

#### NORTHEAST REGIONAL OFFICE CLEAN WATER PROGRAM

| Application Type | Renewal |  |  |
|------------------|---------|--|--|
| Facility Type    | Sewage  |  |  |
| Major / Minor    | Major   |  |  |

# NPDES PERMIT FACT SHEET ADDENDUM

| Application No.  | PA0026107 |
|------------------|-----------|
| APS ID           | 718796    |
| Authorization ID | 941884    |

#### Applicant and Facility Information

| Applicant Name         | Wyoming Valley Sanitary Authority     | Facility Name           | Wyoming Valley Sanitary Authority<br>Wilkes Barre    |
|------------------------|---------------------------------------|-------------------------|--|
| Applicant Address      | PO Box 33a                            | Facility Address        | 1000 Wilkes-Barre Street H                           |
|                        | Wilkes Barre, PA 18703-1333           |                         | Hanover Township, PA 18706                           |
| Applicant Contact      | James Tomaine                         | Facility Contact        | Bernard Biga   |
| Applicant Phone        | (570) 825-0366                        | Facility Phone          | (570) 823-4716                                       |
| Client ID              | 78918                                 | Site ID                 | 245668   |
| SIC Code               | 4952                                  | Municipality            | Hanover Township                                     |
| SIC Description        | Trans. & Utilities - Sewerage Systems | County                  | Luzerne  |
| Date Published in PA E | Sulletin June 4, 2022                 | EPA Waived?             | No   |
| Comment Period End I   | Date July 4, 2022                     | If No, Reason           | Major POTW, Significant Chesapeake<br>Bay, CSOs, IPP |
| Purpose of Application | Application for a renewal of an NP    | DES permit for discharg | e of treated Sewage                                  |

#### Internal Review and Recommendations

A new Redraft NPDES Permit is being issued because of permit changes due to public comments. This Fact Sheet Addendum addresses public comments regarding the **4/15/2022 Redraft NPDES Permit** for this 32 MGD POTW. See the previous Fact Sheet Addendum for responses to public comments on the original Draft NPDES permit.

#### Changes to Previous Redraft NPDES Permit:

- <u>Parts A.I.A, A.I.B, Part A.I.C and Part C.VIII</u>: Deletion of unneeded toxic pollutant WQBELs (permit limits) and Monitoring requirements per an Updated Reasonable Potential Analysis incorporating additional WVSA-provided information. New Free Cyanide limit per updated Reasonable Potential Analysis. See below for details.
- Part A.I.B: The proposed TRC limit has been corrected to IMAX limit from incorrect "daily max limit" as IMAX limits (only) pertain to grab sampling.
- Part A.I.C and Part C.IV.D LTCP Schedule of Implementation: The 85% minimum monthly average reduction limits (CBOD5 and TSS) have been changed to "Report" to allow WVSA to make a technical case that Chapter 92a.47(g, h) relief applies within the next LTCP Update (due 18 months after PED).
- Part C.IV.B.6 (Solids and Floatable Control NMC): Per WVSA request, reference to Discharge Chamber (DC) Nos. 52 and 53 netting has been deleted. WVSA will have to update the next LTCP Update to explicitly address any proposed controls for all CSO Discharge Chambers/Outfalls and proposed implementation schedule. See below for details.
- Part C.IV.C.2 (CSO LTCP): The Department has incorporated several EPA-recommended language clarifications into the permit condition. See below for details.

| Approve | Return | Deny | Signatures   | Date              |
|---------|--------|------|--|-------------------|
| x       |        |      | James D. Berger (signed)<br>James D. Berger, P.E. / Environmental Engineer                       | December 13, 2022 |
| x       |        |      | Amy M. Bellanca (signed)<br>Amy M. Bellanca, P.E. / Environmental Engineer Manager               | 12-15-22          |
| NA      |        |      | NA – not required for Redraft NPDES Permit<br>Bharat Patel, P.E. / Environmental Program Manager |                   |

- Part C.IV.C.3 (LTCP Schedule of Implementation): The Department has modified the schedule to accommodate several WVSA-proposed alternate interim milestones:
  - <u>New: Six Months of PED</u>: WVSA calibration of its CSO model (via a calibrating method of estimating, using the daily monitoring data and flow data collected to date; including time to reprogram all radar units located in each WVSA diversion chambers) to provide the frequency, duration and quantity (volume) of flow information required by the DEP Annual CSO Status Report Forms and monthly CSO reporting forms. Please note that a subsequent LTCP interim milestone requires a PA Professional Engineer Report on the estimation methodology's accuracy.
  - <u>Revised PCCM Plan Submittals</u>: Per WVSA request for additional time to develop a Post Construction Compliance Monitoring (PCCM) Plan, the Department has moved the next PCCM Plan update from the 12 month time-frame (In-Stream Water Quality Monitoring Plan Update milestone) to the 18-month time-frame (LTCP Update Submittal milestone). See below for details.
- Part C.V (Requirements for Total Residual Chlorine (TRC)): This condition has replaced the previous TRC Schedule of Compliance in order to explicitly address WVSA's requested options in terms of either a site-specific mixing study and/or an effluent Chlorine Demand study.
- Part C.VI.H (POTW Pretreatment Program Implementation): The US EPA Regional III Office contact address has been updated per EPA comment.
- <u>Part C.X (WQBELs below Quantitation Limits)</u>: The condition has been updated in accordance with the updated Reasonable Potential Analysis (deleting references to pollutants no longer requiring permit limits).
- **Typographical Corrections**: Several minor typographical errors were also corrected.

## Internal Comments:

- Part A.I.B TRC Limit (page 4): The draft permit mistakenly required a daily max limit, not IMAX limit (for the grab sampling) typo error when inputting limit. The Redraft NPDES Permit Limit has been corrected.
- <u>2021 Chapter 94 Report for WVSA Information (On-Base No. 52442)</u>: The following information/comments are provided for permitting context and general informational purposes:
  - Loadings: No existing or projected hydraulic or organic overloading reported by Chapter 94 Spreadsheet, but the WVSA-completed Report Spreadsheet assumed <u>incorrect</u> design capacities and omitted NPDES Permit-required site-specific information.
    - Permitted Design Capacities: The correct design capacities for Chapter 94 purposes are: 32 MGD (average dry weather) hydraulic design capacity (per existing Part C.II special condition, with extra existing wet weather hydraulic capacity) and 49,106 lbs BOD5/day organic design capacity per the Redraft NPDES Permit. 2020 Census data was summarized for the WVSA municipalities. They noted a decrease in EDUs of 1995 was largely due to updated information (reexamining WVSA accounts, examining tax records, some from stormwater property inspections, etc.).
    - Faulty Reporting: WVSA needs to report additional per the existing Part C Condition and reevaluate prior years because both 2018 and 2019 (high precipitation years) included >3-month periods of >32 MGD monthly average flows. See Redraft NPDES Permit Part C.II for a slightly updated permit condition meant to clarify reporting requirements. In addition, the Chapter 94 Narrative stated contradictory information to the spreadsheet: "Historic organic loading data along with future projections are presented in DEP Chapter 94 Spread Sheet Organic capacities of 52,967 lbs/day dry weather loading and 68,301 lbs/day wet weather loadings depicted on Figure 2". The numbers do not match the spreadsheet, and for purposes of Chapter 95-defined organic overload, there is no difference between dry or wet weather loadings. Any monthly average loading above the NPDES Permit-identified organic design capacity would be "organic overloading".
    - Chapter 94 Report data: 2021 data:
      - Persons/EDU: 3.5
      - <u>Existing EDUs</u>: 99,952
      - Load/EDU: 0.363
      - Load/Capita: 0.104 (DWFM default is 0.17)
      - Flow/EDU: 282.1 GPD
      - <u>Flow/Capita</u>: 80.6 GPD. (DWFM default is 100 GPDC, with an inbuilt allowance of 20 GPDC due to I&I).
      - <u>New EDU/year projected</u>: 694 (based on net average 5-year increase of 694 EDUs/year since 2017).

