

Application Type Renewal  
Facility Type Sewage  
Major / Minor Major

## NPDES PERMIT FACT SHEET ADDENDUM

Application No. PA0041742  
APS ID 595638  
Authorization ID 1459893

### Applicant and Facility Information

<p>Applicant Name <u>Nazareth Borough Municipal Authority Northampton County</u></p> <p>Applicant Address <u>PO Box A 872 Tatamy Road Nazareth, PA 18064-0450</u></p> <p>Applicant Contact <u>Dean Minnich</u></p> <p>Applicant Phone <u>(610) 759-0727</u></p> <p>Client ID <u>34470</u></p> <p>SIC Code <u>4952</u></p> <p>SIC Description <u>Trans. &amp; Utilities - Sewerage Systems</u></p> <p>Date Published in PA Bulletin <u>October 26, 2024</u></p> <p>Comment Period End Date <u>March 12, 2025 (extended)</u></p> <p>Purpose of Application <u>Application for a renewal of an NPDES permit for discharge of treated Sewage</u></p>	<p>Facility Name <u>Nazareth Borough WWTP</u></p> <p>Facility Address <u>872 Tatamy Road Nazareth, PA 18064-2562</u></p> <p>Facility Contact <u>Dean Minnich (with alternate site contact identified as William Brown (HRG) at 484-460-7050)</u></p> <p>Facility Phone <u>(610) 759-0727</u></p> <p>Site ID <u>260823</u></p> <p>Municipality <u>Lower Nazareth Township</u></p> <p>County <u>Northampton</u></p> <p>EPA Waived? <u>No</u></p> <p>If No, Reason <u>Major</u></p>
--	--


### Internal Review and Recommendations

This is the Fact Sheet Addendum for a Redraft NPDES Permit for the 1.6 MGD Nazareth Borough Municipal Authority (NBMA) POTW discharging to Shoeneck Creek (WWF) a.k.a. Schoeneck Creek (both spellings in use in different sources) and additional stormwater discharge to the UNT to Shoeneck Creek (known locally as Nazareth Creek). Outfall 001 is located in a Shoeneck Creek reach/segment that dries out during low flow conditions due to upstream hydromodification & sinkholes but flows in wetter time-frames. The Point of First Use by aquatic life is at the confluence between the UNT and Shoeneck Creek.

- The NPDES Permit Renewal Application was submitted hard copy.
- The Draft NPDES Permit was issued 10/8/2024.

**Changes made to Redraft NPDES Permit:** Permit changes required a Redraft NPDES permit be issued for public comment.

- General: NPDES Permit regenerated with latest NPDES permit template (new Part A.III.C.4.b.iii condition) and autogeneration-corrected first page editing error. Several Part C conditions were renumbered.
- Part A.I.A, A.I.B, and Part C.III:
  - Deleted Total Aluminum; Total Cadmium; Total Silver; Free cyanide; Total Antimony; Boron; Chloroform; Bromodichloromethane; Dibromochloromethane; Beta-BHC; Alpha-Endosulfan; and Heptachlor Final WQBELs and interim monitoring per updated Reasonable Potential Analysis (below).
  - Hexachlorobutadiene and 1,2,4-Trichlorobenzene changed to annual monitoring requirement (Part A.I.C) due to failure to provide 24-hour composite sampling results (standard application requirement). Grab samples can be biased (i.e. non-detects were not conclusive in showing absence.)

Approve	Return	Deny	Signatures	Date
X			James D. Berger (signed) James D. Berger, P.E. / Environmental Engineer	November 4, 2025
X			 Edward Dudick, P.E. / Environmental Engineer Manager	November 10, 2025
X			NA – not required for Redraft NPDES Permit Amy M. Bellanca, P.E. / Program Manager	

Internal Review and Recommendations

- Part C.III now only addresses proposed Total Zinc limits, but the permittee has the option of also addressing Total Antimony, Boron, Total Copper, Hexachlorobutadiene and 1,2,4-Trichlorobenzene monitoring requirements under the Part C.III options.
- Part A.I.C:
  - Change in influent minimum sampling requirements (BOD5 and CBOD5) made per permittee request.
  - CBOD5 and TSS minimum % reduction limit reporting added (existing Part A.I Additional Requirements Item 2 requirement)
  - E Coli monthly monitoring added. (Apparently not in previous draft by accidental omission.)
- Part C.I.G: Condition clarified that the referenced stream was the UNT during dry stream conditions (when upstream Shoeneck Creek is dry except for NBMA discharge).
- Part C.IV.A.3 (WET): TIWc value error corrected.
- Previous Part C.V (WQBELs below TQLs): References to deleted Part C.III constituents (no longer with proposed permit limits or monitoring requirements) were deleted.

**Updated Reasonable Potential Analysis:** The 3/12/2025 NBMA Letter included four (4) sample data and analysis for assorted constituents with proposed permit limits and monitoring requirements. The new data is representative of NBMA discharges going forward (see public comments for summary of provided new data) and was incorporated into an updated Reasonable Potential Analysis (see below). See public comments for additional information.

- Conversion to UV disinfection resulted in reduction in chlorine residuals.
- Change in Free Cyanide sampling methodology showed reduction in detected Free Cyanide effluent concentrations per NBMA.
- New Sampling data: The DEP Four Sample method (4 weekly samples meeting DEP TQL when insensitive ND results are reported and for screening out false positive detections per DEP SOP) was followed by NBMA.
  - Four sample data, meeting DEP TQL or lower lab RL, allowed for discarding of insensitive ND results (that otherwise had to be treated as the constituent being present at the insensitive ND concentration per the EPA Sufficiently Sensitive Rule).
  - The four weekly samples, showing ND at either DEP TQL or more sensitive Lab RL, allowed the discarding of several constituent results (detections) per DEP permitting SOPs and as previously communicated to NBMA during the technical review process.
  - Hexachlorobutadiene and 1,2,4-Trichlorobenzene changed to annual monitoring requirement (Part A.I.C) due to failure to provide 24-hour composite sampling results. Grab samples can be biased and do not meet NPDES permit application requirements.
- Updated TMS output: Only the more stringent Total Zinc Limit and monitoring requirements (Total Antimony, Total Boron, Total Copper) remain in the permit. The Part C.III (WQBELs for Toxic Pollutants) includes the process for NBMA to see further relief from the Final Total Zinc WQBELs per the Schedule of Compliance. The Part C.III process can also be expanded to include the other toxic pollutant monitoring requirements if NBMA chooses. Please note that it would take a minimum of ten sample results to allow for calculation of a Long Term Average Monthly Effluent Concentration (LTAMEC) and daily Coefficient of Variability (COV), using EPA-approved statistical methodology, to determine if monitoring requirements can be dropped.

☒ Recommended WQBELs & Monitoring Requirements

No. Samples/Month:

Pollutants	Mass Limits		Concentration Limits				Governing WQBEL	WQBEL Basis	Comments
	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units			
Total Antimony	Report	Report	Report	Report	Report	µg/L	7.71	THH	Discharge Conc > 10% WQBEL (no RP)
Total Boron	Report	Report	Report	Report	Report	µg/L	2,203	CFC	Discharge Conc > 10% WQBEL (no RP)
Total Copper	Report	Report	Report	Report	Report	µg/L	20.0	CFC	Discharge Conc > 10% WQBEL (no RP)
Total Zinc	2.48	2.48	186	186	186	µg/L	186	AFC	Discharge Conc ≥ 50% WQBEL (RP)



NBMATMS1PDF.pdf

### Internal Review and Recommendations

**Public Comments:** Responses bolded. See Communications Log for additional discussions between NBMA and the Department regarding permitting issues. **Public comment period was subsequently extended to allow time for NBMA to provide additional public comments/information for Department consideration.**

**3/6/2025 EPA Comments:** This is a major permit that discharges to the Unnamed Tributary to Shoeneck Creek ("Nazareth Creek"). EPA has chosen to perform a limited review of the draft permit based on the PFAS and WET requirements. EPA has completed its review and offers the following comment:

1. The fact sheet summarizes the NOEC values for the completed WET tests, but PADEP's procedures use the TST to compare replicate data for the control to replicate data for the TIWC. Please provide us with the WET Analysis Spreadsheets, if used for evaluating the permittee's WET data, so that EPA can complete its review. **The Department e-mailed the Nazareth Borough NPDES Permit Renewal Application WET Analysis Spreadsheets to EPA per their request. To clarify the receiving stream, the Outfall No. 001 discharge is to a dry reach of Shoeneck Creek with the Point of First Use by aquatic life at the UNT Confluence to Shoeneck Creek.**
2. 4/1/2025 EPA (Dana Hales) E-mails indicated no further comments on the Draft NPDES Permit. **Noted.**

**12/20/2024 and 3/11/2025 NBMA Public Comment Letters (submitted via E-mail):** The 12/20/2024 (Public Upload# 276723) and (e-mailed) 3/11/2025 NBMA (William Brown, P.E., HRG) Public Comment Letters comments are summarized below. Responses are bolded. See also Communication Log for NBMA telephone discussions and Meeting highlights.



