permit has begun on or before the second anniversary of the permit date.
- 7. If, at any time, the sewerage facilities covered by this permit create a public nuisance, including but not limited to, causing malodors or causing environmental harm to waters of the Commonwealth, DEP may require the permittee to adopt appropriate remedial measures to abate the nuisance or harm.
- 8. If, after the issuance of this permit, DEP approves a municipal sewage facilities official plan or an amendment to an official plan under Act 537 (Pennsylvania Sewage Facilities Act, the Act of January 24, 1966, P.L. 1535 as amended) in which sewage from the herein approved facilities will be treated and disposed of at other planned facilities, the permittee shall, upon notification from the municipality or DEP, provide for the conveyance of its sewage to the planned facilities, abandon use and decommission the herein approved facilities including the proper disposal of solids, and notify DEP accordingly. The permittee shall adhere to schedules in the approved official plan, amendments to the plan, or other agreements between the permittee and municipality. This permit shall then, upon notice from DEP, terminate and become null and void and shall be relinquished to DEP.
- 9. This permit does not relieve the permittee of its obligations to comply with all federal, interstate, state or local laws, ordinances and regulations applicable to the sewerage facilities.
- 10. This permit does not give any real or personal property rights or grant any exclusive privileges, nor shall it be construed to grant or confirm any right, easement or interest in, on, to or over any lands which belong to the Commonwealth.
- 11. The authority granted by this permit is subject to all effluent requirements, monitoring requirements and other conditions as set forth in NPDES Permit No. PA0026972 and all subsequent amendments and renewals. No discharge is authorized from these facilities unless approved by an NPDES Permit.

Construction

- 12. This permit is issued under the authorization of The Clean Streams Law and 25 Pa. Code Chapter 91. The permittee shall obtain all necessary permits, approvals and/or registrations under 25 Pa. Code Chapters 102, 105 and 106 prior to commencing construction of the facilities authorized by this permit, as applicable. The permittee should contact the DEP office that issued this permit if there are any questions concerning the applicability of additional permits.

- 13. The facilities shall be constructed under the supervision of a Pennsylvania licensed Professional Engineer in accordance with the approved reports, plans and specifications.
- 14. A Pennsylvania licensed Professional Engineer shall certify that construction of the permitted facilities was completed in accordance with the application and design plans submitted to DEP, using "Post Construction Certification" form (3800-PM-WSFR0179a). It is the permittee's responsibility to ensure that a Professional Engineer is on-site to provide the necessary oversight and/or inspections to certify the facilities. The certification must be submitted to DEP before the facility is placed in operation. As-built drawings, photographs (if available) and a description of all deviations from the application and design plans must be submitted to DEP within 30 days of certification.
- 15. Manhole inverts shall be formed to facilitate the flow of the sewage and to prevent the stranding of sewage solids. The manhole structure shall be built to prevent undue infiltration, entrance of street wash or grit and provide safe access to facilitate manhole maintenance activities.
- 16. The local Waterways Conservation Officer of the Pennsylvania Fish and Boat Commission (PFBC) shall be notified when the construction of any stream crossing and/or outfall is started and completed. A written permit must be secured from the PFBC if the use of explosives in any waterways is required and the permittee shall notify the local Waterways Conservation Officer when explosives are to be used.