- <u>Max 3-month Average Flow</u>: 33.1 MGD (one month exceeded the 32 MGD dry weather basis flow at 39 MGD) in 2021. They project continued >32 MGD Max 3-Month Average periods, so they need to clarify what were the average dry weather flows for Chapter 94 requirements per Part C.II requirements.
- Hauled-in Wastewater: 12.17 million gallons in 2021.
- <u>Sewer System Extensions</u>: It is not clear that the 2021 WVSA Proposed Project Capacity Requests table is complete. WVSA contacted the host municipalities but some Trib reports were not available to WVSA. Some Tributary Municipality Chapter 94 Reports were not available to WVSA by the Annual Reporting deadline. The table should be updated when the information becomes available.
- <u>IPP Report</u>: No table of Part B.I.C.4-required additional information (for IUs with pretreatment requirements) was located. A new IU (Ball Metal Beverage Container) started production in 2021 (indicated to be in the "Coil Coating" Industrial Category (40 CFR 465)). It is unclear what Subpart applies, but some category Subparts include Pretreatment Limits triggering NPDES Part B.I.C.4 permit requirements for reporting (above and beyond the Part C Annual Report requirements).
- <u>Annual CSO Status Report Information</u>: WVSA did not use the DEP Annual CSO Status Report form. An undated copy of the WVSA "Comprehensive CSO Study (Proposed) Outline of Scope of Work" was attached (but it was unclear if it was being implemented at this time as it referenced work not discussed in the 2021 Annual CSO Status Report such as the proposed Market Street "separation and site treatment" project other than mentioning funding had been located for such projects). No PCCM or stream monitoring data found. They did not provide all existing NPDES Permit Part C Annual CSO Status Report-required information and summarization. They did not address any LTCP Goal calculations (presumptive or narrative) in the Report to clarify status of compliance with any LTCP Goal. Provided CSO-related information found included:
  - Solids and floatable control systems are deployed at diversion chamber (DC) Nos. 14, 29, 32, 33, 34, 38, 41, 42, 45, 48, 51, 54, and 55. Collected solids (15,759 lbs) were removed. DC Nos. 17, 23, 27 were also cleaned. <u>NOTE</u>: DC numbers vary from CSO Outfall Numbering (usually the Outfall is the consecutive number).
  - Collection lines flushed and cleaned: 1,905,900 LF (broken down by municipality and # of lines)
  - Collection lines televised: 74,700 LF (broken down by municipality and # of lines)
  - The industrial pretreatment group has developed a restaurant inspection program (grease traps from 2,225 facilities inspected and failed operators brought back into compliance)
  - <u>Eastside Interceptor</u>: WVSA is proceeding with repairs. CIP lining was completed for a 3,600 LF section in Wilkes-Barre by March 2022, with preliminary design work for a 3-mile segment (San Souci Highway area) starting in 2022 (with the roadway scheduled for total reconstruction in 2025).
  - WVSA Stormwater Management Team manually cleaned catch basins in Kingston, Edwardsville, Forty Fort, Exeter, Wyoming, and West Pittston.
  - WVSA indicates the Storm Water Management Model (SWMM) has been completed, allowing for modeling storm scenarios, with WVSA working to find accurate measures to calibrate this model.
  - In 2021, WVSA's technical consultant (ADS) collected flow data from Diversion Chambers Nos. 24, 30, 44, 49, and 54 per report. They had collected data from DC Nos. 3, 20, 31, 32, and 36 in 2020.
    - They submitted <u>DC-20</u> data and analysis as a representative sample (with rest of data in an unsubmitted 300-page report). Average annual quantity was estimated at 0.261 MGD, ranging from 0.010 1.003 MGD flow. However, they did not provide monthly tabulated data after August (6.346 MG Total that month). Narrative indicated they had switched monitoring locations in 2021.
    - They plan to redeploy the flow meters in 2022 to DC Nos. 33, 38, 50 and 53, with one unit remaining at DC No. 24 (due to insufficient data collection at that location).
  - After a 2020 pilot study (DC Nos. 33 and 34 plus Pump Station 21), WVSA is now expanding use of Vega flowmeters and telemetering in diversion chambers to calculate overflows to receiving stream (DC1 River Side and DC Side, DC Nos. 2, 3, 6, 8, 11, 12, 19, 21, 22, 23, 24, DC-27 DC Side and Valve Side, 29, 31, 33, 34, 36, 44, DC48 River Side and DC Side, 49, 50, 53, 54. And 55. The system was indicated to be more reliable than the former pressure transducer method.
  - WVSA has started I&I inspections with flow meters to characterize flows in sewer sheds and subsewer sheds.
- Flow Meter Calibrations: They calibrated the "Bypass Flow Meter" and the "Influent Flow Meter" (for up to 100 MGD when the facility receives up to 115 MGD peak wet weather influent flows) but not the effluent flow meter.

**EPA Comments**: The EPA provided public comments via the June 2, 2022 E-mail.

- <u>EPA Region III Mailing Address (Part C.VI.H)</u>: EPA noted that's EPA Regional III Office had moved, and that the NPDES Permit Part C.VI.H (Industrial Pretreatment Program) address required updating. **Change made.**
- <u>On-Base Application Submittals</u>: EPA commented that it was unable to access the DEP On-Base System to access the CSO LTCP Update and Application drawings (both On-Base submittals exceeding MS Outlook PDF attachment size limits). The Department Central Office subsequently forwarded the Application Update LTCP Update and Drawings via a DEP/EPA File Transfer Site. EPA subsequently acknowledged receipt.