NBMAPublicCom.p  
df



NBMADecPubCom  
m.pdf

NBMA Requests a 90-day extension of the public comment period to allow NBMA time for additional sample collection. If the extension is granted, the comment period will end on March 12, 2025. **The extension was granted. See 3/11/2025 Letter above for provided data and comment-responses below.**

NBMA requests an in-person meeting with PADEP at the Wilkes-Barre office as early in January 2025 as possible to discuss the Q7-10 flow utilized for calculating permit limits and the specific parameters to be included in the additional sampling NBMA intends to conduct, along with some other topics. **The requested meeting took place on 1/10/2025. See Communications Log (below) for meeting highlights, and related communications.**

#### **General Timing:**

- Several NBMA comments requested an additional ninety (90) days for additional public comments (possible new sampling data, etc.) submittal if the Department did not concur with the specific NBMA requests for NPDES Permit changes (Q7-10 low flow assumption; deletion of new WQBELs; etc.). **The Department could only concur in part. Public Comment periods (Chapter 92a.82 – 92a.86) are not open-ended. The Department has issued this Redraft NPDES Permit for public comment, with its own public comment period (minimum of 30 days after PA Bulletin Notice publication and additional 15-days given upon request). The Department will evaluate any request for additional public comment period extensions, received within the public comment period, on its own merits. In practical terms, the 36-month NPDES Permit Part C.III Schedule of Compliance will also provide ample time for NBMA to investigate options for modifying or deleting the proposed Final WQBELs prior to their Effective Date, even after Final NPDES Permit action.**
- If the Department is not amenable to the revising the Q7-10 flow and or component of the additional sampling proposed prior to issuing another draft of the permit, NBMA respectfully requests a meeting prior to the Department's issuance of any such permit. **The Department has issued this Redraft NPDES Permit for public comment to allow for a productive meeting, if still desired by NBMA. Any meeting request should include agenda, list of participants and tentative meeting dates (within the public comment period) to allow for scheduling a productive meeting.**

### Internal Review and Recommendations

**Request for use of NBMA-proposed Q7-10 low flow:** NBMA requests that PADEP utilize the 1.63 cfs Q7-10 value derived from StreamStats rather than the calculated value used in the draft permit, which, again, does not account for any quarry discharges. **The Department could not concur for reasons discussed below.**

- **Background for Context:**

- **Q7-10 Low Flow:** The Q7-10 flow (Chapter 96.1) is actual or estimated lowest 7 consecutive-day average flow that occurs once in 10 years for a stream with unregulated flow, or the estimated minimum flow for a stream with regulated flow. The Q7-10 low flow is used in DEP Reasonable Potential Analysis to meet Chapter 93 (Water Quality Standards (WQS)) and Chapter 96.3 – 96.4 (Water quality protection) requirements to protect the waters of the Commonwealth. Regulated flow is when a dam, diversions, or other types of hydrologic modifications determine low flow conditions in a receiving stream.
  - Due to historic quarry mining earth disturbance/pumping and possibly stream rerouting (both hydrological factors), the upstream Shenandoah Creek segment is a dry stream at the NBMA outfall, i.e. near zero Q7-10 low flow and near zero LFY (see definition below).
  - The quarries, along the UNT (known locally as Nazareth Creek), contribute pumped quarry water to the UNT flow, which essentially contribute all Q7-10 low flow at the POFU (see below) at critical conditions (due to dry Shoeneck Creek upstream conditions during dry periods). The UNT watershed quarry pumping would also remove groundwater (affecting groundwater recharge rates) but then be added back to the UNT by quarry discharge pumping.
- **Low Flow Yield (LFY):** The “Low Flow Yield” (LFY) is the Q7-10 divided by the stream location drainage area (in square miles) which is an input value for DEP Water Quality Models such as the DEP Toxic Management Spreadsheet (TMS) which is used in the Reasonable Potential Analysis to determine permit limits to ensure no exceedances of the Chapter 93 WQS during critical conditions.
  - It is essentially the groundwater recharge rate for the receiving stream during low flow (dry weather) conditions.
  - The LFY Method calculates a watershed LFY (applicable to a stream watershed drainage area) by determining the Q7-10 low flow at a different point in the receiving stream and dividing the Q7-10 low flow by the stream drainage area. The watershed LFY can then be used at different points along the stream to calculate an estimated Q7-10 low flow at different locations.
- **Point of First Use by Aquatic Life (POFU):** In general terms, this is the point where a perennial stream supports aquatic life (fish and macroinvertebrates) and is subject to Chapter 93 Water Quality Standards protection. In practical terms, the Chapter 92a.2 “perennial stream” definition is based on the presence of aquatic life, that an intermittent/dry stream would not support. The Point of First Use (POFU) for NBMA’s facility is the confluence of UNT/Nazareth Creek (on Shoeneck Creek itself) that receives NBMA discharge from essentially a dry stream reach during Q7-10 low flow conditions. The upstream portion of Shoeneck Creek (between NBMA Outfall No. 001 to UNT) periodically dries out.
- **USGS PA Streamstats:** The Federal Government (USGS) developed the PA Streamstats program to calculate Q7-10 low flows in Pennsylvania based on their vast data base and expertise. This is the United States Geological Service (USGS) web application, available via the USGS website, for estimating stream flows in PA. The USGS PA Streamstats (web application) is the current best available method of determining Q7-10 low flows for ungaged streams unless invalidated due to site-specific reasons or superseded by better site-specific information. Gaged streams have a USGS Gage Station or other approved gage station that continually measures and records stream flow data that allow for direct calculation/identification of the Q7-10 low flow.
- **Background Information:** This is an unusual situation. Shoeneck Creek is a perennial stream upstream of the POTW, but upstream area has been subject to hydromodification (historic and ongoing cement plant mining activities/pumping plus possible historic stream rerouting) and sinkholes to the point that it has been and continues to be a dry stream at the POTW Outfall No. 001 (with POFU previously determined at downstream UNT (Nazareth Creek) confluence about 0.13 miles downstream of Outfall No. 001). DEP Biologist indicates that the groundwater flow direction also differs from the dry reach flow direction (losing stream scenario), likely from historic stream rerouting.
  - The DRBC Docket assumed a 0.17 MGD (0.26 CFS) Q7-10 low flow for Schoeneck Creek at the WWTP discharge (001), equivalent to the 0.1 CFS/square mile DEP statewide LFY default. In reality, there would not be any dry weather flow due to loss of upstream flow to sinkhole and undefined upstream quarry pumping impacts.
  - Previous modeling assumptions were dubious. There is no existing stream gage on Shoeneck or Bushkill Creeks. Previous modeling assumed USGS Gage 01452500 (Monocacy Creek at

Internal Review and Recommendations

Bethlehem) was a comparable stream for use to calculate an LFY, but that is dubious due to site-specific conditions (described above).

- Stream Drainage Area Breakdown:
  - The UNT stream drainage area contribution was estimated 3.38 square miles by PA Streamstats, which is the actively contributing stream flow area.
  - The dry reach Shoeneck Creek stream drainage area is 2.6 square miles by subtraction (~43% of area).
- **PA Streamstats Usage:** NBMA respectfully submits that the draft permit utilizes a Q7-10 flow value that is unsupported, inconsistent with general practices, and based entirely on hypotheticals that are unlikely to occur. NBMA respectfully requests that PADEP instead utilize the Q7-10 flow data provided by StreamStats, which is already an unduly conservative number that does not reflect actual flows. **The Department used a corrected PA Streamstats analysis that addressed the large dry stream portion of the drainage area (i.e. no contribution to stream flow at low flow/dry conditions). The dry stream condition is not hypothetical.**
- **PA Streamstats and Quarry Flows:** For the NBMA POFU, the quarry discharge data — which was not considered in PADEP's calculation of the Q7-10 value used in the current draft permit—further demonstrates that the use of the StreamStats Q7-10 flow rate of 1.63 cfs is entirely appropriate, if not conservatively low. NBMA has obtained available data from PADEP for the two (2) quarries that discharge to the unnamed tributary of the Schoeneck Creek (locally called the Nazareth Creek). The quarry flow data is attached as NBMA Letter Appendix A. **The Department does not concur.**
  - PA Streamstats used available historic stream gage information (including any quarry discharge contributions) but there was a complicating factor in that a large portion of the Shoeneck Creek drainage area is not contributing flow at the POFU during the critical low flow design conditions (Chapter 96.3 – 96.4).
  - See the Draft NPDES Permit Fact Sheet for details on how the Department developed an NBMA site-specific Q7-10 low flow estimate and watershed LFY for the POFU. To summarize the highlights:
    - USGS PA Streamstats estimated 1.63 CFS Q7-10 low flow for a 5.98 square mile drainage area at the Shenandoah Creek Confluence with the UNT (equivalent to a watershed LFY of 0.2752 CFS/square mile LFY). But a large portion of the POFU drainage area's groundwater/stream flow is not reaching the POFU (due to dry Shoeneck Creek conditions), rendering the predicted Q7-10 low flow invalidated.
      - The DEP statewide default LFY is 0.1 CFS/Square Mile (used only when there is no better data), which shows that the quarry contributions (along the UNT) was accounted for. Many PA streams have much lower watershed LFYs. Other streams do not have quarry discharge pumping during low flow conditions that are accounted for by the 0.2752 CFS/square mile LFY.
      - What was not accounted for, was the absence of any stream flow contribution from a large portion of the upstream Shoeneck Creek drainage area (upstream of the POFU). NBMA did not dispute the dry stream conditions. Simply put, there is near zero contribution from that drainage area. Therefore, the DEP water quality modeling had to be modified to account for less flow than assumed in the NBMA-cited figure. Less flow means less dilution and greater likelihood of exceedances of the Chapter 93 WQS in the receiving stream, i.e. resulting in more stringent Water Quality-Based Effluent Limits (WQBELs).
    - DEP Water Quality Modeling a.k.a. Reasonable Potential Analysis:
      - The overall calculated watershed LFY was multiplied by the UNT-only drainage area (at the POFU) to calculate a valid Q7-10 low flow value for the Nazareth Creek/UNT Q7-10 low flow.
      - The revised UNT Q7-10 low flow was then divided by the total Shoeneck Creek watershed drainage area (at the POFU) to calculate a watershed LFY that could be used in DEP water quality modeling as an input variable to allow for site-specific water quality modeling along the modeled portion of Shoeneck Creek. It is conservative because it accounts for nearly zero dry Shoeneck Creek contributions at the POFU, and does not assume unrealistic groundwater recharge rates (LFY) in the perennially flowing downstream portions of Shoeneck Creek (where there is no quarry discharge pumping contributions). In short, the quarry flows are accounted for.