Operation and Maintenance

- 17. The permittee shall maintain records of "as-built" plans showing all the treatment facilities as actually constructed together with facility operation and maintenance (O&M) manuals and any other relevant information that may be required. Upon request, the "as-built" plans and O&M manuals shall be filed with DEP.
- 18. The sewers shall have adequate foundation support as soil conditions require. Trenches shall be back-filled to ensure that sewers will have proper structural stability, with minimum settling and adequate protection against breakage. Concrete used in connection with these sewers shall be protected from damage by water, freezing, drying or other harmful conditions until cured.
- 19. Stormwater from roofs, foundation drains, basement drains or other sources shall not be admitted directly to the sanitary sewers.
- 20. The approved sewers shall be maintained in good condition, kept free of deposits by flushing or other cleaning methods and repaired when necessary.
- 21. The sewerage facilities shall be properly operated and maintained to perform as designed.
- 22. The attention of the permittee is called to the highly explosive nature of certain gases generated by the digestion of sewage solids when these gases are mixed in proper proportions with air and to the highly toxic character of certain gases arising from such digestion or from sewage in poorly ventilated compartments or sewers. Therefore, at all places throughout the sewerage facilities where hazard of fire, explosion or danger from toxic gases may occur, the permittee shall post conspicuous permanent and legible warnings. The permittee shall instruct all employees concerning the aforesaid hazards, first aid and emergency methods of meeting such hazards and shall make all necessary equipment and material accessible.
- 23. An operator certified in accordance with the Water and Wastewater Systems Operator Certification Act of February 21, 2002, 63 P.S. §§1001, *et seq.* shall operate the sewage treatment plant.
- 24. The permittee shall properly control any industrial waste discharged into its sewerage system by regulating the rate and quality of such discharge, requiring necessary pretreatment and excluding industrial waste, if necessary, to protect the integrity or operation of the permittee's sewerage system.
- 25. There shall be no physical connection between a public water supply system and a sewer or appurtenance to it which would permit the passage of any sewage or polluted water into the potable water supply. No water pipe shall pass through or come in contact with any part of a sewer manhole.
- 26. All connections to the approved sanitary sewers must be in accordance with the official Act 537 Plan and, if applicable, a corrective action plan as contained in the approved Title 25 Pa. Code Chapter 94 Municipal Wasteload Management Annual Report.
- 27. Collected screenings, slurries, sludge and other solids shall be handled and disposed of in compliance with Title 25 Pa. Code Chapters 271, 273, 275, 283 and 285 (related to permits and requirements for land filling, land application, incineration and storage of sewage sludge), Federal Regulations 40 CFR 257 and the Federal Clean Water Act and its amendments.



**WATER QUALITY MANAGEMENT
POST CONSTRUCTION CERTIFICATION**

PERMITTEE IDENTIFIER

Permittee	Exeter Township Berks County
Municipality	Exeter Township
County	Berks
WQM Permit No.	0692402 A-3
Facility Type	Sewage

All of the above information should be taken directly from the Water Quality Management Permit.