# <u>CSO-related</u>:

- <u>General NPDES Permitting Comments Not Specific to This NPDES Permit</u>: EPA noted first that the scope of the review was based on its understanding between the EPA Region III and DEP regarding how to proceed with reissuance of permits with CSOs and Long Term Control Plan (LTCPs) consistent with the Clean Water Act Section 402(1) and the 1994 EPA CSO Policy including NPDES Permit Template revisions.
  - <u>Future NPDES Permit Template Updates</u>: The EPA noted that additional NPDES Permit template updating will be required to address 40 CFR 122.47 (including final compliance date for LTCP Implementation) after the Department updates Chapter 92a.51 language for CSOs. EPA Phase 2 ereporting rule will require electronic reporting of Sewer Overflow/Bypass events in the future. The Department will incorporate any updated template language in the next NPDES Permit renewal/amendment after the new Template language becomes effective.
  - E Coli Monitoring Requirements: The EPA noted that PADEP will begin incorporating E Coli monitoring due to the new Chapter 93 Water Quality Standard into NPDES Permits and Post-Construction Compliance Monitoring (PCCM) Plans. EPA noted that a PCCM Plan with an established schedule will be required in the permit once a facility begins to implement its approved plan. Acknowledged.
- <u>CSO-related Bypassing (Part C.III)</u>: EPA stated additional clarification is needed on different aspects of CSO bypassing at this facility (showing CSO minimum treatment requirements are met):
  - Minimum Treatment Requirements for CSO bypassing: EPA requested clarification on the CSO bypassing and requested the Fact Sheet to clearly indicate whether the bypassed flow receives the minimum treatment required (primary clarification; solids and floatables removal; and disinfection). As shown on the revised WVSA "Schematic of Wastewater Flow NPDES Number PA-0026107" (part of WVSA public comments), the peak wet weather influent flows go through the POTW's mechanical screening (floatables and solids control), then primary settling (primary clarification in the bypass system), and then routed around the secondary treatment trains to merge with the secondary treatment trains' discharge flow prior to chlorine disinfection (disinfection) and discharges via Outfall No. 001. See the previous Fact Sheet Treatment Facility Section & CSO-related comments for what was previously permitted under the DEP NPDES Permit and applicable Water Quality Management Permits.
    - The previous Redraft NPDES Permit clarified the representative discharge sampling & reporting requirement for wet weather flows (BOD5/TSS sampling location) to address peak wet weather flows. The facility is otherwise required to representatively sample by NPDES Permit Part A.I Additional Requirements Item 4 (bypass sampling) and Part A.III.A (during changes in loadings (peak wet weather events)).
    - If future effluent data or DEP CSO Inspections or LTCP Update indicate any noncompliance with existing minimum treatment requirements, then WVSA will be required to take any necessary actions to come into compliance.
  - The CSO Bypass should not be listed as a CSO Outfall; a CSO-related Bypass is not a CSO Outfall: The Department concurs. The Department retained the existing CSO Outfall No. 053 in the NPDES Permit Renewal to address any onsite Treatment Plant overflows <u>from</u> the CSO Bypass System in the absence of an adequate LTCP Update. The Department will be evaluating whether the CSO Outfall No. 053 should be retained in the next NPDES Permit renewal (with LTCP Update). Bypassing will be reported by separate DEP Bypassing Report form and the Annual CSO Status Report.
  - If the CSO Outfall No. 053 (Combined Sewage Primary Treatment Plant Overflow) has its own discharge location, then EPA and DEP will have to discuss appropriate monitoring/limitations for this permit, as this discharge form the Treatment Plant would need to meet water quality standards: The

# Internal Review and Recommendations LTCP Schedule of Compliance includes provisions for an adequate LTCP Update and reporting to determine whether any particular CSO Outfall will require permit limits. The Department will take action as appropriate. EPA only reviewed the 2021 CSO LTCP Update, which did not discuss the CSO-related bypass, and its unclear if previous LTCP addressed this. If an earlier LTCP did not evaluate the bypass as part of the LTCP, the Final LTCP submission (required by the permit within 54 months of PED) will need to ensure the LTCP provides sufficient support for the permit record and approval of a CSOrelated bypass in the permit (to ensure compliance with 40 CFR 122.41(m)). Acknowledged. The Maximize Treatment/CSO bypass condition is in the existing NPDES Permit, and therefore was previously brought to the EPA's attention. The future LTCP Update and Final LTCP will have to consolidate any still relevant historical information (from previous LTCPs, previous Water Quality Management Permit applications, etc.) and address all CSO-related requirements. Part C.VI.C.2 Clarifications: 0 EPA recommended that wording ("wet weather") be deleted for consistency. Change made. EPA noted that the Final LTCP will have to define design conditions so that they can be incorporated into subsequent permits. Acknowledged. EPA recommended the Draft NPDES Permit language be changed to the following (and with numbering). See EPA language below. Change has been made with additional cross-referencing. Changes made. 1. CSO Water Quality-Based Effluent Limit The permittee shall comply with a minimum of one of the following under wet weather design conditions: a. A planned control program that has been demonstrated to be adequate to meet the water quality-based requirements of the CWA ("demonstration approach"), or b. A minimum level of treatment that is presumed to meet the water quality-based requirements of the CWA, unless data indicate otherwise ("presumption approach"): i. Eliminate or capture for treatment, or storage and subsequent treatment, at least 85% of the system-wide combined sewage volume collected in the combined sewer system during precipitation events under design conditions; or ii. Discharge no more than an average of [4, 5, or 6] overflow events per year; or iii. Eliminate or remove no less than the mass of the pollutants identified as causing water guality impairment, for the volumes that would be eliminated or captured for treatment under the 85% capture by volume approach. E. coli monitoring must be included in Post-construction compliance monitoring (PCCM) plans to verify compliance with water quality standard and designated uses. Combined Sewer Flows remaining after implementation of the nine minimum controls and within the criteria specified in paragraph (b)(i) or (ii), above, should receive a minimum of Presumption Goal Minimum treatment level requirements include: primary clarification,

Presumption Goal Minimum treatment level requirements include: primary clarification, removal and disposal of solids and floatables, and disinfection to meet the applicable Water Quality Standards (including removal of harmful disinfection chemical residuals where necessary).

 EPA recommended that WVSA ensure that an appropriate LTCP implementation end date be defined in the revised LTCP, with the 2021 LTCP Update lacking a detailed schedule for work to be completed in the latter tiers of the plan. Acknowledged. A more detailed LTCP Schedule of Compliance plan will be required in the future LTCP Updates.

July 1, 2022 WVSA Public Comments (On-Base Submittal No. 61963): The WVSA provided assorted public comments and requested a Redraft NPDES Permit for public comment, prior to Final NPDES Permit action. WVSA requested that the Draft NPDES permit be updated and republished for public comment. This Redraft NPDES Permit and Fact Sheet Addendum addresses the received WVSA public comments.

Request for deletion of all proposed Part A.I.C and Part C.VIII Toxic Pollutants Proposed Permit limits from permit: WVSA requested deletion of all Toxic Pollutant Water Quality-Based Effluent Limits (WQBELs) a.k.a. proposed permit limits from the NPDES Permit on the basis of updated laboratory sheets, new Free Cyanide analytical data, and assorted public comments discussed in detail below.