Internal Review and Recommendations

- **NBMA-provided Quarry Flow Data:**
  - NBMA provided inapplicable annual average flow estimates that do not address Q7-10 low flow critical stream conditions for meeting the Chapter 93 Water Quality Standards per Chapter 96.3 & 96.4.
  - NBMA provided only a printout of quarry discharge flows to the Unnamed Tributary (apparently from the DEP Mining Program Electronic Discharge Monitoring Report (EDMR) System), without any technical determination of the critical Q7-10 low flows for the UNT (by statistical analysis or other technical argument).
    - The printout did not provide basic information on what the flow meter was reporting (instantaneous flows, daily flows, maximum or average discharge rates). The printouts did not report the relevant minimum quarry discharge rates to the receiving stream.
    - Printouts: The provided data (see below) showed that there are periods of greater than one week when neither quarry is discharging, i.e. potentially zero quarry contribution to the Q7-10 low flow. Reduced pumping rates or pumping cessation would be expected during Q7-10 low flow periods (due to reduced groundwater elevations).
      - Lehigh Cement Nazareth 1 Quarry PA0124303 Printout: The provided 2020 – 2024 discharge data showed apparent weeks of zero discharge, when the quarry is not providing any flow to the UNT. The discharge rates also as low as 0.01 MGD, without any statistical analysis to determine the Q7-10 low flows. There was no correlation of discharges to stream low flow conditions.
      - New Enterprises Stone & Lime Nazareth Quarry PA0119253 Printout: The provided 2018 – 2024 discharge data including time-frames of zero discharge (some periods longer than one week in duration) to the UNT, without any statistical analysis to determine the Q7-10 low flows. There was no correlation of discharges to stream low flow conditions.
      - Annual Quarry Discharge Flow data was summarized (see below): Average Annual Flows are irrelevant for DEP water quality modeling per Chapter 96 requirements.

Year	Average Annual Quarry Discharge (cfs)	Stream Stats Average Annual Flow at POFU (cfs)
2019	11.92	8.47
2020	17.42	8.47
2021	12.36	8.47
2022	14.52	8.47
2023	15.58	8.47
2024	19.15	8.47



Internal Review and Recommendations

- Please advise us if PADEP believes that additional information is needed to support the use of the Stream Stats Q7-10 flow rate of 1.63 cfs, and if that is the case, please provide guidance on what type of information PADEP seeks and advise whether PADEP will assist NBMA obtaining that information. **See above. NBMA did not make an adequate technical case for an alternative Q7-10 low flow and/or watershed LFY. The Department is prohibited from acting as a technical consultant for any permittee/applicant by regulation. NBMA and its technical consultants retain the option to propose and technically justify any alternative site-specific Q7-10 low flow and Low Flow Yield (Q7-10 low flow divided by drainage area in square miles) if it wants the Department to consider an alternate Q7-10 low flow and/or LFY in the Reasonable Potential Analysis.**
  - The Department previously noted several options available to NBMA at a previous meeting. (See the Communications Log for details.) NBMA's technical consultants are free to proposed alternative methods of determining the Q7-10 low flow/LFY.
  - The Department cannot promise to assist in information-gathering when NBMA has failed to explain what information is needed and otherwise available to the Department. The Department previously assisted NBMA in accessing publicly available information on quarry flow discharges per request. Otherwise, the Department is prohibited from acting as a technical consultant per regulation.
- If PADEP believes additional information is necessary, NBMA requests an additional 90-day extension in order to obtain it with PADEP's assistance. **See above.**
- PADEP Mining was not able to provide a continuous record of daily discharges from the quarries for a 10-year period (and the quarries did not respond to NBMA's requests for discharge data). **Noted.**
- PA Streamstats Usage: The use of Q7-10 flow as obtained by StreamStats is the standard accepted method for use when preparing NPDES permits, but PADEP appears to deviate from that approach in preparing NBMA's draft permit. The Q7-10 flow shown in StreamStats for the confluence of the Schoeneck Creek and the unnamed tributary (locally referred to as Nazareth Creek) is 1.63 cfs. PADEP's fact sheet references this value. PADEP's proposed Q7-10 flow subtracts from that number a calculated flow from the Schoeneck Creek to arrive at a Q7-10 flow of 0.9 cfs, which does not reflect reality. The Schoeneck Creek has flow upstream of the Hercules Quarry and is only dry downstream due to dewatering of the quarry's pit, which PADEP has allowed to occur with no flow returned to the Schoeneck Creek. The Hercules quarry discharges solely to the Little Bushkill Creek. **PA Streamstats is rendered inaccurate when there is substantial flow regime modification at the site-specific location (i.e. requiring adjustment in this case). As noted by NBMA, it is possible that the Hercules quarry pumping is redirecting Shoeneck Creek watershed groundwater to a Little Bushkill Creek discharge (i.e. why the dry stream drainage area does not contribute to the POFU location during low flow conditions. The NBMA public comments acknowledged the dry stream conditions in the applicable upstream portion of Shoeneck Creek (where Outfall No. 001 is located).**
- UNT (a.k.a. Nazareth Creek Flows): Two quarries discharge substantial daily flow into Nazareth Creek. The 1.63 cfs Q7-10 flow provided by StreamStats and utilized in the 2018 Fact Sheet is already extremely conservatively low. By way of illustration, on November 1, 2024, the precast concrete culvert in Nazareth Creek proximate to NBMA's discharge point was observed to have approximately 20 cfs flowing through it (22 ft wide culvert with 2 ft of depth of water noticeably flowing through it). New Enterprise Stone and Lime Co., Inc., has a permit to discharge a 30-day average flow of 12.0 MGD (18.56 cfs) and Lehigh Cement Company has a permit to discharge a 30-day average flow of 1.25 MGD (1.93 cfs). Both of these quarries must constantly discharge groundwater in order to operate. Yet PADEP has thus far chosen not to include these pumped flows when calculating Q7-10 flow, apparently due to the (very unlikely) possibility that one or both quarries may cease discharging because their permits, which PADEP issued, do not contain minimum release requirements. There is no reason to assume that discharges from either quarry will cease any time in the foreseeable future. Moreover, if one or both quarries stop dewatering their pits, that will likely result in the return of groundwater, which will likely restore natural flows to Nazareth Creek. **PA Streamstats flows show influence of quarry discharges. No PA PE Engineering analysis of quarry discharges was provided to quantify quarry discharge contributions during the Q7-10 low flow conditions at the POFU. The provided quarry data showed quarry discharge pumping cessation events. Natural flows to Nazareth Creek would likely be lower in the absence of pumping redirecting groundwater to the UNT.**
- To impose a dry-stream criteria on NBMA due to negative effects from one quarry while concurrently ignoring positive effects from two other quarries seems arbitrary and punitive to a municipal entity caught in the middle. NBMA is being penalized for a condition caused by PADEP's decision not to impose minimum

**Internal Review and Recommendations**

discharge requirements on the New Enterprise and Lehigh Cement quarries, and PADEP's allowing the Hercules Quarry's operations to deplete the water in Schoeneck Creek without replenishing the creek.

- **Addressing site-specific conditions is not "arbitrary and punitive".**
- **The NBMA public comments acknowledged the dry stream conditions in the applicable upstream portion of Schoeneck Creek (where Outfall No. 001) is located. The Department is not imposing more stringent "dry stream" discharge requirements at the Outfall No. 001 location at this time. The NBMA discharge is essentially the only stream flow during the dry periods in the dry stream reach.**
  - **No quarry discharge flow goes to Schoeneck Creek at Outfall No. 001 or to the Creek prior to the Nazareth Creek/UNT confluence with Schoeneck Creek.**
  - **NBMA can contact the PA DEP Mining Program (which permits the two cited quarry discharges) about adding a minimum discharge requirement to the Mining NPDES Permits, but the Department is unaware of any statutory and/or regulatory requirements/authority to impose any minimum discharge requirement on the third parties for the exclusive benefit of NBMA. NBMA is free to contact the quarries to determine if they would commit (in writing) to any minimum discharge period during the Q7-10 flow periods to allow for consideration in the Reasonable Potential Analysis.**
- **As noted by NBMA, the Hercules Cement quarry pumping may be removing water from the Schoeneck Creek watershed, removing groundwater recharge capacity from the watershed by discharging to the separate Little Bushkill Creek watershed. That removed water is simply not available at the POFU.**
- If PADEP intends to not utilize StreamStats data for calculating NBMA's NPDES permit limits, then a permanent USGS stream gage should be installed at along the Schoeneck Creek at Prologis Parkway and 10 years of data collected and utilized. NBMA is quite confident that the Q7-10 flow, if calculated from actual field measurements, will significantly exceed 1.63 cfs.
  - **See Part C.III schedule of compliance time-frames which can be used to pursue technical justification of an alternate Q7-10/LFY value.**
  - **NBMA is free to propose, obtain USGS/DEP authorization for, and operate a site-specific stream gage to allow for development of a site-specific Q7-10 low flow value.**
  - **NBMA is free to contact its local legislators to see if they can arrange Commonwealth funding for a site-specific stream gage.**
  - **NBMA can separately petition the USGS for installation and operation of a site-specific stream gage to gather site-specific stream data.**

**Request for deletion of proposed WQBELs (Total Aluminum; Total Cadmium; Total Silver; Hexachlorobutadiene; 1,2,4-Trichlorobenzene; Free cyanide; Total Antimony; Boron; Chloroform; Bromodichloromethane;**

**Dibromochloromethane; Beta-BHC; Alpha-Endosulfan; and Heptachlor**: NBMA took four (4) additional samples for analysis for a request to delete Final WQBELs for. NBMA requested an extension of 90 days if more samples are required. Several results were not identified as "J" values (based on lab MDL not RL) on table or lab sheets. NBMA requested removal of proposed WQBELs based on the new provided sampling data and previous Q7-10 comments.

