pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST REGIONAL OFFICE
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET ADDENDUM

Application Type	**Renewal**	Application No.	**PA0027006**
Facility Type	**Sewage**	APS ID	**480064**
Major / Minor	**Major**	Authorization ID	**1144225**

Applicant and Facility Information

Applicant Name	**Borough of Tamaqua**	Facility Name	**Borough of Tamaqua WWTP**
Applicant Address	320 East Broad Street	Facility Address	Sewage Plant Road
	Tamaqua, PA 18252		Tamaqua, PA 18252
Applicant Contact	Kevin Steigerwalt	Facility Contact	Richard Baddick
Applicant Phone	(570) 668-3444	Facility Phone	(570) 668-0669
Client ID	62429	Site ID	253253
SIC Code	4952	Municipality	Tamaqua Borough & Walker Township
SIC Description	Trans. & Utilities - Sewerage Systems	County	Schuylkill
Date Published in PA Bulletin	February 5, 2022	EPA Waived?	No
Comment Period End Date	March 7, 2022	If No, Reason	Major Facility

Purpose of Application: Renewal of existing NPDES permit.

Internal Review and Recommendations

Public notification of draft permit issuance was published in the PA Bulletin on February 5, 2022. Comments were received from the permittee's consultant and the US EPA during the 30-day comment period. Changes made to the permit in response to the comments require a second draft permit to be issued and published for public comment. The comments and DEP responses are below.

Tamaqua Comment 1. Nitrate/Nitrite Nitrogen, Total Kjeldahl Nitrogen, Total Nitrogen, and Total Phosphorus Monitoring

New once per month "monitor-only" requirements for Nitrate/Nitrite Nitrogen (NO_2-NO_3), Total Kjeldhahl Nitrogen (TKN), Total Nitrogen (TN), and Total Phosphorus (TP) have been incorporated in the Effluent Limitations Table on page 2 of the draft Permit. PADEP has not provided any justification or rationale for the need for this additional monitoring. If there is no regulatory or policy rationale for this monitoring, we request that this monitoring be removed from the final NPDES Permit.

DEP Response:

DEP guidance recommends monthly monitoring/reporting for Total Phosphorus and Total Nitrogen in new and reissued permits as a minimum technology-based standard. The basis for implementing the monitoring/reporting requirements can be found in PA Code 92a.61.

Tamaqua Comment 2. Total Aluminum, Total Iron, and Total Manganese (TMDL Parameters) Monitoring

Monitor only requirements continue to be incorporated in the Effluent Limits Table on page 3 of the draft NPDES Permit for Total Aluminum, Total Iron, and Total Manganese. The accompanying "NPDES Permit Fact Sheet" states that these requirements are a result of a Total Maximum Daily Load (TMDL) for the Little Schuylkill River Watershed, which was last revised by USEPA in February 2014. The TMDL addresses the three (3) primary metals associated with acid mine drainage

Approve	Return	Deny	Signatures	Date
X			Brian Burden Brian Burden, E.I.T. / Project Manager	April 12, 2022
X			Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	4-13-22

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(Aluminum, Iron, and Manganese), as well as pH. The NPDES Permit Fact Sheet acknowledges that treated sewage is not considered a major contributor of these metals but monitoring and reporting requirements are incorporated regardless. The monitoring frequency throughout the entire Permit cycle has been reduced to once per year for these parameters. We believe that this monitoring requirement is no longer necessary, and these requirements should be eliminated in the final NPDES Permit. Monitoring over the last ten (10) years has produced a sufficient database for USEPA and PADEP to definitively demonstrate that the discharge from the Tamaqua WWTP is minimal. We request that this monitoring be removed from the final NPDES Permit.

DEP Response:

The draft permit included a less frequent annual monitoring requirement for the TMDL parameters when compared to the requirements in the previously issued permit. Although sewage discharges are typically not considered a major contributor of these metals, the annual monitoring/reporting requirement remains in the permit when considering the variability in wastewater constituents that industries discharging to the WWTP can bring about.

DEP guidance suggests if a.) downstream waters are impaired for any pollutant that will not already be monitored and b.) that pollutant is present in the effluent at detectable concentrations, then a monitor only requirement for those pollutants are to be established, at minimum.

Tamaqua Comment 3. Total Copper, Bis(2-Ethylhexyl)Phthalate, and Heptachlor Monitoring

The Effluent Limits Table on page 3 of the draft NPDES includes new Total Copper, Bis(2-Ethylhexyl)Phthalate, and Heptachlor monitor-only requirements. The monitoring frequency is once per quarter for these parameters. The final effluent sampling and modelling results for these parameters are summarized in Table 1.