<u>Updated Toxic Management Spreadsheet (TMS) Output</u>: The updated Reasonable Potential Analyses (below) incorporated the new information. A number of constituents dropped out (ND at MDLs below DEP Target QL) including: Cadmium, Silver, Acrolein, Vinyl Chloride, 1,3-Dichloropropylene, 1,1,2,2-Tetrachloroethane, Hexachlorobutadiene, and 1,2,4-Trichlorobenzene. A new Free Cyanide limit is required

WVSATMS2PDF.pdf

Recommended WQBELs & Monitoring Requirements

No. Samples/Month: 4

|                     | Mass             | Limits           |         | Concentra | tion Limits |       | ]                  |                |                                    |
|---------------------|------------------|------------------|---------|-----------|-------------|-------|--------------------|----------------|------------------------------------|
| Pollutants          | AML<br>(lbs/day) | MDL<br>(Ibs/day) | AML     | MDL       | IMAX        | Units | Governing<br>WQBEL | WQBEL<br>Basis | Comments                           |
| Hexavalent Chromium | 4.35             | 6.34             | 16.3    | 23.8      | 23.8        | µg/L  | 16.3               | AFC            | Discharge Conc ≥ 50% WQBEL (RP)    |
| Total Copper        | Report           | Report           | Report  | Report    | Report      | µg/L  | 12.4               | AFC            | Discharge Conc > 10% WQBEL (no RP) |
| Free Cyanide        | 4.46             | 6.96             | 16.7    | 26.1      | 41.8        | µg/L  | 16.7               | THH            | Discharge Conc ≥ 50% WQBEL (RP)    |
| Total Zinc          | Report           | Report           | Report  | Report    | Report      | µg/L  | 107                | AFC            | Discharge Conc > 10% WQBEL (no RP) |
| 2,6-Dinitrotoluene  | 0.2              | 0.31             | 0.74    | 1.15      | 1.85        | µg/L  | 0.74               | CRL            | Discharge Conc ≥ 50% WQBEL (RP)    |
| alpha-BHC           | 0.002            | 0.002            | 0.006   | 0.009     | 0.015       | µg/L  | 0.006              | CRL            | Discharge Conc ≥ 50% WQBEL (RP)    |
| 4,4-DDT             | 0.0001           | 0.0002           | 0.0004  | 0.0007    | 0.001       | µg/L  | 0.0004             | CRL            | Discharge Conc ≥ 50% WQBEL (RP)    |
| 4,4-DDE             | 0.00008          | 0.0001           | 0.0003  | 0.0005    | 0.0007      | µg/L  | 0.0003             | CRL            | Discharge Conc ≥ 50% WQBEL (RP)    |
| 4,4-DDD             | 0.0004           | 0.0006           | 0.001   | 0.002     | 0.004       | µg/L  | 0.001              | CRL            | Discharge Conc ≥ 50% WQBEL (RP)    |
| Dieldrin            | 0.000004         | 0.000006         | 0.00001 | 0.00002   | 0.00004     | µg/L  | 0.00001            | CRL            | Discharge Conc ≥ 50% WQBEL (RP)    |
| Endrin              | 0.023            | 0.033            | 0.086   | 0.13      | 0.13        | µg/L  | 0.086              | AFC            | Discharge Conc ≥ 50% WQBEL (RP)    |
|                     |                  |                  |         |           |             |       |                    |                |                                    |

• <u>Revised Hawk Mountain Lab Sheets</u>: WVSA provided Hawk Mountain Laboratory Inc. laboratory reports with identified Method Detection Levels (MDL) and Quantitation Limits for assorted analyses for the effluent and influent analyses. No updated Pollutant Group Table and the no laboratory determination of the "J" value (when the laboratory's MDL is sensitive enough to determine the presence or absence of a constituent when the lab quantitation limit does not meet DEP Target Quantitation Limits (QLs) was provided. See Table below for summarization of submitted information and its implications. The EPA Sufficiently Sensitive Rule requires the Department to treat the constituent as present at any insensitive ND concentration level (with DEP Target QLs representing the required level of sensitivity):

| Constituent   | Original Application<br>data and DEP Target<br>QL<br>(ug/I) | Updated Lab Sheet<br>MDLs* for three<br>effluent samples<br>(ug/l unless<br>specified<br>otherwise) | Comment                     |
|---------------|---|---|-----------------------------|
| Total Cadmium | 3 NDs at 1 ug/l   | 0.000152 mg/l   | Updated information used in |
|               | QL is 0.2 ug/l  | 0.000152 mg/l   | Toxic Management            |

|                           |                               | 0.000152 mg/l     | Spreadsheet. No limit                                 |
|---------------------------|-------------------------------|-------------------|---|
|                           |                               | 01000102 mg/1     | required. WVSA also                                   |
|                           |                               |                   | commented that Cadmium                                |
|                           |                               |                   | was not detected in its IPP                           |
|                           |                               |                   | influent analyses with a                              |
|                           |                               |                   | range of 0.8 – 2.0 ug/l.                              |
| Total Copper              | Detected. 3.9 ug/l max        | 0.000390 mg/l     | Reported concentrations                               |
|                           | (3 samples)                   | 0.000390 mg/l     | require monitoring. See                               |
|                           | ()                            | 0.000390 mg/l     | applicable WQBEL above.                               |
| Hexavalent Chromium       | Detected. 33.0 ug/l max       | 0.024 ug/l        | Reported concentrations                               |
|                           | 5                             | 0.024 ug/l        | require permit limits. See                            |
|                           |                               | 0.024 ug/l        | applicable WQBEL above.                               |
| Total Silver              | 3 NDs at 5 ug/l               | 0.000132 mg/l     | Updated information used i                            |
|                           | QL is 0.4 ug/l                | 0.000132 mg/l     | Toxic Management                                      |
|                           | C C                           | 0.000132 mg/l     | Spreadsheet. No limit                                 |
|                           |                               | g, :              | required.   |
| Total Zinc                | Detected. 34.4 ug/l max       | 0.0024 mg/l       | Reported concentrations                               |
| -                         | of 3 samples; 47 ug/l         | 0.0024 mg/l       | require monitoring. See                               |
|                           | max in original               | 0.0024 mg/l       | applicable WQBEL above.                               |
|                           | application.                  |                   |   |
| Acrolein                  | 3 NDs at 5 ug/l               | 1.04              | Updated information used in                           |
|                           | DEP Target QL is 2.0          | 1.04              | Toxic Management                                      |
|                           | ug/l                          | 1.04              | Spreadsheet. No limit                                 |
|                           |                               |                   | required.   |
| Vinyl Chloride            | 3 NDs at 1 ug/l               | 0.219             | See above   |
|                           | DEP Target QL is 0.5          | 0.219             |   |
|                           | ug/l                          | 0.219             |   |
| 1,3-Dichloropropylene     | 3 NDs at 2 ug/l               | 0.338             | See above   |
|                           | DEP Target QL is 0.5          | 0.338             |   |
|                           | ug/l                          | 0.338             |   |
| 1,1,2,2-Tetrachloroethane | 2 NDs at 1.00 ug/l,           | 0.162             | See above   |
|                           | missing 3 <sup>rd</sup>       | 0.162             |   |
|                           | DEP Target QL is 0.5          | 0.162             |   |
|                           | ug/l                          |                   |   |
| Hexachlorobutadiene       | 3 NDs at 1.1 ug/l             | 0.229             | See above   |
|                           | DEP Target QL is 0.5          | 0.229             |   |
|                           | ug/l                          | 0.229             |   |
| 1,2,4-Trichlorobenzene    | 3 NDs at 1.1 ug/l             | 0.238             | See above   |
|                           | DEP Target QL is 0.5          | 0.238             |   |
|                           | ug/l                          | 0.238             |   |
|                           | Application data: 0.68        | No MDL given      | No new information                                    |
|                           | ug/l max (3 samples).         | No MDL given      | received. The applicable                              |
| 2,6-Dinitrotoluene        |                               | No MDL given      | WQBEL is 0.74 ug/l, with th                           |
|                           |                               |                   | detected concentration high                           |
|                           |                               |                   | enough to trigger permit                              |
|                           |                               |                   | limits.   |
| 4,4-DDT                   | 3 NDs at different QLs        | No MDL given      | The WVSA Letter indicated                             |
|                           | (0.051 or 0.049 ug/l).        | No MDL given      | the MDL was 0.050 ug/l, bu                            |
|                           | DEP Target QL is 0.05         | No MDL given      | the lab sheets had an                                 |
|                           | ug/l. They were above         |                   | identified MDL with 0.051                             |
|                           | the DEP QL in 2 out of        |                   | ug/I QL. No new sampling                              |
|                           | 3 tests.                      |                   | data.   |
| 4,4-DDE                   | <b>3 NDs</b> at different QLs | No MDL given      | The WVSA Letter indicated                             |
| 4,4-DDC                   | (0.051 or 0.049 ug/l).        | No MDL given      |   |
|                           | DEP Target QL is 0.05         | No MDL given      | the MDL was 0.018 ug/l identified, but the lab sheets |
|                           | I DEP TAIGET QL IS 0.05       | I INU IVIDE QIVEN | I Identined, but the Iab sheets                       |