- Using the sampled values for Antimony at 1.63 cfs Q7-10, the TMS analysis triggers a Monitor-Report for Antimony. The most common source for Antimony is the drinking water system. NBMA does not propose or believe that any additional sampling for Antimony is required at this time, and NBMA accepts a Monitor-Report condition for this parameter in the next draft of the permit.
- All three insecticides (Beta-BHC; Alpha-Endosulfan; and Heptachlor) were analyzed at detection/reporting levels significantly lower than the PADEP TQLs. The only samples reported with any detection were from August 30 and 31, 2023. Both of these samples were prepared on September 5, 2023, and analyzed on September 6, 2023. While laboratories refuse to ever admit an anomaly, based on the results of other samples collected and the fact that there are no sources of these parameters within NBMA's collection system, NBMA concludes that the test results for analyses performed on September 6, 2023, are at best non-representative, and are very likely the result of laboratory error. There are no known sources of any of these chemicals with the NBMA collection system, and the levels detected in samples analyzed on September 6, 2023, are the result of laboratory error and should not be considered. **NOTE:** See Reasonable Potential Analysis above for why the old results were superseded. The burden is on the permittee to show any lab error for previously submitted lab results from a certified lab. In practical terms,



## Internal Review and Recommendations

the new sampling results showed that the previous detections were not representative, but the detections might have resulted from spiking (when some POTW customer pours old chemical products into the sewer system i.e. no lab error need be assumed).

- The following table summarizes the available sampling data:

Constituents with previous insufficiently sensitive analytical results to exclude monitoring or limits	1/15/2025 sample	1/22/2025 sample	1/29/2025 sample	2/5/2025 sample	DEP TQL	Lab RL or MDL	Previous Application Data
Total Aluminum (ug/l)	25J	29J	25J	22J	10	100 RL 9 MDL	<100 ug/l (3 samples, all ND at lab QL of 100 ug/l).
Total Cadmium (ug/l)	<0.1	<0.1	<0.1	<0.1	0.2	0.4 RL 0.1 MDL	<0.4 ug/l (3 samples, all ND at lab QL of 0.4 ug/l).
Total Silver (ug/l)	<0.2	<0.2	<0.2	<0.2	0.4	1 RL 0.2 MDL	<1 ug/l (3 samples, all ND at lab QL of 1 ug/l)
Hexachlorobutadiene (ug/l) ( <b>grab samples**</b> )	<0.5	<0.5	<0.5	<0.5	0.5	0.5 RL	<0.98 ug/l (3 samples, all ND at lab QL of 0.98 ug/l)
1,2,4-Trichlorobenzene (ug/l) ( <b>grab samples**</b> )	<0.5	<0.5	<0.5	<0.5	0.5	0.5 RL	<0.98 ug/l (3 samples, all ND at lab QL of 0.98 ug/l)
Free Cyanide (ug/l) (grab samples)	<0.5	<0.5	<0.5	<0.5	10	0.5 MDL 5 RL	6 ug/l max, 5 ug/l average (12 samples)*
<b>Constituents detected below DEP TQL***</b>	-	-	-	-	-	-	-
Total Antimony (ug/l)	0.8	0.7	1.3	1.1	2.0	0.4 RL	0.9 ug/l max and 0.833 ug/l average (3 samples detected with lab QL of 0.4 ug/l)
Boron (ug/l)	105	146	116	89	200	50 RL	256 mg/l max and 229 mg/l average (3 samples detected, lab QL of 50 mg/l)
<b>Chlorine Disinfection byproducts***</b>	-	-	-	-	-	-	-
Chloroform (ug/l) ( <b>grab samples</b> )	<0.5	<0.5	<0.5	<0.5	0.5	0.5 RL	11.7 ug/l max, 10.6667 ug/l average (3 samples,

Internal Review and Recommendations

							all detected at lab QL of 0.5 ug/l)
Bromodichloromethane (ug/l) (grab samples)	<0.5	<0.5	<0.5	<0.5	0.5	0.5 RL	1.1 ug/l max, 0.8 ug/l average (8 samples)
Dibromochloromethane (ug/l) (grab samples)	<0.5	<0.5	<0.5	<0.5	0.5	0.5 RL	2 ug/l max and 1.95 ug/l average (3 samples, 1 ND at lab QL of 0.5 ug/l)
<b>Insecticides Previously Detected Below DEP TQL</b>	-	-	-	-	-	-	-
Beta-BHC (ug/l)	<0.005	<0.005	<0.005	<0.005	0.05	0.005 RL	0.02 ug/l max and 0.02 ug/l average (3 samples, 2 NDs at lab QL of 0.005 ug/l)
Endosulfan I (ug/l)	<0.02	<0.02	<0.02	<0.02	0.05	0.02 RL	0.04 ug/l max and 0.04 average (3 samples, 1 ND at 0.02 ug/l lab QL)
Heptachlor (ug/l)	<0.005	<0.005	<0.005	<0.005	0.05	0.005 RL	0.3 ug/l max and 0.3 ug/l average (3 samples, 1 ND at Lab QL of 0.005 ug/l)

\*“NBMA has documented to PADEP and EPA that the previously reported free cyanide results were false results due to excess preservative in the sampling bottles. NBMA has had consistent non-detect results since identifying this sampling preservative issue”. **NOTE:** The documentation was not provided in the public comments nor specific submittal identified. However, the sampling results show the results.

\*\* Per Major Sewage NPDES Permit Application Instructions: All samples collected for the application must be 24-hour composite samples, with the exception of pH, Temperature, Cyanide, Total Phenols, Total Residual Chlorine, Dissolved Oxygen, Oil and Grease, Fecal Coliform, PFOA, PFOS, PFBS, HFPO-DA, and Volatile Organics (Pollutant Group 3). Hexachlorobutadiene and 1,2,4-Trichlorobenzene are Pollutant Group 5 constituents that require 24-hour composite sampling per Major Sewage NPDES Permit Application Instructions, but only grab samples were taken in the resampling. They are solvents that can come from assorted sources with a variety of historic usages. There are two Part 463 Industrial Users (plastics category) sending IW to the POTW.

\*\*\*NBMA decommissioned its chlorine disinfection system in August 2024 and now uses UV disinfection (i.e. no usage of chlorine, with expected reduction in chlorine disinfection residuals/byproducts). The new grab sampling results are therefore indicative of future discharge.

**The new NBMA sample information was incorporated into the updated Reasonable Potential Analysis (see above) allowing for deletion of requirements for assorted constituents and reduction to monitoring-only requirements for other constituents. The Redraft NPDES permit was updated as appropriate.**

- See above in terms of the Q7-10 low flow.
- No NBMA water quality modeling was included in the public comments.

Internal Review and Recommendations

NBMA acknowledges zinc and copper are present in its effluent. NBMA already samples for zinc monthly and copper quarterly. The results collected as part of NBMA's present NPDES Permit requirements will be tabulated and included with the additional data collected in 2025 for the permit renewal. **Noted, but no additional zinc/copper data has been received.**

NBMA asserts that rather than requiring additional insecticide samples, PADEP should exercise its discretion and not incorporate permit limits for NBMA that are not generally included at similar domestic WWTPs. There are no known sources of these pollutants within the service area, and therefore NBMA respectfully asks that these requirements be removed. **See updated Reasonable Potential Analysis above that resulted in the removal of the WQBELs.**

- **The Department does not have “discretion” to ignore application sampling data indicating presence of these constituents, Chapter 93 Water Quality Standards (lower than the DEP Target Quantitation Limits), and/or the constitutional, statutory, and regulatory requirements to protect the waters of the Commonwealth. The Department followed scientifically-approved methodologies to evaluate the NBMA-provided sampling data to determine Reasonable Potential for causing exceedances of the Chapter 93 Water Quality Standards. The Reasonable Potential Analysis determined when limits and/or monitoring is not required.**
- **What was or was not found at other Major STPs is not relevant to the Reasonable Potential Analysis for these priority pollutants for this facility.**

Carbon Tetrachloride was mentioned in the March 2024 letter, and is included on a “Report-annual” basis in the present NPDES permit, but was not mentioned in the Draft NPDES Permit. NBMA does intend to submit any additional analytical data for this parameter. **Noted. Monitoring was not required by the Reasonable Potential Analysis.**

**General Comment:** As a general comment, NBMA's most recent prior permit renewal application, submitted in 2018, was very similar to its pending application, and site conditions have not changed. However, the current Draft NPDES Permit raises new issues that have never been raised in previous permitting cycles, most notably, the addition of a Part C dry stream site-specific conditions, multiple new chemical permit effluent limitations and Toxic Reduction Evaluations. In summary, NBMA asserts the new/renewed permit should be identical to the existing permit with the exception that any effluent limitations related to chlorine disinfection are removed from the permit due to the cessation of chlorine disinfection and the sole use of UV Light Disinfection since August 2024. **The Department cannot concur. The Department does a technical review of any NPDES Permit Renewal Application in accordance with the PA Constitution, PA Clean Stream Law, applicable regulations, applicable technical guidance, and best available information. The NPDES Permit is revised as necessary to protect the public health, safety, welfare and environment. See Draft NPDES Permit Fact Sheet and this Fact Sheet Addendum for explanation of the required NPDES permit changes and why the changes are necessary.**