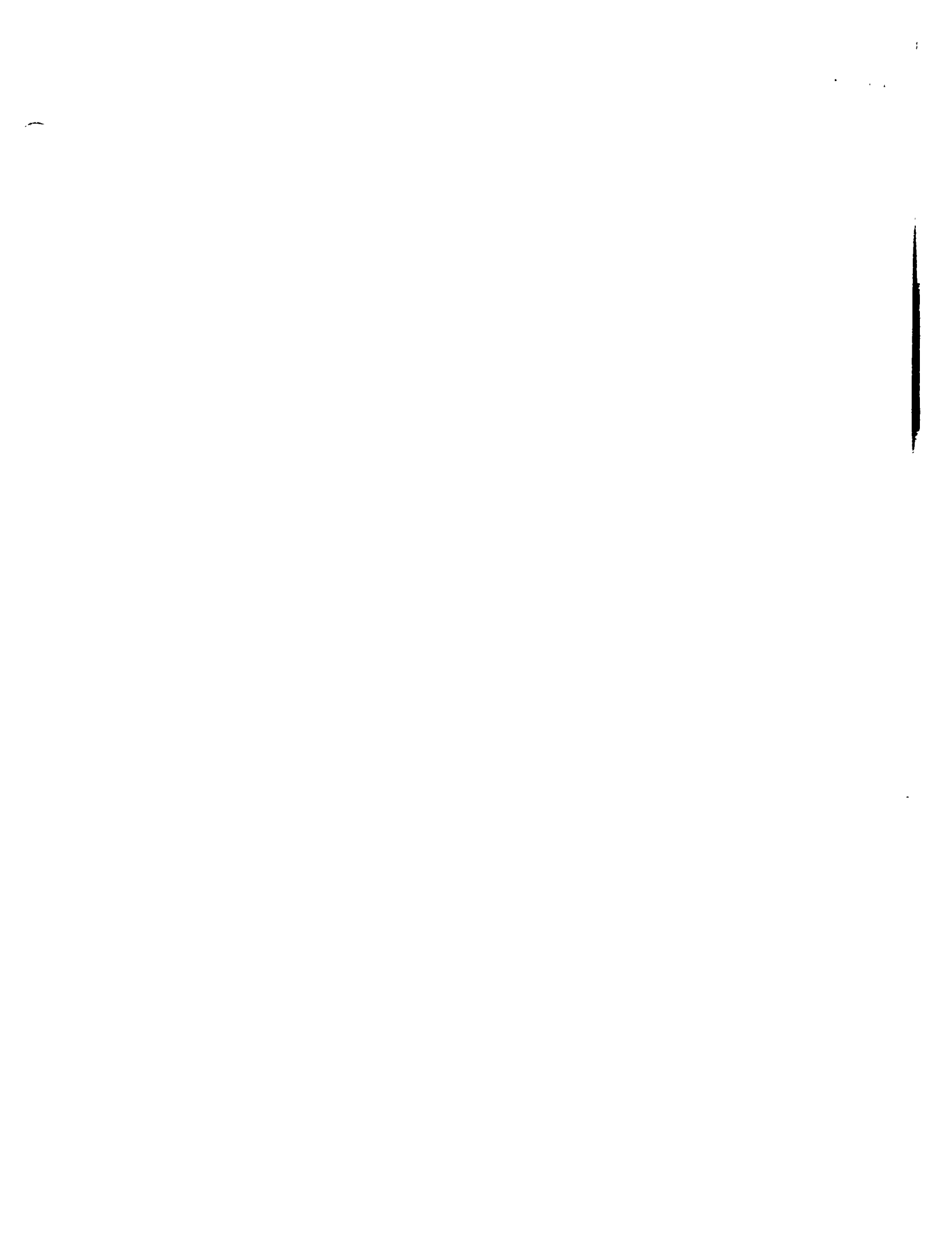
CERTIFICATION

This certification must be completed and returned to the permits section of the DEP's regional office issuing the WQM permit within 30 days of completion of the project and received by DEP prior to operation, and if requested, as-built drawings, photographs (if available) and a discussion of any DEP-approved deviations from the design plans during construction.

I, being a Registered Professional Engineer in Pennsylvania, do hereby certify to the best of my knowledge and belief, based upon personal observation and interviews, that the above facility approved under the Water Quality Management Permit has been constructed in accordance with the plans, specifications and modifications approved by DEP.

Construction Completion Date (MM/DD/YYYY): _____

Engineer's Seal	Professional Engineer
	Name _____ (Please Print or Type)
	Signature _____
	Date _____
	License Expiration Date _____
	Firm or Agency _____
	Telephone _____
	Permittee or Authorized Representative
	Name _____ (Please Print or Type)
	Signature _____
	Title _____
	Telephone _____





FILE COPY

Application Type Amendment **WATER QUALITY MANAGEMENT PERMIT** Application No. 0692402 A-3
 Facility Type Sewage **INTERNAL REVIEW AND** APS ID 3957
Treatment **RECOMMENDATIONS**
 WQM Type Plant Authorization ID 1171784

Application Facility Information			
Applicant Name	<u>Exeter Township Berks County</u>	Facility Name	<u>Exeter Township WWTP Birdsboro</u>
Applicant Address	<u>4975 DeMoss Road</u> <u>Reading, PA 19606-9060</u>	Facility Address	<u>400 Hanover Street</u> <u>Birdsboro, PA 19508-9181</u>
Applicant Contact	<u>John Granger</u>	Facility Contact	<u>Paul Herb</u>
Applicant Phone	<u>(610) 779-5660</u>	Facility Phone	<u>(610) 582-8300</u>
Client ID	<u>51184</u>	Site ID	<u>454828</u>
SIC Code	<u>4952</u>	Municipality	<u>Exeter Township</u>
SIC Description	<u>Trans. & Utilities - Sewerage Systems</u>	County	<u>Berks</u>
PA Bulletin Date	<u>3/18/2017</u>		
Purpose of Application	<u>To amend current WQM permit to reflect new influent pumps at WWTP to replace old pumps</u>		

Internal Review and Recommendations

This WQM application was received February 6, 2017. According to DEP's priority policy, the goal issuance date for the WQM amended permit was May 9, 2017, i.e. ≤ 65 business days from receipt of the application unless there are application deficiencies. The permit writer contacted the design engineer on May 1, 2017 (by phone) with a follow-up message on May 10, 2017 (by e-mail) to obtain needed project details. The additional information was provided on May 16, 2017 and has been included in the application file.