|              | ug/I. They were above<br>the DEP QL in 2 out of<br>3 tests.  |  | had an identified MDL wit<br>0.051 ug/l QL. No new<br>sampling data.   |
|--------------|--|--|--|
| 4,4-DDD      | 3 NDs at different QLs<br>(0.051 or 0.049 ug/l).<br>DEP Target QL is 0.05<br>ug/l. They were above<br>the DEP QL in 2 out of<br>3 tests.                                 | No MDL given<br>No MDL given<br>No MDL given                               | The WVSA Letter indicate<br>the MDL was 0.032 ug/l, ,<br>but the lab sheets had an<br>identified MDL with 0.051<br>ug/l QL. No new sampling<br>data. |
| Dieldrin     | 3 NDs at different QLs<br>(0.051 or 0.049 ug/l).<br>DEP Target QL is 0.05<br>ug/l. They were above<br>the DEP QL in 2 out of<br>3 tests.                                 | No MDL given<br>No MDL given<br>No MDL given                               | The WVSA Letter indicate<br>the MDL was 0.0140 ug/l,<br>but the lab sheets had an<br>identified MDL with 0.051<br>ug/l QL. No new sampling<br>data.  |
| Endrin       | <b>3 NDs</b> at different QLs<br>(0.051 or 0.049 ug/l).<br>DEP Target QL is 0.05<br>ug/l.  | No MDL given<br>No MDL given<br>No MDL given                               | The WVSA Letter indicate<br>the MDL was 0.033 ug/l, ,<br>but the lab sheets had an<br>identified MDL with 0.051<br>ug/l QL. No new sampling<br>data. |
| Alpha-BHC    | 0.011 max (3 samples)<br>with 0.025 ug/l QL. DEP<br>Target QL is 0.05 ug/l.  | No MDL, detected at<br>0.011 ug/l, 0.010<br>ug/l, and ND at<br>0.025 ug/l. | Detected below the QL, th<br>constituent is known to be<br>present at concentrations<br>triggering permit limits. Se<br>WQBEL above.                 |
| Free Cyanide | No effluent data in<br>previous application.<br>Lab sheets were<br>received for 5/20/2022<br>(0.009 mg/l), 5/16/2022<br>(0.004 mg/l), and<br>5/13/2022 (<0.0005<br>mg/l) | No MDL given, QL<br>was 0.0005 mg/l.                                       | Permit limits required per<br>updated Reasonable<br>Potential Analysis.  |

Internal Poview and Pecommendation

\*Lab sheet indicated ND is "Not detected at or above the adjusted method detection limit". MDL was defined as the "Adjusted Method Detection Limit". PQL is defined as "Practical Quantitation Limit".

- Pesticides and Reasonable Potential: In addition to the updated Lab sheets, WVSA also stated that there was no "reasonable potential" for the permit-listed pesticides: DDT (banned in 1972), DDD (banned in 1972), DDE (banned in 1972), Dieldrin (banned in 1974), Endrin (banned in 1984), a-BHC (banned in 1978, being "minor byproduct/contaminant of Lindane which was banned in 2006), hexachlorobutadiene (banned in January 2021). WVSA believes these substances are insoluble in water, and were primarily used in agriculture with only incidental domestic yard and garden use) with DDE (a biodegradation product of DDT only). WVSA believes there is "no reason to presume that insoluble agricultural chemicals that have been banned for decades and have never been detected in the system are likely present in the wastewater". WVSA noted that its Local Limits Evaluation Protocol (NPDES Permit Part C.VI.E) requires testing for these constituents. WVSA "disputes the contention that any of the listed pesticides are likely to be present in this effluent at levels that after in-stream dilution will cause an exceedance of any water quality criteria such that extensive and expensive testing over the five+ year term of the permit would be required.
  - <u>Water Priority Pollutant Chemical List</u>: These constituents are Water Priority Pollutant Chemicals by regulation. WVSA is free to petition the US EPA and DEP to remove any constituent from the existing (water) Priority Pollutant List and minimum application requirements on the basis of its arguments,

but these constituents must be addressed in the NPDES Permit Application and Reasonable Potential Analysis per existing regulations, application requirements, and DEP technical guidance. The best method, of proving the constituents are not present, is sampling/analysis data meeting the EPA Sufficiently Sensitive Rule.