**Part C Dry Stream Condition:** NBMA does not see the need for, or validity of, any narrative Dry Stream/Losing Reach Conditions in Part C of the draft permit—or for the new and lower numeric effluent limits (discussed in the attached appendix) that would be imposed based on such conditions, which, again, PADEP allowed to occur. If anything, NBMA believes PADEP should increase the Q7-10 flow used for modeling purposes to more realistically represent the actual stream conditions at the existing POFU at the confluence of Nazareth and Schoeneck Creeks. **The Department does not concur that the Part C.I.E (dry stream) permit condition should be deleted. The NBMA public comments acknowledged the dry stream conditions in the applicable upstream portion of Shoeneck Creek where Outfall No. 001 discharges. See above in regard to the Q7-10 issues & Reasonable Potential Analysis.**

**Item A: Part A.I.C (Influent CBOD and BOD Sampling):** The draft permit has the sampling frequency for influent CBOD and BOD reversed. NBMA will continue to sample influent BOD two times each week. Influent CBOD will only be sampled once each month to satisfy the DRBC docket requirement. NBMA requests revisions to these sampling requirements in the NPDES permit. **The Department has made the requested change, but the change is at NBMA's own risk because the DRBC requirement is a minimum 85% CBOD5 monthly average reduction, with greater frequency of monitoring generally desirable to allow for averaging (to address spiking scenarios).**

Internal Review and Recommendations

Item B: Part A.I.C (PFOA, PFAS, PFBS and HFPO-DA Sampling): NBMA objects to sampling for these parameters in its effluent as a NPDES Permit reporting requirement. If DEP believes that there is a source of these pollutants in the service area, it would be more prudent to sample that source directly and to limit the discharge of these pollutants into the sanitary sewer. There is no value in sampling the treatment plant effluent. These pollutants are best controlled at the source. NBMA requests removal of these sampling requirements from the NPDES permit. **The Department cannot concur because these are now standard monitoring requirements (Chapter 92a.61) for major Sewage Treatment Plants (STPs) per the PADEP PFAS Strategy and Chapter 92a.61 requirements. The Department and EPA is gathering information from all Major POTWs, with the need to establish a baseline for POTWs. The Department recommends that NBMA also consider sampling any potential sources on its own, under Part B.I.D (General Pretreatment).**

Item C: Part A.I.C (UV light intensity): NBMA requests clarification from PADEP regarding what specifically needs to be monitored and how it is to be recorded and reported regarding UV Light Intensity. **Specifically, the requirement is that the instantaneous minimum UV light intensity (in the UV disinfection system) be monitored daily and reported via DMR monthly in terms of the instantaneous minimum light intensity (in  $\mu\text{w}/\text{cm}^2$  units) during the month, whenever discharging via Outfall No. 001. A reduction in measured intensity can signal a problem with UV disinfection effectiveness (bulb burnout, etc.) that should trigger required O&M prior to prevent fecal coliform effluent exceedance.**

Item D: Part A.I.D and A.I.E (Stormwater Outfalls /Drainage Areas 002 and 003): These two outfalls all contain sheet flow. NBMA will include these areas in its PPC plan and have BMPS in place to prevent contamination of these outfalls. No sample collection will ever be possible at these areas. NBMA requests removal of sampling requirements from the NPDES permit. **The Department cannot concur at this time. Semi-annual stormwater sampling is now a standard requirement where there is a sampleable stormwater monitoring point. The NBMA Site Plan (Drawing G-1) figure showed an existing stormwater control discharging toward the UNT (i.e. Outfall No. 003 drainage area) and an apparent potential sampleable point of concentrated stormwater flow (i.e. in the Outfall No. 002 drainage area) for discharge to Shoeneck Creek.**

- **Background:** IW Stormwater permitting requirements pertain to all Major STPs ( $\geq 1.0$  MGD NPDES permit basis flow). In practical terms, the NPDES Permit Part C Stormwater conditions (site PPC Plan, stormwater BMPs, etc.) apply even if there is no available point of concentrated flow to sample stormwater (i.e. sheet flow/infiltration areas). Sheet flow sampling can also be done if necessary.
- **Part A.I.D (Outfall No. 002):** The permit footnote states: “\*If point of concentrated stormwater flow allows for sampling”. Therefore, no sampling is necessary if there is no actual point of concentrated stormwater flow to allow for stormwater sampling. Points of concentrated flow can arise from berms, curbs, etc. If a point became available in the future, monitoring would be required.
- **Part A.I.E (Outfall No. 003):** The Application identified an existing stormwater retention pond with associated rock filters on the southern part of the site, which would discharge to the UNT. If there is no discharge, no discharges can be reported per the DMR form.

Item E: Part B.I.D.4 (Submission to EPA of Potential PFAS Industrial Discharges): A Pre-Draft Permit Survey for Toxic Pollutants was completed and included as Appendix B with NBMA’s June 5, 2024, response letter. EPA Envirofacts was the source of that information. NBMA objects to being required to submit a list of industries obtained from an EPA data and resubmitting that data back to EPA. NBMA requests removal of this permit requirement. **The Department cannot concur with the deletion of this now standard Major STP Part B.I.D.4 (PFAS) permit language. NBMA apparently also misunderstood the requirement. NBMA is required to evaluate its own customer/sources list to identify any Industrial User/indirect discharger in the Part B.I.D.4-identified industrial classes. NBMA is then required to submit this to both the US EPA and DEP via the permit condition-identified links within the specified time-frame (6 months of Permit Effective Date). This information will be used to update Envirofacts. See also the Part B.I.C.4 annual reporting requirements for industrial categories with Federal pretreatment Effluent Limitation Guideline (ELG) limits. Please note the US EPA retains authority to require any POTW to enter its Industrial Pretreatment Program (IPP).**

Item F: Part C.III (WQBELs for Toxic Pollutants) and Part C.IV (Whole Effluent Toxicity) Toxic Reduction Evaluations (TREs): All historic NBMA WET Tests, as noted in the Fact Sheet, have passed. NBMA requests removal of any Toxic Reduction Evaluations (TREs) requirements in the absence of a WET test failure. **The comment was unclear which TRE requirement was being referenced – whether Part C.III or Part C.IV). The Department could not concur in either case.**

- **Background:**

Internal Review and Recommendations

- The Whole Effluent Toxicity (WET) Tests are used to identify synergistic/cumulative impacts of all effluent pollutants on the receiving stream's aquatic life.
- The Toxic Reduction Evaluation (TRE) requirements include source investigation, potential source reduction options, and potential treatment/other options to address specific pollutants known or suspected of impacting the receiving stream.
- **Part C.III (WQBELs for Toxic Pollutants) TRE requirements:** These are standard requirements for new Toxic Pollutant Water Quality-Based Effluent Limits (WQBELs) as determined by the Reasonable Potential Analysis. This requirement is limited to Total Zinc, due to Reasonable Potential for effluent to cause exceedances of the Zinc Chapter 93 Water Quality Standards in the receiving stream (impacting aquatic life). If any previous Zinc TRE was completed, any still valid and applicable information can be used in a new TRE.
- **Part C.IV (Whole Effluent Toxicity) TRE requirements:** New TREs would only be required in event of a failed WET Test as set forth in the permit conditions. If a specific cause of the WET Test failure cannot be identified and/or addressed by the permittee, additional TRE requirements would be triggered.

**Compliance History:** No open violations per 10/30/2025 WMS query (open violations by client number):

Client ID: 34470

Client: All

Open Violations: 0

No data was found using the criteria entered. Please revise your choices and try again.

**Communications Log:** When there was a discussion, the DEP response is bolded for clarity's sake.

**10/8/2024:** Draft NPDES Permit issued

**10/25/2024:** Permittee request for copy of previous DEP modeling. **NOTE:** The modeling was included in the original Draft NPDES Permit Fact Sheet, but also separately provided per permittee request by the DEP Program Manager.

**10/28/2024:** Permittee (William Brown, HRG) E-mail requesting telephone call to discuss Draft NPDES Permit issues for clarification. The 10/29/2024 Telephone Call discussed the following:

- The change in 7Q10 flow and whether there is reasonable potential to exceed for several of the parameters would still be met at the previous 7Q10 flow. He noted that he got varying Q7-10 values when he delineated different spots in the area of the UNT confluence (POFU). He noted the UNT receives quarry pumping discharges that increase its low flow value and will be looking at quarry pumping data: **USGS PA Streamstats is used by the Department to determine Q7-10 low flows and low flow yield (stream Q7-10 low flow in CFS/square mile) for water quality modeling. It is scientifically-supported, but it is impacted by site-specific stream regulation (losing stream scenarios; historic rechanneling; significant groundwater pumping; changes in terrain; etc.). In this case, the Department has determined that there is a dry stream reach between Outfall No. 001 and the point of first use by aquatic life (POFU at the UNT confluence with Shoeneck Creek). That drainage area is not contributing to flow at the POFU, with Shoeneck Creek flow basically reduced to the UNT flow during the Q7-10 low flow conditions (lowest 7-days of flow in a 10-year period, determined statistically).**
  - See Draft Fact Sheet for how the values were applied in the water quality modeling/Reasonable Potential Analysis.
  - The facility can explain what it found in its own investigation, and provide it for Department consideration.
    - The Department noted that other applicants have considered their own site-specific stream gages and hired a hydrologist to address the stream low flows.
    - USGS PA Streamstats took available gage data (which would have accounted for UNT high flows and dry stream "no flow" during low flow periods). It is unclear if quarry pumping volumes is constant during low flow periods. Quarry pumping is not like an AMD orphan discharge where no one controls the discharge rates.
  - Impact on WQBELs by changes in Q7-10 low flows/LFY:
    - By comparing changes in estimated dilution, one could ballpark likelihood of changes in permit limits by comparison of effluent max concentration/Long Term Average Monthly

Internal Review and Recommendations

Effluent Concentration (LTAMEC) to TMS-calculated WQBELs (in Fact Sheet). Generally, permit limits are required when the maximum concentration or LTAMEC is  $\geq 50\%$  of the calculated WQBEL as shown on the TMS output excerpt. Monitoring is generally required at 10 - 50% of WQBEL.