Table 1. Final Effluent Sampling and Modelling Results

Parameter	DEP Target QL (mg/L)	Lab MDL (mg/L)	Reported Effluent Results (mg/L)	WQBEL (mg/L)
Total Copper	4.0	0.4	7.7, 9.5, 9.5	27.2
Bis(2-Ethylhexyl)Phthalate	5.0	1	1, 1, 2	6.51
Heptachlor	0.05	0.00507	< 0.00507, < 0.00507, 0.019 (1)	0.0001
		0.5	< 0.5 (2)	

Notes:
(1) Sampling as part of the June 2016 renewal application.
(2) Supplemental sampling as part of the August 2017 resample.

We do not believe that these data support a decision to impose monitoring requirements for Bis(2-Ethylhexyl)Phthalate and Heptachlor. WBELs for Bis(2-Ethylhexyl)Phthalate and Heptachlor have been developed that are significantly lower than the PADEP-recommended quantification limit outlined in the Permit renewal instructions. Furthermore, the reported Heptachlor data was all reported at concentrations that were an order of magnitude lower than the PADEP-recommended target quantification limits. The Borough requests that the monitoring requirement for Bis(2-Ethylhexyl)Phthalate and Heptachlor be eliminated in the final Permit.

DEP Response:

The concentrations in the table above should be in µg/L.

Bis(2-Ethylhexyl)Phthalate

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Monitoring requirements for this parameter were recommended since the maximum discharge concentration reported in the application (2 µg/L) was greater than 25% of the WQBEL (6.5 µg/L). The target QL is 5.0 µg/L. Toxics Management Spreadsheet still recommended limitations even though the reported concentration was lower than the target QL. The spreadsheet only screens out parameters as not needing limits or monitoring when a non-detect is reported at or below the target QL.

The permittee may take 3 additional effluent samples, at a minimum, at least one week apart during the 2nd draft permit comment period for Bis(2-Ethylhexyl)Phthalate concentrations in the effluent. The permittee may sample using the Department's target QL during the draft permit comment period, but it's recommended to analyze the sample using the more sensitive methods that were utilized during the permit renewal Pollutant Group sampling. It's recommended to ensure the sampling techniques eliminate the possibility of contamination. The discharge will then be remodeled with the new results.

Heptachlor

As indicated in the draft permit fact sheet, limitations were recommended for Heptachlor since the only detectable sample result was 0.019 µg/L and the most stringent WQBEL is 0.0001 µg/L. The Department's target QL for this parameter is 0.05 µg/L and the Toxics Management Spreadsheet still recommended limitations even though the reported concentration was lower than the target QL. The spreadsheet only screens out parameters as not needing limits or monitoring when a non-detect is reported at or below the target QL.

The permittee was offered a chance to resample for this pollutant due to its unexpected presence in the effluent, however, the additional sample results submitted on July 31, 2018 utilized MDLs of 0.0005 mg/L (0.5 µg/L), which was higher than the target QL.

Additional data is still required due to the detected concentration in the original analysis submitted with the permit renewal application. The offer to resample the parameter at the Department's target QL during the draft permit comment period is still available although it's recommended to analyze the sample using the more sensitive methods that were utilized during the permit renewal Pollutant Group sampling. The permittee may take 3 additional effluent samples, at a minimum, at least one week apart during the draft permit comment period for Heptachlor concentrations in the effluent. The new results will be re-modeled to determine if monitoring requirements/limitations are necessary for this permit term.

Tamaqua Comment 4. Total Zinc Limit

The Effluent Limits Table on page 7 of the draft NPDES includes new Total Zinc discharge limits. These limits will be effective beginning four (4) years after NPDES Permit effective date. During the first 4 years of the Permit cycle, a monitor-only requirement is included. The monitoring frequency throughout the first four (4) years of the Permit cycle is once per month and then increases to once per week during the last year of the Permit cycle (when the limit is implemented).

It appears that DEP is imposing discharge limits for Total Zinc because the highest value reported in the sampling results submitted to the Department with the renewal application for this parameter was greater than the calculated WQBEL. Reviewing the final effluent sampling results provided in the June 2016 NPDES Permit renewal application, it appears that the highest Total Zinc result was approximately 52% of the proposed WQBEL concentration. We understand that if the highest reported Total Zinc result was less than 50% of the proposed WQBEL concentration, then only monitoring requirements would have been implemented instead of a limit. The final effluent sampling and modelling results for Total Zinc are summarized in Table 2.

Table 2. Final Effluent Sampling and Modelling Results

Parameter	DEP Target QL (mg/L)	Lab MDL (mg/L)	Reported Effluent Results (mg/L)	WQBEL (mg/L)
Total Zinc	5.0	7.4	95, 105, 122	233

The Borough requests that the Department allow time to collect twice per month sampling for Total Zinc over a three (3) month period and that the Department consider these additional results when evaluating the need for limits in the final NPDES Permit.