The Township plans to replace their three raw sewage intake pumps at the treatment plant due to age and wear as well as valves, force main piping and associated appurtenances within the existing influent pump station (PS), sump pump, HVAC fans and motors for ventilation within the PS, a new hoist and trolley and reinforced trolley beam, and other electrical equipment. Three pumps are proposed, each with a pumping capacity of 4500 gpm at Total Dynamic Head (TDH) of 65 feet; only one or two pumps will be in use at a time, with one redundant pump. Their application cites a peak instantaneous future flow rate of 12.07 MGD. The permit writer verified with the design engineer that this flow rate includes anticipated inflow and infiltration in the sewer lines and maximum industrial wastewater contributions. If one pump is not operational for any reason, the other two pumps will be able to handle this flow rate: $4500 \text{ gpm} = 6.48 \text{ MGD}$ for each pump $\times 2 = 12.96 \text{ MGD}$. The facility's most recent DMRs were reviewed by the permit writer to ensure that application flows are reasonable compared to actual flows; their DMRs from January 2015 through April 2017 showed a daily maximum flow of 11.6 MGD. Note: Both the east (1.20 MGD) and west (8.43 MGD) treatment trains at this WWTP share the same influent pump station and headworks.

The pumps are vertical dry pit suction pumps, with influent Φ of 10" and discharge Φ of 12"; their VFD motors are 100 hp whereas the old pumps were 125 hp. A 12" Φ return line to the wet well is provided to prevent rapid starting and stopping of pumps due to the size of the existing wet well, the same as the existing design. Calculations for friction loss to determine TDH and pump curves were submitted by the design engineer, a licensed P.E. The force main will be cement-lined ductile iron pipe, 12" Φ at the pump outlet and expanding to 30" Φ before leaving the pump station. Emergency power for the PS already exists: diesel powered generators. The PS is connected to the WWTP's SCADA system and 24-hour alarms and

Approve	Return	Deny	Signature	Date
X			<i>Bonnie J. Boylan</i> Bonnie J. Boylan / Environmental Engineering Specialist	May 18, 2017
			(vacant) / Environmental Engineer Manager	
✓			<i>Maria D. Bebenek</i> Maria D. Bebenek, P.E. / Program Manager	5/24/17

FILE 654

Internal Review and Recommendations

notifications by autodialer are provided for pump or VFD failure, high water levels in the wet well, & level transmitter failure.

The existing WWTP includes screening equipment and grit removal after the influent pumps and the retrofit will be configured the same way. The new force main piping and fittings will therefore include a lining to offer some protection from debris and grit. While this configuration does not match recommendations in the DEP's Domestic Wastewater Facilities Manual (DWFM), it is noted that a) the previous influent pumps were installed in the early 1990s and have worked for over 20 years, b) this project is a retrofit working within the confines of the existing structures, c) the proposed influent pumps are designed to handle 4 1/2" solids (in conformance with DWFM which recommends pumps be able to pass spheres $\leq 3"$ Φ), and d) the facility did have a Muffin Monster at one time and the staff found it a nuisance and prefer clearing the pumps of rags and strings on occasion instead of using a comminutor, according to the design engineer.

The existing wastewater treatment facility does not currently have an operational influent flow meter and this project does not include adding one, due to the cost: the influent flow meter on the submitted drawings is the old meter that has not worked for years. The proposed project instead allows influent flow to be calculated at 15 second intervals by the pump controller (Allen Bradley PLC) and recorded on the SCADA. Any hauled-in wastes are routed through the influent pump station such that this calculation will include these flows. There is no requirement in State regulations or in the DWFM that an influent flow meter be installed although DEP recommends influent flow meters for process control and accurate reporting on the annual Chapter 94 reports. (DEP Inspector's reports do indicate that the facility has an effluent flow meter, an ultrasonic meter with totalizer.)

The replacement electrical equipment proposed as part of the project includes: wet well level transducer (with float backup), pump controls, pump electrical panels, and Variable Frequency Drives (VFD's). Pump alternation and sequencing can still operate whether level transducer is in use (primary mode) or whether level floats are in use (back-up mode).