- The Department water quality models are available on the DEP Water Quality Models and Tools webpage in event the permittee wants to model different flow conditions (Q7-10 low flow, LFY) for the Reasonable Potential Analysis.
- Another big-picture question is whether or not moving the outfall to the unnamed tributary would change any of the permit conditions: **The Department brought up this option as a long-range planning consideration (20-30-year planning time-frame) in event someone restored the Shoeneck Creek dry stream reach upstream of the WWTP Outfall No. 001 (via sinkhole remediation; quarry pumping cessation; etc.), with the point of first use by aquatic life moving to the Outfall No. 001 location (present dry reach). In that case, previous water quality modeling would be invalid (much less dilution, lower ambient total hardness conditions, greater potential sensitivity to SBR batch discharges by aquatic life). The Department is asking for notification of any such known stream remediation (when known), and would then have its aquatic biologists look at the changes in stream conditions at that time. In that event, the facility could consider relocating the discharge point in comparison to other facility options at that time.**
- Among other things, I'd really like to eliminate the TRE's if there is any way to do that. TREs involve a great deal of work and sometimes cannot trace the source of the constituent. 10 constituents require permit limits and 6 constituents require monitoring (no TRE obligation). Proposed WQBELs for Cadmium, Free Cyanide, Zinc, Alpha-Endosulfan, 1,2,4-Trichlorobenzene, Beta-BHC, Chlorodibromomethane, Chloroform, Heptachlor, Hexabudatiene. Monitoring only for Aluminum, Antimony, Boron, Copper, Silver, and Dichlorobromomethane: **There are additional sampling options that can be pursued (4 non-detects weekly samples to show absence; 10 samples at sufficient sensitivity to calculate the LTAMEC and COV for the Reasonable Potential Analysis – can include older sample data) during an extended public comment period:**
  - **More Stringent WQBELs:** Free Cyanide and Total Zinc required more stringent limits than the existing limits. Depends on what was done previously TRE-wise.
  - **Insensitive ND:** Five (5) constituents' ND concentration data did not meet DEP TQL (Total Aluminum, Total Cadmium, Total Silver, Hexachlorobutadiene, and 1,2,4-Trichlorobenzene). The EPA Sufficiently Sensitive Rule requires that the ND concentration be treated as if the constituent is present at the insensitive ND concentration. Resampling is an option at DEP TQL.
  - **Conversion to UV disinfection:** Additional sampling might allow for elimination of Chloroform, Chlorodibromomethane, Dichlorobromomethane, and possibly Free Cyanide (per applicant statements only) due to elimination of treatment plant source(s) changing effluent quality.
  - **Detected below DEP TQL constituents:** Total Antimony (3 detects), Beta-BHC (1 detect), Alpha-Endosulfan (2 detects), Heptachlor (2 detects) with low Chapter 94 Water Quality Standards triggering permit limits. Sampling would have to be sufficiently sensitive not to bias the results (like using "J" option tied to lab MDL). Some constituents' Chapter 93 WQS are so low that if they are detected, that generally triggers permit limits.
  - **Monitoring Parameters:** Additional sampling data might reduce monitoring requirements as well.
- **Fact Sheet References to Shenandoah Creek:** An accidental transposition of names. All Fact Sheet information/analysis pertained to the receiving Shoeneck Creek and related UNT.
- **Public Comment Period:** The Department noted that the minimum 30-day public comment period started 10/26/2024. The permittee can ask for an automatic 15-day extension. The permittee can also ask for more time for sampling (or other proposed action) if it explains what it will be doing and gives a target date for submittal. The Department prefers all public comments be submitted at the same time to allow for a single Redraft NPDES Permit or final permit action.

**10/31/2024 and 11/11/2024:** Permittee (HRG Inc.) E-mails and DEP Response (bolded):

- Request for 15-day extension of public comment period: **The 11/12/2024 DEP (Berger) E-mail granted the requested extension to December 12, 2024.**
- We are trying to recreate the TMS spreadsheet. We must have some inputs slightly different from yours. Can you please either look at our entries or send you spreadsheet?:
  - **The Draft NPDES Permit Fact Sheet Effluent section had included the TMS in PDF format. The 11/12/2024 DEP (Berger) E-mail contained a TMS PDF attachment in case NBMA had been unable to open the Fact Sheet PDF.**

Internal Review and Recommendations

- The Department E-mail noted that the HRG Inc. TMS Spreadsheet simply did not use the same inputs as the DEP TMS Spreadsheet (provided in the Draft NPDES Permit Fact Sheet with background information on stream conditions), with the natural result that the TMS outputs would differ. Examples of differences included: different discharge total hardness & pH values, lack of inputting of stream concentrations for assorted metals, missing significant digit in one input number, different RMI/Elevations/Drainage areas, different Low Flow Yield (LFY), etc.
- As a matter of practical guidance, if you want to recreate a model, you must use the same input values and assumptions to start with. Then you can see how adjusting the model inputs/assumptions impact the outputs (permit limits and monitoring requirements).
- If you believe that other input values and/or assumptions should be used in the DEP Reasonable Potential Analysis/water quality modeling, then you would need to provide supporting technical information and analysis for Department consideration during the public comment period.
- In terms of other TMS-related guidance:
  - See the DEP Water Quality Models and Tool Page for further information on the TMS Spreadsheet.
  - See DEP E-library for the old PENTOXSD water quality model Technical Guidance document for additional information regarding water quality modeling input values and how to refine the water quality modeling. (TMS used much of the old PENTOXSD equations, etc.).
  - See the DEP Clean Water Academy for available courses on DEP Water quality modeling programs.
- Potential future sampling and analysis plan (mentioned in the HRG Inc. E-mail): **In terms of any future proposed sampling and analysis plan (mentioned in the e-mail), please note that it would take a minimum of ten (at least weekly apart) sampling results meeting the DEP TQL (or more sensitive lab QL including J value option) to allow for calculation of a statistically valid Long Term Average Monthly Effluent Concentration (LTAMEC) and daily COV to enter into the TMS Spreadsheet. If all previous results were ND above the DEP TQL, you only need four samples (meeting the DEP TQL) to show that it is not present (but if detected, the max concentration would be used in updated DEP modeling unless you do the LTAMEC option).**
  - Insensitive ND levels would bias the results. Older sampling data, sufficiently sensitive, can be used.
  - Sometimes labs can provide “J” values (based on the lab MDL which is more sensitive than the lab QL) for older sampling results (as well as new sampling), but they would need to provide lab sheets with the “J” value explicitly identified.
  - We would need the data in table form – date of sample, sample result, sample units, lab QL, etc. for each constituent as well as the lab sheets to calculate the LTAMEC.

**12/15/2024:** NBMA (HRG) E-mail request for telephone call. Regarding the sampling time frame – NBMA is an in-house accredited lab for all the routine, weekly NPDES permit parameters. For the samples that require monthly sampling, NBMA has an outside, contracted laboratory come to the plant and pick up samples. So for the parameters needing additional samples, we are proposing to add a second monthly pick-up for those samples (along with the regular monthly pick-up) since NBMA cannot perform the analyses for these chemicals in-house.

**12/15/2024:** DEP (Berger) E-mail scheduling requested telephone call and stating: **the ball’s in your court in terms of any additional public comments/information to be submitted and/or for asking for a meeting regarding the Nazareth Borough MA Draft NPDES Permit No. PA0041742’s public comments (with meeting agenda and list of anticipated participants needed to allow for scheduling).**

**12/16/2024:** NBMA (HRG) requested telephone call (no agenda or list of participants given in advance).

- Participants:
  - NBMA: William Brown (HRG, NBMA technical consultant)
  - DEP: James Berger (Engineer)
- Public comment period extension and Sampling Program: They will get any other info into us by next week that they want DEP to consider in terms of an extension or other public comment. DEP is likely to grant 60 – 90 day extension to the public comment period to allow for sampling & analysis (with submittal) and any other public comments by March 31. Would need definite commitment and deliverables for longer time-frame, given only 4 samples are being proposed except for Aluminum, Copper, Zinc where they have historical data or can tell if monitoring requirement likely can drop out with 4 samples. **Not sure LTAMEC will benefit them in terms of the constituents. The 4 sample resampling can be used to screen out false positives (but must meet the lab QL if lower than the DEP TQL). Even if found, the Permit includes time-frames to see if they can eliminate or modify the permit limits prior to their effective date. They can also explain why DEP should ignore older sampling data (conversion to UV; explanation of change in free cyanide analysis methodology that they said had led to**



Internal Review and Recommendations

incorrect results, etc.). DEP can only consider what information/comments that NBMA submits in its decision-making, so perhaps other constituents should be analyzed for. They can run the TMS to see if the sampling results benefit them as well.

- Low Flow: They intend to pursue this issue. They can provide any data or technical argument (especially physical factors) why the Q7-10/LFY should be greater than assumed with the future sampling results. They plan to submit modeling based on a higher value as part of the public comments.
  - **PA Streamstats is inaccurate where there is substantial flow modification, which the Department took into account (including quarry discharges). The DEP used a downstream location to calculate the LFY for the stream, but adjusted it to account for dry stream reach (no contribution from upper Shoeneck Creek watershed during the low flow period).**
  - **They can make any technical case why another watershed area (like Monocacy Creek) would be more representative.**
  - **They contacted USGS about a site-gage but was told that 10-years of data would be needed for a site-specific Q7-10 low flow.**

**12/20/2024**: NBMA (Brown) Email of NBMA Letter with Meeting Agenda items and list of participants. Letter asked for public comment extension to 3/12/2024.

**12/31/2024**: DEP E-mail scheduling permittee-requested meeting and extending the Public Comment Period to 3/12/2024 per permittee request.