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DEP Response:

The concentrations in the table above should be in µg/L.

The permittee may submit seven additional analytical results for Total Zinc, at a minimum, to generate an AMEC (average monthly effluent concentration) using the Department's TOXCONC spreadsheet. The AMEC concentration would then be input into the Toxics Management Spreadsheet instead of the maximum reported concentration to determine reasonable potential. The additional samples should be taken one week apart. If the permittee chooses not to submit additional samples during the draft permit comment period, then they may choose to conduct the site-specific studies outlined in Part C.X to modify the WQBELs in the future.

EPA Comment 1:

EPA's review of the CSO portion of this permit reflects the recent understanding between the EPA Region III Water Director and PADEP Deputy Secretary for Water Programs regarding how to proceed with reissuance of permits with CSOs and LTCPs consistent with Section 402(q) of the CWA and EPA's 1994 CSO Policy. As you know, consistent with that understanding, PADEP has committed to making changes to its CSO program as noted in the its June 9, 2020 letter to EPA and its April 15, 2020 memo (see attached). PADEP's memo documents its commitment to initiate the regulatory revisions process for modifying its compliance schedule regulations at 25 Pa. Code § 92a.51(a), so that schedules for LTCP implementation can be placed in an NPDES permit. PADEP will draft CSO permits using the template language agreed upon by PADEP and EPA. EPA notes that once PADEP's compliance schedule regulations are revised and final, the template language will need to be modified to incorporate a CSO compliance schedule that meets the requirements of 40 CFR 122.47 and includes the final compliance date for LTCP implementation. EPA's Phase 2 e-Reporting rule requires electronic reporting of Sewer Overflow/Bypass Events, and PADEP will need to make modifications to this template that will be necessary to address the requirements of the e-Reporting rule that is effective at the time that the permit is issued.

In addition, consistent with the understanding between EPA and PADEP, since PADEP's proposed seasonal E. coli became effective in March 2021, PADEP will begin to incorporate E. coli monitoring in subsequently reissued NPDES permits and ensure it is included in CSO post-construction compliance monitoring (PCCM) plans to verify compliance with water quality standards and designated uses. Consistent with the CSO Policy, EPA notes that there will also need to be a requirement added to implement a PCCM plan with an established schedule in NPDES permits once a facility begins to implement its approved plan.

Draft Permit Part C.III.C.2. states the "permittee shall comply with the following performance standards that apply during **design conditions**". Based on our review of the Fact Sheet and Draft Permit, it is EPA's understanding that PADEP is requiring the permittee to develop a High Flow Management Plan (HFMP) and submit an updated LTCP in this permit reissuance with the intent to inform the Department on current conditions and operations of the collection system. EPA recommends DEP ensure that they and the facility increase the understanding of the design conditions under which the performance standards will be met for inclusion in a subsequent permit.

DEP Response:

The Department agrees with the comment.

EPA Comment 2:

EPA Region 3 is the pretreatment program approving authority for the Commonwealth of Pennsylvania. Region 3's internal pretreatment program staff believe it is necessary for Tamaqua to develop a pretreatment program for approval by the EPA-Region 3 after the review of the information regarding industrial activity in Rush Township's Tide Industrial Park. Tamaqua shall develop and implement a program in accordance with the requirements in 40 CFR 403.8. Please include the attached pretreatment language ("Pretreatment Development.docx") and compliance schedule in the NPDES permit conditions. The following compliance dates will give the Borough ample time to develop and implement an approved program, see below:

1.	Submit sampling plan for local limits development	3 months

Internal Review and Recommendations

2.	Submit pretreatment program to EPA and DEP	9 months
3.	Begin implementation of approved pretreatment program	12 months

DEP Response:

The Department agrees with the comment and the condition is added to Part C.

EPA Comment 3:

Draft Permit Part C. VI. A. has a compliance schedule for water quality based effluent limitations for Total Residual Chlorine (TRC). The Compliance Schedule should have specific actions for the Permittee to take in order to meet the final WQBEL. The Compliance Schedule in Draft Permit Part C.V.A. lacks specificity and seems to give the Permittee the option to collect site specific data or implement other measures, which is inconsistent with 40 FR 122.47(a). Site specific data collection does not necessarily ensure compliance with the final TRC limit, so while the permit can include an option to concurrently collect site specific data to inform a revised WQBEL, the compliance schedule needs to clearly define other actions the facility will take to meet the WQBEL that was derived for the permit. EPA is happy to discuss this further with the Region and/or Central Office as needed.

DEP Response:

The comment is noted. The standard template condition utilized in Part C.VI. will remain in the permit with the understanding that DEP's Central Office and the EPA will work toward developing a template condition for this scenario that is consistent with 40 CFR 122.47(a) in the near future.