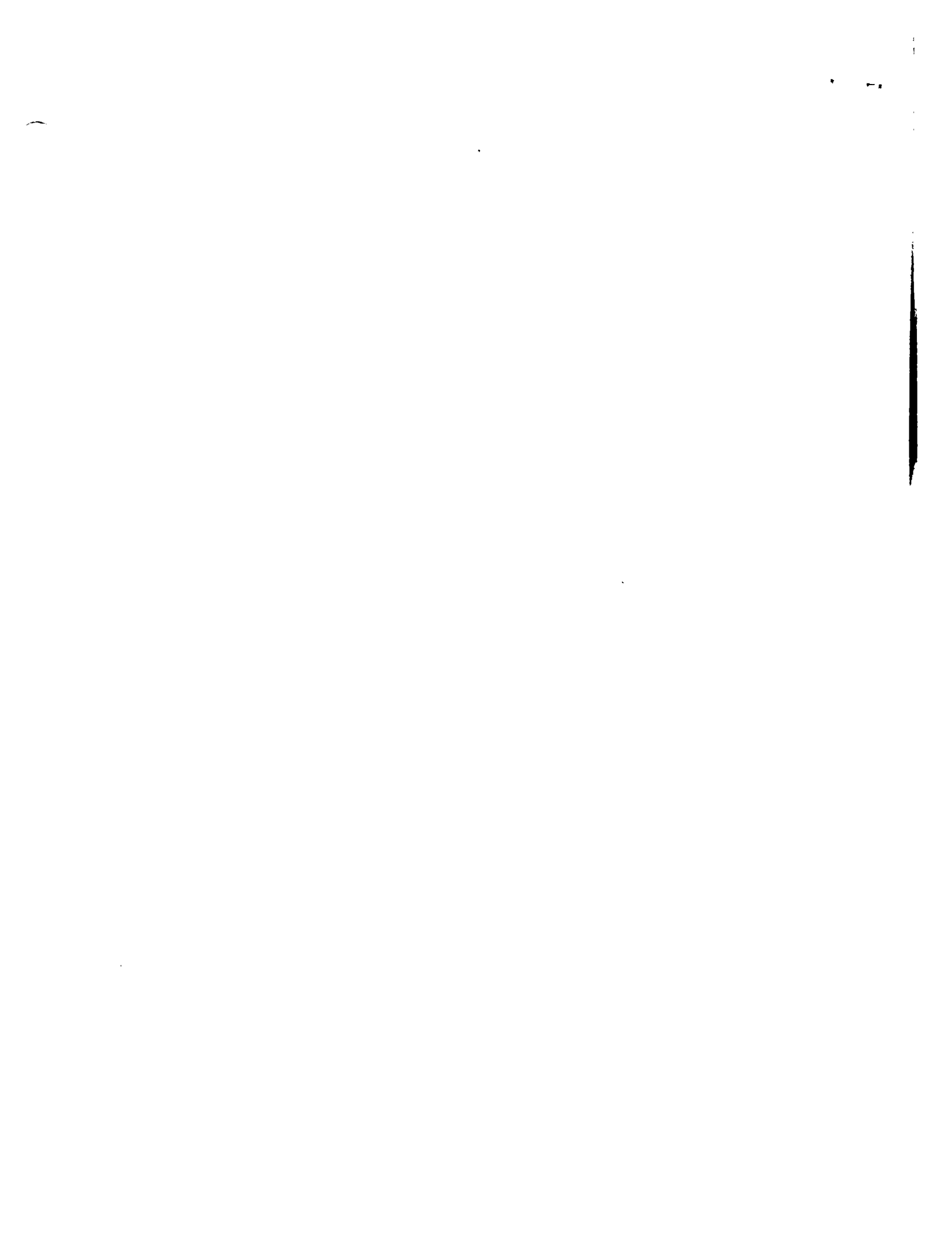
Bypass pumping during construction will occur to avoid interruption in the WWTP operations: raw wastewater and treatment plant return lines will be bypassed around pump station, from respective manholes MH#1 & MH DL#1 to the existing force main after the pump station. Rather than supplying the number of bypass pumps and pumping capacity in the application, however, the design engineer's revised report required the contractor to supply a submittal for the design engineer's pre-approval with calculations demonstrating that the bypass system can handle the peak hourly flow even when one pump is offline or fails. Rather than supplying other details of the bypass operation, the design engineer's revised report states:

"The pump system will be required to have a backup power supply in the event of a power failure unless the pumps are diesel engine pumps. The bypass pumping system will need to have the necessary precautions to ensure sewage spills do not occur during the bypass operation. This may include two sets of floats to operate the pumps, continuous monitoring and/or an alarm with dial out notification. The final bypass operation will need to be approved by the Owner and Engineer prior to implementation."