**1/10/2025**: Meeting requested by Permittee. Meeting highlights:

- Participants:
  - DEP: Amy Bellanca (Program Mgr.), Mike Ferrence (OCC), Ann Conserette (OCC, via phone) and James Berger (Engineer)
  - NBMA: Dean Minnich (Plant Mgr.)
  - NBMA Counsel: Peter Keayes and Steven Miano
  - NBMA Technical Consultants: Jenifer Fields P.E; William Brown P.E (consulting engineer); Ella Quinn (consulting engineer)
- NBMA WWTP/Draft NPDES Permit:
  - They do not understand the reason the changes in the Draft NPDES Permit from the previous permit, and asked if they could have the same permit language as before. Mr. Minnich noted the facility has never had a NOV issued in the last 30 years that he has been there. All WET tests have passed. They have six licensed operators and replace equipment/parts prior to end-of-service-life/failure. They are not aware of any changes in site conditions since previous NPDES permit renewal. NBMA repeatedly won awards for its Treatment Plant. Other parties tour their facility as a good example.
  - **The Department noted that was not possible to re-use previous NPDES permit language due to permit template changes, changes in regulations, changes in policies (DEP PFAS Monitoring Strategy, etc.), etc.**
- Q7-10 Low Flow and quarry pumping on UNT (a.k.a. Nazareth Creek): NBMA noted that this issue was very important to them. They have done "what if" modeling that indicated that higher Q7-10 flows might eliminate proposed Final WQBELs and monitoring requirements. NBMA believes there are greater flows in the UNT (known locally as Nazareth Creek) than used in the DEP water quality modeling/Reasonable Potential Analysis. NBMA noted that the facility is surrounded by quarries and indicated groundwater flow have been impacted/redirectioned by historic mining and quarry pumping. The UNT receives pumping discharges from quarries, restoring flow. NBMA thought that a minimum quarry discharge might be needed to sustain aquatic life in the UNT. Shoeneck Creek has dry conditions at times, but the UNT has high flows per NBMA visual observations. They believe the quarry discharges are ~12 MGD daily (greater than previously assumed Q7-10 low flow) to the UNT, and that any Mining NPDES Permit should have a minimum discharge requirement to prevent a dry stream scenario (due to quarry pumping otherwise resulting in a dry stream and fish kills), etc. Such issues have come up at other quarry sites per the NBMA technical consultants.
  - NBMA asked for reason for Q7-10/LFY changes. **DEP referenced the Draft NPDES Permit Fact Sheet for reasons for change in the Q7-10 low flow (lowest 7-day consecutive flow in a 10-year period) and Low Flow Yield (a.k.a. LFY which is Q7-10 low flow divided by drainage area) used in the Reasonable Potential Analysis.**
  - NBMA asked if the previous flow analysis/water quality modeling could be used instead of the updated Fact Sheet's modeling/Reasonable Potential Analysis in the NPDES Permit Renewal. **The Department answered no. It is not possible to use previous NPDES permit renewal modeling/results (obsolete data, obsolete modeling assumptions, obsolete/superseded computer modeling programs).**

Internal Review and Recommendations

- NBMA asked if the Department has the required UNT flow data to calculate the quarry discharge impact on low flows. **The Department indicated this information was not available to the DEP Clean Water Program permitting staff.**
  - **The quarry NPDES discharges & pumping were permitted by the DEP Mining Program, not the DEP Clean Water Program. NBMA had not indicated DEP Mining Program representatives were needed for the meeting, so no one was present to discuss the quarry Mining NPDES Permits and their requirements. No one could speak in terms of Mining NPDES Permit requirements in terms of monitoring requirements, quarry gage type/capabilities, minimum flow/discharges required to support aquatic life, other Mining information on the UNT, etc. NBMA noted that it was seeking such information from the DEP Mining Program and quarries. The Department noted another meeting (with Mining Program attendance) could be arranged if requested.**
  - **The DEP NPDES EDMR system generally only reports things like monthly average and daily max flows for the operating quarry, not minimum flows during the critical Q7-10 low flow conditions.**
  - **Options: NBMA's PA Professional Engineer could submit a PA PE-sealed technical report to identify and technically justify a different Q7-10 low flow with data and technical argument. Several potential options were mentioned.**
    - Historic Quarry Pumping Data: If 10-years of daily quarry pumping/discharge data is available, NBMA can identify the lowest 7-day consecutive flow period as the minimum Q7-10 discharge. NBMA noted that it might look at local gages to identify the Q7-10 time-frames if there were not 10-years-worth of data available.
    - New UNT Gage (to be installed by NBMA): Other facilities have installed their own gages to gather the required information to identify the Q7-10 low flow. There are example facilities to look at if they want to pursue that option and what the permit would look like. The NBMA Engineer noted there was a box culvert in the UNT that might be a potential gage location.
    - Minimum pumping rates:
      - If the Mining NPDES Permit-specified a minimum discharge rate, it could be treated as the default Q7-10 (like minimum dam release flows when specified in a Dam permit).
      - Perhaps the NBMA and quarry Mining Engineers can determine the minimum pump rates required to operate the quarry, even during drought/Q7-10 flow conditions.
  - **NBMA felt the DEP was punishing NBMA due to quarry-caused impacts on the Shoenek Creek watershed, and that DEP should require minimum discharges in the quarry NPDES permit(s) to protect the stream. **The DEP noted Mining NPDES permits are subject to NPDES permit renewal and public comment periods. NBMA can request a minimum discharge value be established in any Mining NPDES Permit Renewal for any active quarry operation.****
  - Schedule:
    - **The Department has extended the public comment to March 12 per NBMA request. Preferably, all public comments (including any proposed additional Q7-10 low flow justification) should be submitted at that time. The Department can grant additional time if NBMA can explain why it is needed.**
    - **Any issued Redraft NPDES Permit would have its own public comment period to allow for further public comment & responses. New sampling data might result in a need for a Redraft NPDES Permit.**
    - **Any Final NPDES Permit would have a schedule of compliance for any proposed Final WQBELs effective date. Three years is in the Draft NPDES Permit. Only upon Final WQBEL effective date would the regulatory antibacksliding prohibition be triggered, making it more difficult to obtain any relief. The issue could be further pursued prior to the Final WQBEL effective date. An antibacksliding exception (new information not previously available) might apply later. EPA looks at any antibacksliding exception request.**
    - **NBMA noted that it might litigate any issued Final NPDES Permit that does not address their concerns. **A Final NPDES Permit action would be an appealable action.****
- Specific Parameters for Additional NBMA sampling & analysis (Parts A.I.A, B, C; Part C.III):

Internal Review and Recommendations

- NBMA noted that it was going to take four (4) samples on a weekly basis (meeting TQLs) but did not want to discuss their sampling plan further at the meeting. They do not plan to do any copper and zinc sampling beyond their current NPDES permit requirements since they probably have enough data.
  - **DEP noted that they would need four NDs at the more sensitive Lab QLs to show that several pesticide constituents were not present (i.e. false positives in original sampling) at the more sensitive lab QL. If something was detected, the max concentration would be used in the updated Reasonable Potential Analysis unless they had ten (10) sample results (sufficiently sensitive) to allow for calculation of the LTAMEC and daily COV via DEP TOXCONC Spreadsheet. NBMA should look at the 4-sample results and decide if they need additional weekly samples at that time. DEP also noted that the Bureau of Lab has a list of certified labs able to meet DEP TQLs.**
- TREs - Toxic Reduction Evaluation (Part C.III Toxics and C.IV WET):
  - NBMA does not want to do TREs. TREs take a lot of effort for little result (copper and zinc are usually from public water supply, etc.).
  - **The Department noted TREs are only required for new proposed Final WQBELs (not monitoring) which would exclude Copper. Future NBMA sampling and future Q7-10 submittal might eliminate Final WQBELs. If NBMA can meet the Final WQBELs (in the Final NPDES Permit), then TRE requirements can be minimal. If they cannot meet the Final WQBELs, more would be needed.**
  - **Some facilities have voluntarily done the Biotic Ligand Model (BLM) to obtain a site-specific water quality criterion. However, any facility must live with the BLM results, which can make Final WQBELs more stringent.**
- PFOA, PFAS, PFBS, and HFPO-DA Sampling and Analysis Requirements (Part A.I.C): NBMA was concerned about public perceptions of monitoring data since the POTW effluent PFAS concentration might be greater than the POTW influent concentration per their understanding of the in-treatment chemistry and EPA webinar discussions
  - **Why: This monitoring is being required per the DEP PFAS Monitoring Strategy. The Strategy targets Major STPs (with IUs in the industrial categories known or suspected of being PFAS sources) and IW dischargers (in the industrial categories known or suspected of being PFAS sources) upfront during NPDES permit renewals or major amendments. There is an EPA-approved Test Method for these parameters.**
  - NBMA asked what other facilities are doing with the data. NBMA noted that any PFAS treatment process would be costly from what they heard from an EPA Webinar. **The first round of sampling data has come in. Some facilities have backtracked the source of the PFAS chemicals and stopped accepting the waste streams via their pretreatment program.**
  - **Long-term, any Chapter 93 Water Quality Standards update (for PFAS) would be subject to public comment. After any new Chapter 93 WQS comes into effect, Chapter 92a.12 has the procedure for DEP to require a revised NPDES Permit application (rather than waiting for the next renewal).**
- Furnishing EPA with list of potential PFAS dischargers (Part B.I.D.4): NBMA asked what is needed, since it knew of potential PFAS dischargers via the EPA database. **DEP noted EPA/DEP was asking facilities for the information to update the EPA database. Facilities were expected to go through their customer lists to identify the potential PFAS dischargers (industrial dischargers, not commercial dischargers, that are known or suspected of discharging PFAS per the EPA guidance). DEP noted there was an EPA SIC-to-ELG Crosswalk that would indicate which 40 CFR 400 – 500 industrial category might apply to a specific SIC Code. EPA has identified the industrial categories that are known or suspected of being a PFAS source in its guidance. POTWs might be aware if a facility might fall under the type of industrial category known or suspected of being a PFAS source, even if the SIC code was not correctly identified. A fire-fighting training center might be a PFAS source (PFAS in fire-fighting foam). The Department had not identified any additional potential IUs than set forth in the NPDES Permit application.**
- Stormwater Outfalls/Drainage Areas 002 and 003 (Part A.I.D, E; Part C.VI Stormwater): NBMA indicated the STP drainage areas have sheet flow drainage to the receiving streams. **The Department showed the NBMA Site Plan (Drawing G-1) figure that showed an existing stormwater control discharging toward the UNT (i.e. Outfall No. 003 drainage area) and an apparent potential sampleable point of concentrated stormwater flow (i.e. in the Outfall No. 002 drainage area) for discharge to Shoeneck Creek.** NBMA Engineer thanked the Department for the clarification.
  - NBMA indicated the Outfall No. 003 control seldom has water in it and might never discharge. “GG” reporting can be used if there is no discharge. (Do not use “EE” because that is failure to sample.)
  - NBMA did not think the potential Outfall No. 002 sampleable location would likely discharge. They can look further at that area and get back to the Department.

