

Application Type Amendment, Major
 Facility Type Municipal
 Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0085006 A-1
 APS ID 16
 Authorization ID 1442789

Applicant and Facility Information

Applicant Name	<u>Conoy Township</u>	Facility Name	<u>Bainbridge STP</u>
Applicant Address	<u>211 Falmouth Road</u> <u>Bainbridge, PA 17502</u>	Facility Address	<u>2115 River Road</u> <u>Bainbridge, PA 17502</u>
Applicant Contact	<u>Jennifer Rabuck</u>	Facility Contact	<u>Jennifer Rabuck</u>
Applicant Phone	<u>(717) 367-4991</u>	Facility Phone	<u>(717) 367-4991</u>
Client ID	<u>77263</u>	Site ID	<u>239234</u>
Ch 94 Load Status	<u>Existing Hydraulic Overload</u>	Municipality	<u>Conoy Township</u>
Connection Status	<u>No Exceptions Allowed</u>	County	<u>Lancaster</u>
Date Application Received	<u>June 5, 2023</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>June 28, 2023</u>	If No, Reason	<u></u>
Purpose of Application	<u>NPDES Amendment</u>		

Summary of Review

Conoy Township has submitted an amendment application for the National Pollutant Discharge Elimination System (NPDES) Permit PA0085006. The permit was issued on February 25, 2020, and became effective on March 1, 2020. Conoy Township has requested this amendment due to the conversion of the chlorine contact tank into a UV disinfection system, and is requesting that the Total Residual Chlorine (TRC) limit be removed. The existing permit expiration date is February 28, 2025.

The NPDES Permit will be amended to remove the TRC limit. In its place, a UV monitoring requirement will be added. Based on an email conversation with Conoy Township and Entech Engineering dated August 2, 2023, it has been confirmed that the UV system is capable of intensity monitoring in mW/cm². Therefore, the amended permit will have a monitoring requirement for UV intensity with these units. The updated effluent limits and monitoring requirements are shown below.

Sludge use and disposal description and location(s): Sludge holding tank with offsite disposal.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Approve	Deny	Signatures	Date
X		Benjamin R. Lockwood Benjamin R. Lockwood / Environmental Engineering Specialist	August 3, 2023
X		Maria D. Bebenek for Daniel W. Martin, P.E. / Environmental Engineer Manager	September 19, 2023

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instantaneous Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
CBOD5	17	27	XXX	25	40	50	2/month	8-Hr Composite
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	8-Hr Composite
TSS	20	30	XXX	30	45	60	2/month	8-Hr Composite
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
UV Intensity (mW/cm ²)	XXX	XXX	Report	XXX	XXX	XXX	1/day	Measured
Nitrate-Nitrite	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
Total Nitrogen	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Calculation
Ammonia	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite

Outfall 001 , Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Instantaneous Minimum	Average Monthly	Weekly Average	Instant. Maximum		
TKN	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
Total Phosphorus	Report Annl Avg	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite

Compliance Sampling Location: Outfall 001

Other Comments: None

Lockwood, Benjamin

From: Tim Lester <TLester@entecheng.com>
Sent: Wednesday, August 2, 2023 3:49 PM
To: Lockwood, Benjamin
Cc: Austin Schneck; Jennifer Rabuck
Subject: [External] RE: Conoy TWP NPDES Amendment Applications PA0085006 & PA0085022

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Hi Ben,

Good question. The UV units have intensity monitoring in mW/cm². See below snip for product data submitted with the Water Quality Management permit application, and photos showing the monitoring panels that were installed. Thanks for confirming!

-Tim

Timothy Lester, PE
 Project Manager
 o. 717.200.8259



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EQUIPMENT DETAILS D3200K (150,000 GPD Each Bank)

- Two (2) complete UV systems supplied with Type 304 Stainless Steel Channel, Module Support Rack, Level Control Weir, Transition Boxes, Monitoring System, Spare Parts Package, Operators Kit, and Maintenance Rack.
- 4 Type 316 Stainless Steel UV Modules per bank supplied, containing 2 UV lamps each – Total of 16 UV lamps
- Each UV module weighs 30 lbs (14 kg) and is easily handled by one person
- Each UV module has a standard 120V plug and 10 foot weatherproof cable for connection to GFI receptacle
- 4 Outdoor-rated GFI Power Distribution Receptacles supplied (one for 2 modules)
- Each lamp consumes 87.5 Watts – Total system power requirement of 1,400 Watts, 12.68 amps
- Lamp on/off status indicated on each UV module using LED indicators
- Monitoring System provided for local indication of UV intensity, lamp age and alarms
- Remote indication of UV intensity and low UV intensity alarm available
- Monitoring System requires 120V, single phase, 2 wire plus ground, 5 amp power supply

Approve	Deny	Signatures	Date
X		Benjamin R. Lockwood Benjamin R. Lockwood / Environmental Engineering Specialist	August 3, 2023
X		Maria D. Bebenek for Daniel W. Martin, P.E. / Environmental Engineer Manager	September 19, 2023



From: Jennifer Rabuck <jrabuck@conoytownship.org>
Sent: Wednesday, August 2, 2023 1:47 PM
To: Lockwood, Benjamin <blockwood@pa.gov>

Lockwood, Benjamin

From: Tim Lester <TLester@entecheng.com>
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-Tim

Timothy Lester, PE
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