Other specifics in application, for purpose of documentation:

- BEP of pumps: 82.9% @ 4767 gpm, minimum flow per pump = 750 gpm
- Wet well detention time per design engineer = 1.09 minutes (max. daily flow) – 8.43 minutes (min flow observed)
- Peak flows for 2016 were included in design engineer report. Highest was 11.07 (< 12.1 projected in application and used for design of influent pumps)
- calculations were included for head losses due to friction in pipe and fittings, suction losses, and static head
- there are two back-up floats for level sensing, with mercury tube float type switches
- minimum shut-off head of 119 ft. for pumps
- there are disconnect switches on the pumps and manual override for all three pumps in event of PLC/HMI failure
- an uninterruptible power supply (UPS) will be installed to insure power is available to power the PLC and touch screen during a power outage, for a minimum of 30 minutes
- the controls will allow automatic restart of the VFDs after a power outage
- Leak test and hydrostatic pressure test will be conducted on new force main before placed into operation
- equipment and electrical systems will be grounded, inspected, and tested after installation; circuit breakers and surge protectors will be provided

The existing WQM permit was last amended in 2009 and indicates a maximum monthly average flow (hydraulic design capacity) of 9.63 MGD. (The WQM permit was also amended in 2001 according to DEP's eFacts database. Previous amendments may have occurred prior to the eFacts database existence so that the identification as permit #0692402 A-3 only signifies that this is the third known amendment since WQM amendments have been coded into the eFacts database.) The WWTP holds a NPDES permit PA0026972, the renewal permit application also indicates a maximum monthly average flow of 9.63 MGD.



**EXETER TOWNSHIP
BERKS COUNTY, AUTHORITY
FOUNDED 1741**

4975 DeMoss Road
Reading, PA 19606
Exeter Township, Berks County
Pennsylvania
610-779-5660

November 9, 2009

Mr. Paul Herb
Exeter Township Municipal Building
4975 DeMoss Road
Reading, PA 19606

SOLICITOR:
Frederick L. Reigle, P.C.
2901 St. Lawrence Avenue

Suite 202
Reading, PA 19606
610-779-4550
DISTRIBUTION
610-779-4550 (ORIG)
BOS _____ PR
MC ✓ _____ PO
S/ _____ PM
S ✓ _____ BS
S _____ ORDERS
E _____
FILE COMMENTS

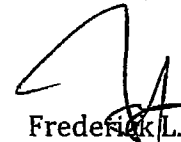
RE: BIOSOLIDS DRYER PROJECT - WQM PART II - PERMIT NO. 0692402
AMENDMENT NO. 1

Dear Paul:

I am enclosing herewith a letter from DEP under date of October 26, 2009, transmitting the above referenced original permit. Please note that the form entitled "Sewage and Industrial Wastewater Facilities Construction Certification" needs to be completed by the supervising professional engineer for this project.

If you have any questions whatsoever do not hesitate to contact me.

Very truly yours,


Frederick L. Reigle

FLR/bf
Enclosure
Cc: Larry Drogo
Roger Phillips, Gannett Fleming

RECEIVED
NOV 10 2009
EXETER TOWNSHIP
BOARD OF SUPERVISORS



Pennsylvania Department of Environmental Protection

909 Elmerton Avenue
Harrisburg, PA 17110-8200

OCT 26 2009

Southcentral Regional Office

717-705-4707
FAX - 717-705-4760

CERTIFIED MAIL NO. 7008 2810 0002 0822 6183

Mr. Lawrence Drago, Chairman
Exeter Township Supervisors
4975 DeMoss Road
Reading, PA 19606

Re: Sewage
Biosolids Dryer Project
WQM Part II Permit No. 0692402
Amendment No. 1
APS ID No. 3597
Exeter Township, Berks County

Dear Mr. Drago:

Your permit is enclosed.

You must comply with all Standard and Special Conditions attached to this Permit. Construction must be done in accordance with the permit application and all supporting documentation. Please review the permit conditions and the supporting documentation submitted with your application before starting construction.

Enclosed is the "Sewage and Industrial Wastewater Facilities Construction Certification" form. A Pennsylvania-registered Professional Engineer must sign and complete this form prior to startup of the facilities (see Permit Conditions Relating to Sewage). You or your authorized representative must also sign the form. This certification and other post-construction documentation must be submitted to the Department within 30 days following startup of the facilities.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, PO Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

Mr. Lawrence Drago

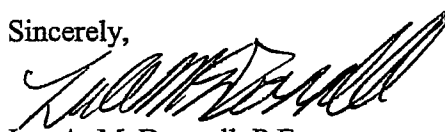
- 2 -

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.