- <u>Reasonable Potential Analysis Process</u>: To explain the Reasonable Potential Analysis further:
  - The Reasonable Potential Analysis determines what permit limits and/or monitoring requirements are required at a specific facility in accordance with the regulations and scientifically-supported water quality modeling and technical guidance documents. The Reasonable Potential Analysis used the information presented in the WVSA application and other readily available information. Permit application information and available site-specific information is used.
  - The EPA Sufficiently Sensitive Rule requires the Department to treat any reported insensitive Non-Detect (ND) concentration level as the constituent being present at the reported insensitive ND concentration. Per DEP's scientifically supported Technical Guidance/water quality modeling, the highest detected or reported ND concentration of the three (3) minimum effluent samples was used in the water quality modeling in the absence of additional sampling data. When detected below the DEP Target QL, the information is incorporated in the Reasonable Potential Analysis to determine if permit limits or monitoring is required.
    - The NPDES Permit Application Instruction stresses the need for meeting DEP Target Quantitation Limits (QLs), identified in the Instructions, and potential consequences if not met. The instructions also include the "J" reporting option. Where a laboratory's QL is greater than the Target QL in the instructions but the Method Detection Limit (MDL) is at or below the Target QL, DEP will accept estimated values ("J" values) at the Target QL (e.g., "< 0.5 µg/L J"). WVSA did not report "J" values in its application.</li>
    - Historical data, not meeting the present DEP Target Quantitation Limits, would be subject to the EPA Sufficiently Sensitive Rule if included in the application. As WVSA provided no historic effluent data for these constituents, the Department cannot evaluate whether any historical data would be of any benefit to WVSA.
  - See the Draft Fact Sheet Addendum and the applicable DEP Technical Guidance documents, found on DEP E-library, for further information on the Reasonable Potential Analysis and its methodology.
- <u>The Alpha BHC pesticide</u>: This pesticide was detected below the reported insensitive ND level concentration, requiring the Department to treat the insensitive ND concentration as the constituent being present at that concentration. Therefore, the Department does not concur with the WVSA statement that "It is obvious that conducting additional testing at the same achievable detection level will not produce any new information to contradict the reasonable conclusion that this substance is not present at all". It is known to be present. The insensitive ND level (above the detected sample concentrations) resulted in the required permit limits. In the absence of additional data, the EPA sufficiently sensitive rule does not allow for use of any lower concentration value in the Reasonable Potential Analysis. The Department acknowledges that additional sampling & analysis might not result in any relief from the new permit limit due to the low WQBEL (see TMS output above).
- <u>Sampling and Analysis costs</u>: Sampling & analysis costs are unavoidable when there is Reasonable Potential for those constituents to cause an exceedance of the Water Quality Standards in the receiving stream. The Department has updated the Reasonable Potential Analysis based on the newly provided application data summarized above. WVSA will have the opportunity to provide additional Part C.VIII site-specific information to allow re-evaluation of whether relief from permit limits/monitoring requirements is possible.

<u>Volatile Organic Compound Monitoring</u>: WVSA stated that VOCs are properly sampled as grab samples; but the draft permit requires 24-hour composite sampling. Per the NPDES Permit Part A.II (Definitions): "Composite Sample (for GC/MS volatile organic analysis) consists of at least four aliquots or grab samples collected during the sampling event (not necessarily flow proportioned). The samples must be combined in the laboratory immediately before analysis and then one analysis is performed. (EPA Form 2C)"

<u>Silver Reasonable Potential Analysis</u>: WVSA commented that it did not find the WQBEL in the Redraft NPDES Permit Fact Sheet. The Redraft NPDES Permit Fact Sheet's TMS Output identified the Governing WQBEL as 3.02 ug/l.

**Free Cyanide Reasonable Potential Analysis**: WVSA indicated that it conducted one influent and three (3) effluent free cyanide tests in May 2022. WVSA stated the Fact Sheet "acknowledges that free cyanide was not detected". WVSA also referred to Free Cyanide as "reactive cyanide". WVSA stated the Redraft NPDES Permit Fact Sheet did not disclose the calculated effluent limit for Free Cyanide, and complained that they did not know the applicable detection limit to determine what would constitute Reasonable Potential. WVSA noted that any received influent Free Cyanide would be subject to substantial dilution, with the average daily industrial waste flow from the seven metal finishers being about 260,000 GPD, which is ~1% of the WWTP ADF. WVSA notes that any "reactive cyanide" would be unstable and subject to degradation during transport to the WWTP and treatment therein. WVSA noted that effluent Total Cyanide values were 7.7, 12, and 4.8 ug/l, with any free cyanide being likely at lower concentrations. The WVSA-provided effluent data resulted in permit limits per the updated Reasonable Potential Analysis (above). In addition:

- The burden is on the applicant to provide the application-required information in the submitted permit application. Free Cyanide is a Major Sewage Application Pollutant Group 2 constituent. Monitoring had been required under Chapter 92a.61 when it was determined that no sampling & analytical data had been provided despite application requirements and the presence of Industrial User discharges expected to contain free cyanide. The best evidence remains actual effluent sampling data that WVSA has now provided.
- Free Cyanide DEP Target QL is 1.0 ug/l per Major Sewage NPDES Permit Application Instructions. See the TMS Output for the applicable WQBELs.

<u>Minimum Monitoring Frequencies and Part C.VIII (WQBELs for Toxic Pollutants) Requirements</u>: WVSA provided comments related to the above Toxic Pollutants that require separate responses for the public record:

- WVSA believes the toxic pollutant requirements are Department errors. No error, other than possibly WVSA's error in submittal of inaccurate/incomplete NPDES Permit Application information, was identified in the WVSA comments. It is not an error to use provided NPDES Permit Application information in permitting.
- WVSA thought the Draft NPDES Permit language requiring monthly testing for three (3) years with escalation to
  weekly monitoring was arbitrary. Going from Monthly to Weekly Monitoring in Three (3) Years is not arbitrary.
  The standard minimum monitoring frequency for toxic pollutants (the subject of the Reasonable Potential
  Analysis) is weekly, with the Department having discretion to require a less frequent monitoring frequency
  on a case-by-case basis during the interim monitoring time-frame (prior to Permit Limit Effective Date).
  - The new permit limits will become effective at the end of the third year of the NPDES Permit Term (NPDES Permit Part A.I.B and Part C.VIII (Water Quality-Based Effluent Limitations for Toxic Pollutants) three-year schedule of compliance). Three (3) years has been given to allow WVSA to make any technical case that the remaining proposed Toxic Pollutant permit limits can either be modified or eliminated prior to that date, via Part C.VIII WQBEL Final Compliance Report and Major NPDES Permit Amendment option. After the new Limits effective date, the Antibacksliding prohibition might prevent relief.
  - Three years of monthly monitoring data (meeting the DEP Target QLs) would allow for calculation of the Long Term Average Monthly Effluent Concentration (LTAMEC) and the daily Coefficient of Variability (COV) using EPA-approved statistical methodologies. WVSA is free to submit a Major NPDES Permit Amendment Application earlier if it believed it could make a technical case that the constituents are not present or not present at concentrations requiring permit limits or monitoring.
- WVSA objected that the Draft NPDES permit does not allow for elimination of the new permit limits or monitoring
  requirements "if new data agree historical data showing these substances are not present": The Part C.VIII sets
  forth the process for modifying the NPDES Permit to eliminate unnecessary permit limits and/or monitoring
  requirements. WVSA failed to provide any historical data for Department consideration, and any resubmitted
  historical data would be subject to the EPA Sufficiently Sensitive Rule. The updated Reasonable Potential
  Analysis took into account the limited new data that WVSA provided.
- WVSA objected to the Draft NPDES Permit Part A.I.A and A.I.B footnote (\*\*If two years of sampling and analysis (meeting DEP Target Quantitation Limits) shows the constituent is not present, the Department retains authority to allow cessation of further monitoring in writing) gives the Department "absolute discretion with no assurance of timely and non-arbitrary decision" and is "insufficient to allow for a major NPDES permit modification to remove discharge limits". The Department is willing to delete this footnote from the Final NPDES Permit, if WVSA so desires, but has retained it for this Redraft NPDES Permit.