Internal Review and Recommendations

- **DEP noted that sheet flow sampling can be done.**
- Influent BOD5 and CBOD5 sampling (Part A.I.C): NBMA requested the monitoring frequencies be switched (to 2/month BOD5 influent and 1/month CBOD5 influent), and noted the DRBC Docket was updated to remove the 85% minimum monthly average reduction CBOD5 requirement (going to M&R).
  - **DEP will do so per NBMA request, but NBMA still has to meet the 85% POTW reduction requirement for whichever parameter (CBOD5 or BOD5) that it chooses to meet.** NBMA noted that it would want to meet the 85% CBOD5 monthly minimum reduction requirement.
  - **Additional sampling addresses potential issues with the influent (causing failure to meet the 85% reduction requirement due to one influent sample result).** DEP noted that NBMA can also always do more than the permit-specified minimum frequency, but not less.
- UV Light Intensity (Instantaneous Minimum in µw/cm² units) M&R expectations & requirements (Part A.I.C):
  - NBMA asked the question of what are M&R expectations & requirements. **DEP noted that the standard basic requirement is daily monitoring of UV intensity or transmissivity or dosage (with reporting the measured instantaneous minimum value for the month). This is an indicator of UV system-required maintenance and potential causes for any future fecal coliform exceedance.** NBMA noted that it replaced UV disinfection bulbs on a regular basis, not waiting for any burnouts.
  - NBMA clarified that it wanted to talk to other Major STPs about how they met the requirement. Their UV intensity sensor is close to the bulbs, so intensity value would normally be high. **DEP promised them some example facilities' contact information. Greater Hazleton JSA was noted to be possibly such a facility.**
- Sinkhole monitoring/reporting requirements (Part C.I.E: In event that the permittee becomes aware of sinkhole remediation upstream of Outfall No. 001, the permittee shall notify the Department in writing): NBMA notes that it informs another governmental entity when it discovers sinkholes. That governmental entity then remediates the sinkholes. **The DEP noted its files and DEP Biologist have identified an old large sinkhole located at a road crossing of Shoeneck Creek that, if remediated, might allow for stream flow to Outfall No. 001. The Department concern is that if Shoeneck Creek flow is re-established, then the Point of First Use (POFU) by aquatic life might move to the Outfall No. 001 location, requiring revised NPDES permit limits.**
  - DEP expected NBMA to report any upstream (from Outfall No. 001) sinkhole remediation project that it becomes aware of. NBMA might become aware of it as part of a local development project. NBMA might become aware of it by simply seeing work being done upstream of Outfall No. 001 on Shoeneck Creek. They might become aware of it because suddenly water is flowing in Shoeneck Creek during previous normal dry times.
  - A simple e-mail to the DEP Inspector would meet the notification requirement.
- Other Items/Issues Raised at Meeting:
  - DEP website issues: Issues have been experienced by NBMA technical consultants. **DEP asked them to contact the DEP HELP desk directly to resolve all such issues. There have been many broken weblinks lately due to DEP website changes.**

**1/14/2025:** The NBMA Lab (Suburban Testing Laboratory) called with questions on the applicable requirements. Rachel Luckhart, Bill Brown (NBMA Engineer) and the lab director/president joined the call. They are beginning the 4 weeks of sampling this week.

- **See Major Sewage NPDES Permit Application Instructions and Form Pollutant Identification & Analysis Section/Pollutant Group Table Section, and Attachment B TQLs) for DEP TQLs and "J" Option.**
- **EPA Sufficiently Sensitive Rule applies for insensitive non-detect results.**
- **We use the max concentration of the sample results in the Reasonable Potential Analysis when we do not have enough samples to calculate the LTAMEC/daily COV.**
- **A concentration of 10 – 25% of the WQBEL (monthly average value found in water quality model in original Fact Sheet) triggers monitoring requirements.**
- **For some constituents (pesticides for example), the Chapter 93 WQS are so low that detections below DEP TQL trigger permit limits or monitoring during the Reasonable Potential Analysis. The Department cannot "unsee data", so any additional sampling for those constituents have to meet the more sensitive achieved lab detection level to make a case for a false positive detection. Otherwise, the Department still uses the data unless the process changed or if the lab showed that it had made an error in the original lab result. The Department requires 4 ND samples at a sufficiently sensitive detection level to make an argument for false positives. If detected, the max concentration would be used in the Reasonable Potential Analysis unless they want to see if the LTAMEC/Daily COV calculation helps them (needing ten sample results that are sufficiently sensitive).**

Internal Review and Recommendations

- LTAMEC Table requirements – date of sample, constituent, relevant QL (DEP TQL or otherwise sufficiently sensitive if detected below TQL), unit and results for at least 10 samples some they have sampling data, some they have sufficiently sensitive old data, some they have no data at all). Lab sheets also needed.
- **From Original Fact Sheet information:**
  - **Insensitive ND Concentrations:** Five (5) constituents' ND concentration data did not meet DEP TQL (Total Aluminum, Total Cadmium, Total Silver, Hexachlorobutadiene, and 1,2,4-Trichlorobenzene).
  - **Conversion to UV disinfection:** Chloroform, Chlorodibromomethane, Dichlorobromomethane, and possibly Free Cyanide (per applicant statements of O&M changes) might result in lower concentrations, but no data submitted yet.
  - **Detected below DEP TQL constituents:** Total Antimony (3 detects), Beta-BHC (1 detect), Alpha-Endosulfan (2 detects), Heptachlor (2 detects).
  - **Copper and Zinc:** They probably have ten sample data points if they want to see if the LTAMEC/Daily COV reduces the requirements.
- They noted that they may ask for more time if they need to conduct additional sampling: **They can ask for more time if they have a target date for a submittal and can say what they need it for. Told them to look at the sample results as they come in to see if they need to schedule more samples at that time to allow LTAMEC/daily COV calculation.**

**1/22/2025:** NBMA (Jen Fields) phone call to Program Manager indicating problems in obtaining Quarry mining NPDES Permit information (quarry discharges). Program Manager indicates she would call Mining. **NOTE:** Available EDMR data can be obtained via EDMR. EDMR data for one of the quarries was monthly average and daily max flows, but not minimum discharges applicable to defining Q7-10 low flows.

**2/5/2025:** DEP (Berger) E-mail to EPA asking for any public comments on the Draft NPDES Permit. (Some communications glitch appears to have happened as no comments had been received to date.). Draft NPDES Permit documents attached.

**2/5/2025:** EPA (Fulton) E-mail indicating no EPA public comments are missing. They are working through the Presidential transition process which has delayed any forthcoming public comments.

**2/5/2025:** EPA (Hales) E-mail indicating EPA received Draft NPDES permit documents via resource account but no e-mail notification. Asked if DEP was going to finalize the permit.

**2/5/2025:** DEP (Berger) E-mail to EPA noting public comment period extended to 3/12/2025 if EPA wanted to provide comments on the Draft NPDES Permit documents. EPA comment about not receiving e-mail notification was referred to Central Office.

**2/5/2025:** DEP (Berger) E-mail answering NBMA meeting question about contact information for other POTWs that monitor/report UV intensity:

- **Mountaintop Area Joint Sanitary Authority (MAJSA)** measures/reports UV light intensity per their existing NPDES Permit No. PA0045985.
  - **Client Contact:** Mr. Jeffery Mylet, Executive Director, 290 Morio Drive, Mountain Top PA 18701, 570-678-7411, [jeff@majsa.org](mailto:jeff@majsa.org).
  - **Alternate Site Contact:** Jayce Temperine, Pretreatment Coordinator, 570-678-7411 Ext. 30, [jtemperine@majsa.org](mailto:jtemperine@majsa.org)
- **Benton Nicholson Joint Sanitary Authority (BNJSA)** measures/reports UV light intensity per their existing NPDES Permit No. PA0064106.
  - **Client Contact:** Bonnie Rosiak, Chairperson, 123 Cobb Hill Road, Nicholson PA 18446, 570-945-5557, [Rosiakb@aol.com](mailto:Rosiakb@aol.com)
  - **Site Contact:** Tara Roche (Environmental Service Corp.) at 570-341-6738, [Tara@esc-pa.com](mailto:Tara@esc-pa.com)

**3/6/2025:** EPA (Fulton) E-mail with public comments received.

**3/7/2025:** DEP (Berger) E-mail to EPA with EPA-requested Nazareth Borough NPDES Permit Application WET Analysis Spreadsheets.

**3/11/2025:** NBMA (Brown) E-mail public comments were received via E-mail.

**3/12/2025:** DEP E-mail forwarding 3/11/2025 NBMA public comment e-mail to EPA due to new information contained therein.