If you have any questions, please call Mr. Byron Davis at 717-705-4824.

Sincerely,



Lee A. McDonnell, P.E.

Program Manager

Water Management Program

Enclosures

cc: Robert Weir, P.E. (w/enclosure)
Delaware River Basin Commission (w/enclosure)



WATER QUALITY MANAGEMENT PERMIT

A. PERMITTEE (Name and Address): Exeter Township 4975 DeMoss Road Reading, PA 19606	CLIENT ID #: 51184 B. PROJECT/FACILITY (Name): Biosolids Dryer Project Exeter Township WWTP
C. LOCATION (Municipality, County): Exeter Township, Berks County	
D. This permit amendment approves the construction of sewerage facilities consisting of: <ul style="list-style-type: none"> ° Two sludge pumps, two centrifuge units, sludge dryer, conveyance systems, polymer feed system, modification of existing lime silo, and building modifications. 	
Pump Stations: _____ Design Capacity: _____ GPM	Industrial Wastewater/Sewage Treatment Facility: Annual Average Flow: 7.1 MGD Design Hydraulic Capacity: 9.63 MGD Design Organic Capacity: 20,289 lbs. BOD ₅ /day
E. APPROVAL GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING: <ol style="list-style-type: none"> 1. Amendments: All construction, operations, and procedures shall be in accordance with the Water Quality Management Permit Amendment application dated August 6, 2009 and its supporting documentation, and addendums dated August 11, 2009, which are hereby made a part of this amendment. 2. Permit Conditions Relating to Sewerage are attached and made part of this permit. 	
F. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS: <ol style="list-style-type: none"> 1. If there is a conflict between the application or its supporting documents and amendments and the attached conditions, the attached conditions shall apply. 2. Failure to comply with the rules and regulations of DEP or with the terms or conditions of this permit shall void the authority given to the permittee by the issuance of this permit. 3. This permit is issued pursuant to The Clean Streams Law Act of June 22, 1937, P.L. 1987, as amended 35 P.S. § 691.1 <i>et seq.</i>, and/or the Dam Safety and Encroachments Act of November 26, 1978, P.L. 1375, as amended, 32 P.S. § 693.1 <i>et seq.</i> Issuance of this permit shall not relieve the permittee of any responsibility under any other law. 	
PERMIT ISSUED: <div style="text-align: center; font-size: 1.2em;">OCT 26 2009</div>	BY: _____ <div style="text-align: center;"> Lee A. McDonnell, P.E. </div> TITLE: <u>Water Management Program Manager</u>



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER SUPPLY AND WASTEWATER MANAGEMENT

PERMIT CONDITIONS RELATING TO SEWERAGE
Water Quality Management Permit No. 0692402 (09-1)

Exeter Township

General

1. Consistent with the Department of Environmental Protection's (DEP) technical guidance document *Conducting Technical Reviews of Water Quality Management Permit Wastewater Treatment Facilities*, DEP ID: 362-2000-007 available on DEP's website at www.dep.state.pa.us, DEP did not conduct a detailed technical review of this application. DEP considers Robert Weir, the registered Professional Engineer whose seal is affixed to the design documents, to be fully responsible for the adequacy of all aspects of the facility design.
2. The approval is specifically made contingent on the permittee acquiring all necessary property rights, by easement or otherwise, providing for the satisfactory construction, operation, maintenance and replacement of all sewers or sewerage structures in, along, or across private property with full rights of ingress, egress and regress.
3. When construction of the approved sewerage facilities is completed and before they are placed in operation, the permittee shall notify DEP in writing so that a DEP representative may inspect the facilities.
4. If, at any time, the sewerage facilities covered by this permit create a public nuisance, including but not limited to, causing malodors or causing environmental harm to waters of the Commonwealth, DEP may require the permittee to adopt appropriate remedial measures to abate the nuisance or harm.
5. This permit does not relieve the permittee of its obligations to comply with all federal, interstate, state or local laws, ordinances and regulations applicable to the sewerage facilities.
6. This permit does not give any real or personal property rights or grant any exclusive privileges, nor shall it be construed to grant or confirm any right, easement or interest in, on, to, or over any lands which belong to the Commonwealth.
7. The authority granted by this permit is subject to all effluent requirements, monitoring requirements, and other conditions as set forth in NPDES Permit No. **PA 0026972** and all subsequent amendments and renewals. No discharge is authorized from these facilities unless approved by an NPDES Permit.