- The sole purpose of the language was to reduce WVSA sampling costs if 24 months of sampling data (meeting DEP Target Quantitation Limits) showed the constituents are not present. In the absence of this language, sampling must continue unless a Major NPDES Permit Amendment is issued modifying or eliminating permit limits and/or monitoring requirements. The Department had anticipated such a request from WVSA if the data allows.
- In practical terms, 24 months of data was expected with the Part C.VIII Final WQBEL Compliance Report, allowing for Department to update its Reasonable Potential Analysis in accordance with scientifically-supported DEP water quality models and technical guidance.
- The Department decision-making would be based upon an updated Reasonable Potential Analysis.
- If WVSA believes the footnote option will not allow for "timely and non-arbitrary decision", then WVSA is free to submit an application for Major NPDES Permit Amendment whenever it feels it has sufficient information to justify changes to the issued Final NPDES Permit, subject to public review and with explanation of any Department decision-making in the related Fact Sheet.
- WVSA objected to the Part C.VIII requirement of a Major NPDES Permit Amendment to remove these constituents from the NPDES Permit for constituents it does not believe present in the first place, that there is no automatic cessation of monitoring requirements, and no stated Department decisional criteria.
  - An Application for Major NPDES Permit Amendment is required for the deletion or modification of proposed permit limits from an issued NPDES Permit. See Chapter 92a.2 for definitions of a "minor amendment" and "major amendment".
  - The burden falls on the WVSA to make any technical case that these constituents are not present or not present in concentrations triggering permit limits and/or monitoring requirements "in the first place" within the NPDES Permit Application. WVSA failed to do so. In the second place, the public comment period provided WVSA opportunity to make any technical case that the toxic pollutants are not present, with some success per the updated Reasonable Potential Analysis. WVSA made such a case for several pollutants, as discussed above, but not others.
  - There is "no automatic cessation of monitoring requirements" regulatory option available when permit limits are determined necessary. The Part C.VIII (WQBELs for Toxic Pollutants) provides the options/process for WVSA to amend or eliminate any remaining new permit limits (which it has failed to do for the remaining constituents).
    - If the Part C.VIII condition was eliminated, the new limits would become effective immediately. After the new limits become effective, the regulatory Antibacksliding prohibition would prevent any relief unless WVSA could demonstrate it met on of the few Antibacksliding Exception requirements.
    - In terms of decisional criteria, the Part C.VIII condition gives options including source reduction and refinement of the Reasonable Potential Analysis. As noted, any relief would be based on an updated Reasonable Potential Analysis.
- <u>Quantitation Limits (QLs)</u>: See Part C.X public comment below for a consolidated response to WVSA comments regarding the DEP Target Quantitation Limits.

85% Minimum Monthly Average Reduction Requirement for BOD5 and TSS (Part A.I Additional Requirements Item 2 and 25 Pa. Code 92a.47(g) and (h)): The WVSA indicated it wants an alternate lower removal rate of 70% removal rates for wet weather flows. The Department could not grant the request in the absence of supporting technical data and analysis to meet the Chapter 92a.47(g, h) requirements. The Department has modified the <u>Part A.I.C</u> requirement to "monitor only", with the WVSA able to address Chapter 92a.47(g, h) requirements in the Long Term Control Plan (LTCP). In practical terms, unless WVSA does not address the regulatory requirements in the LTCP Update, the 85% requirement applies as set forth in the Part A.I Additional Requirements Item 2 and Chapter 92a.47.

<u>CBOD5 and TSS Limits</u>: WVSA indicates that it believes the addition of a significant digit (changing 25 mg/l to 25.0 mg/l CBOD monthly average limits, etc.) is an arbitrary change to the 40 CFR 133.102 and Chapter 92a.47 CBOD5 and TSS regulatory limits. WVSA believes the change is a substantial change that implicates the regulatory process, and cannot be implemented by DEP Staff. WVSA also noted that "best professional judgement" (CWA Sections 4040(a)(1)(B)) may only be applied to new technology-based effluent limits for substances not regulated by Section 304 of the Federal Act. Therefore, WVSA does not believe that there is legal authority to arbitrarily revise Secondary Treatment Standards in PA. The Department does not agree. Adding a significant digit (25 mg/l CBOD5 monthly average limit going to 25.0 mg/l for example) is a clarification for purposes of reporting and compliance, not a regulatory change. In practical terms, per

the previous Fact Sheet's EDMR data, WVSA has been reporting 4 – 5 mg/l CBOD5 monthly average and 4 – 7 mg/l CBOD5 weekly averages plus 3- 7 mg/l TSS monthly averages and 3 – 9 mg/l TSS weekly averages.

<u>WQBEL Modeling Default Assumptions</u>: WVSA stated it disagreed with DEP water quality modeling assumptions used in the Reasonable Potential Analysis:

- <u>Mixing Assumptions</u>: The Authority's Application reports that the discharge point consists of three separate discharge points (for the same Outfall No. 001). Obviously, the degree of mixing with the receiving stream increases as the number of entry points increases. Since discharge limits are dependent on the degree of dilution in the receiving stream, assuming less mixing than actually occurring produces incorrect and unnecessarily low limits. The WVSA believes this mixing factor was ignored by the permit writer. The permit allows for the WVSA develop a mixing factor (Part C.VIII.B) and then apply for a Major Permit Amendment as needed to modify/eliminate the proposed permit limits (Part C.VIII.D). WVSA believes this is unacceptable. "The Authority cannot accept a final issued permit that contains known errors and imposes an arbitrary deadline, to be revised solely at the DEP's discretion to correct them".
  - To use the available submitted NPDES Permit Renewal Application information and other available information to derive permit limits is not arbitrary or erroneous. No site-specific mixing study or mixing factor was found in the NPDES Permit Application. WVSA was free to provide any site-specific mixing study or other site-specific information per NPDES Permit Application Instructions.
  - The Department did not ignore the facility's outfall design, but explicitly mentioned it and brought the mixing factor option to WVSA's attention via the Part C.VIII option to refine the Department water quality modeling prior to the proposed permit limits' effective date. Any Part C.VIII-developed mixing factor can also be used to update Total Residual Chlorine (TRC) water quality modeling when available.
  - In practical terms:
    - The NPDES Permit Renewal Application indicates Outfall No. 001 is a "3-port discharge rather than a single point" and would generate three discharge plumes, but actual design information and location/operational status of the "ports" (including locations relative to River banks and depths) were not included.
    - WVSA and its technical consultants are free to pursue a mixing study to develop a sitespecific mixing factor during the three-year Part C.V (TRC Schedule of Compliance) and three-year Part C.VIII (WQBELs for Toxic Pollutants) three-year schedules of compliance, prior to the new permit limits' effective date. After that date, Antibacksliding prohibitions would prevent less stringent limits unless WVSA could demonstrate a regulatory Antibacksliding Exception applied.
    - The WVSA objected to collecting and providing any Part C.VIII site-specific data, including site-specific stream data (width, depth and flow velocity) to allow for a more accurate mixing factor calculation.
      - Given that WVSA wants the Department to refine its water quality modeling based on its Outfall No. 001 design, WVSA must provide site-specific information on the Outfall design (including discharge locations in the River) and receiving River conditions.
      - The burden falls on the permittee to show that it has conducted a scientifically-valid mixing study. The December 7, 1994 DEP "Field Data Collection and Evaluation Protocol Discharge Mixing Characteristics" guidance allows for dye testing as an option. While WVSA noted dye testing might allow for development of a site-specific mixing factor without stream-specific data, no dye testing or mixing study has been proposed as of yet.
    - The previous NPDES Permitting water quality modeling used a single-point discharge for Outfall No. 001 per Department files. Existing permit limits are subject to the Antibacksliding prohibition, with no relief possible unless the WVSA showed that a regulatory Antibacksliding Exception applies. No Antibacksliding Exception was shown to apply. Therefore, the WVSA objection pertains solely to proposed future permit limits that it can address prior to the proposed permit limit effective date.
- <u>Mandatory Site-Specific Data Collection (Part C.VIII.B)</u>: The WVSA objected to the Part C.VIII Data Collection requirements in general. The WVSA also objected to collecting and providing any Part C.VIII site-specific data, including site-specific stream data (width, depth and flow velocity) to allow for a more accurate mixing factor calculation. WVSA objected to in-stream sampling to collect background information on constituents (using