Construction

8. The facilities shall be constructed under the supervision of a Pennsylvania registered Professional Engineer in accordance with the approved reports, plans, and specifications. If deviations from approved plans are anticipated during construction, DEP shall be notified verbally or in writing for a determination on whether a formal amendment of this permit will be required prior to constructing the modified facilities. Minor changes not affecting capacities, flows, operations, or sewer system alignments may be permitted without a formal amendment to this permit. "As-built drawings" shall be filed with DEP at the completion of the work.
9. A Pennsylvania registered Professional Engineer shall certify that construction of the permitted facilities was completed in accordance with the Part II application and design plans submitted to DEP, using the enclosed "Sewage and Industrial Wastewater Facilities Construction Certification." It is the permittee's responsibility to ensure that a Professional Engineer is on-site to provide the necessary oversight and/or inspections to certify the facilities. The facilities may not be placed into operation until the Professional Engineer completes the certification. The certification must be submitted to DEP within 30 days following startup of the facilities, along with as-built drawings, photographs (if available), and a description of any DEP-approved deviations from the application and design plans.

Operation and Maintenance

10. The permittee shall maintain facility operation and maintenance (O&M) manuals at the facility and ensure proper O&M of the permitted facility. The permittee shall file the O&M manuals with DEP upon request.
11. The sewerage facilities shall be properly maintained so that the facility will perform as designed.



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER SUPPLY AND WASTEWATER MANAGEMENT

PERMIT CONDITIONS RELATING TO SEWERAGE
Water Quality Management Permit No. 0692402 (09-1)

Exeter Township

12. The attention of the permittee is called to the highly explosive nature of certain gases generated by the digestion of sewage solids when these gases are mixed in proper proportions with air and to the highly toxic character of certain gases arising from such digestion or from sewage in poorly ventilated compartments or sewers. Therefore, at all places throughout the sewerage facilities where hazard of fire, explosion or danger from toxic gases may occur, the permittee shall post conspicuous permanent and legible warnings. The permittee shall instruct all employees concerning the aforesaid hazards, first aid and emergency methods of meeting such hazards and shall make all necessary equipment and material accessible.
13. Collected screenings, slurries, sludge and other solids shall be handled and disposed of in compliance with 25 Pa. Code Chapters 271, 273, 275, 283 and 285 (related to permits and requirements for land filling, land application, incineration and storage of sewage sludge), Federal Regulations 40 CFR 257 and the Federal Clean Water Act and its amendments.



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 SOUTHCENTRAL REGIONAL OFFICE
 WATER MANAGEMENT PROGRAM
 909 ELMERTON AVENUE
 HARRISBURG, PA 17110-8200

**SEWAGE AND INDUSTRIAL WASTEWATER FACILITIES
 CONSTRUCTION CERTIFICATION**

Permittee: Exeter Township

Address: 4975 DeMoss Road, Reading, Pennsylvania 19606

Municipality: Exeter Township

County: Berks

We hereby certify that the Biosolids Dryer Project, approved under Part II Permit No. 0692402, Amendment No. 09-1, Auth. ID No. 805898, has been inspected and constructed in accordance with the plans and specifications approved by the Department.

THE FOLLOWING INFORMATION MUST BE COMPLETED AND RETURNED TO THE PERMITS SECTION AT THE ABOVE ADDRESS WITHIN 30 DAYS OF COMPLETION OF THE PROJECT, ALONG WITH AS-BUILT DRAWINGS, PHOTOGRAPHS (IF AVAILABLE), AND A DISCUSSION OF ANY DEVIATIONS FROM THE DESIGN PLANS DURING CONSTRUCTION.

Construction Completion Date (MM/DD/YYYY): _____

Engineer's
Seal

Supervising Professional Engineer:

Name: _____
(Please Print or Type)

Signature: _____

Date: _____

Title: _____

Firm or Agency: _____

Telephone: _____

Permittee's Authorized Representative:

Name: _____
(Please Print or Type)

Signature: _____

Title: _____

Telephone: _____

Principal Operator Information (For Sewage Facilities):

Name: _____
(Please Print or Type)

Certification Number (if applicable): _____

Class: _____

Type: _____