hexavalent chromium and Volatile Organic Compounds as examples). The Department does not agree. If the WVSA wants to demonstrate that site-specific information shows that permit limits are not needed, it must supply the relevant site-specific information. See above in terms of mixing factor requirements. In practical terms, WVSA has already committed to an in-stream WQ monitoring plan due to separate CSO-related requirements, so additional sampling & analysis costs for additional constituents should be minimal. See the previous Fact Sheet for available background information regarding Outfall No. 001.

 <u>TRC Limit</u>: The WVSA objected that the TRC Spreadsheet assumed zero chlorine demand in the effluent discharge. WVSA believes that other POTWs have established that the effluent chlorine demand can be significant, allowing for less stringent TRC Limits. The Department does not have site-specific data to show a WVSA effluent chlorine demand. The Department has updated the Part C.V (TRC) Condition with updated standard template language explicitly to allow WVSA to pursue site-specific data collection and any proposed chlorine-related site-specific study.

## • Proposed WVSA Correction for New Permit Limits:

- Additional Sampling or Measurements: WVSA stated that it will to conduct "such additional testing or measurements as may be required to provide relevant and correct data for use in Reasonable Potential Analyses, and believes it can do so within 18 months of permit issuance. Since the only relevant data for modeling purposes are those obtained during low stream flows, scheduling sampling is dependent on weather. We expect appropriate conditions are likely to occur this summer, but require a contingency allowing for the work to be conducted in mid-2023 be provided":
  - The existing Part C.VIII Schedule of Compliance grants 18 months from Final Permit Effective Date to collect data, and to provide the Final WQBEL Compliance Report (summarizing all collected data with technical rationale as to the meaning of the results) within 24 months. Therefore, no additional time appears required.
  - WVSA has proposed no sampling plan or identified what parameters it might sample for at what quantitation limit or measure. WVSA has not indicated whether it would complete any Part C.VIII site-specific data options (for a mixing study or other study). Given the WVSA's statements, any collected analytical data might be inadequate to support any request for modification or elimination of the remaining Toxic Pollutant WQBELs.
- Proposed Permit Language Changes:
  - WVSA "requests that the Permit acknowledge that the WQBELs listed including TRC limit are estimates; that sufficient data are not available to compute accurate and applicable WQBELs; and that the proposed discharges will only be imposed after 3 years on one of the following contingencies": The Department cannot grant this request. Sufficient information was available to allow for a Reasonable Potential Analysis and determination of applicable WQBELs for assorted Toxic Pollutants and also for Total Residual Chlorine (TRC). The WQBELs are the site-specific permit limits calculated based upon on the provided NPDES application information and other available site-specific information using scientifically-supported technical guidance and water quality models. The NPDES Permit gives already gives three (3) years for the WVSA to make any technical case that the WQBELs can be eliminated or modified by refining the site-specific Reasonable Potential Analysis/Water Quality Modeling with new or additional information.
    - The WVSA "notified DEP within 45 days of permit issuance that it intends to collect additional data (such data MAY include any or all of the items listed at C.VIII.B, or such data as the Authority deems relevant), provides a schedule not to exceed 24 months for the collection of data, and, after evaluation of data collected and submitted by the Authority, DEP determines in writing the applicable limit, if any, to be imposed, at which point the permit might be amended to impose such limits via the major modification process. **The Department cannot grant this request.** 
      - The Department has already determined new WQBELs (permit limits) must be imposed at the end of the three-year schedules of compliance (Parts C.V and C.VIII) via the Reasonable Potential Analysis. The permit limits will become effective unless a Major NPDES Permit Amendment is issued to either eliminate or modify the proposed permit limits prior to their effective date.
      - The WVSA has separately objected to submitting any future Major NPDES Permit Amendment to obtain relief from the proposed permit limits, objected to gathering site-specific information required to justify any relief, proposed

no standards that it agrees are adequate to support new permit limits, and might appeal any unilateral Department permit action to impose permit limits (for any permit limits not in the Final NPDES permit). Meanwhile, the stream would remain unprotected.

• "For any or all pollutants, the permittee chooses not to submit additional data and to accept the specific proposed limits in the permits for those pollutants": This option already exists in the NPDES Permit Part C.VIII.

<u>Chlorine Minimization Condition (Part C.XII.D)</u>: WVSA commented that this condition was ambiguous, with "vague subjective language" and therefore objectionable. WVSA states that the Department represents the NPDES Permit Part A TRC effluent limits are based on water quality standards, and therefore the chlorine minimization condition language appears to be contradictory to the Department's assertion. The WVSA "requests that DEP acknowledge that compliance with the effluent limits for total residual chlorine set forth in Part A of the permit (as may be corrected through additional data collection by the Permittee) constitutes compliance with the "chlorine minimization" requirement. Alternatively, then appropriate measurable standards for complying with the permit condition must be stated. **The Department can provide the following clarifications.** 

- Chlorine is toxic to aquatic life. The Part A limits are based upon Chapter 93 Water Quality Standards and available information. Please note that new or additional site-specific data can sometimes show that existing/proposed permit limits are not adequately protective of the waters of the Commonwealth due to synergistic/cumulative impacts and other undefined site-specific factors (such as less mixing than calculated by the Toxic Management Spreadsheet).
- The Chlorine Minimization condition addresses cumulative and synergistic impacts and unknown sitespecific factors might result in negative impacts on aquatic life in the receiving stream, even if the Chapter 93 WQS are met.
  - The condition requires a permittee to take reasonable steps (chlorine usage optimization) to prevent over-usage of chlorine resulting in negative impacts on the receiving stream. Per the revised Part C.V, WVSA should be optimizing chlorine usage in anticipation of future permit limits.
  - The measurable standard for noncompliance would be negative impacts on aquatic life in the receiving stream traceable to the outfall discharge (i.e. with significant TRC concentrations found in the stream).

# Whole Effluent Toxicity (WET) Testing (Part C.IX):

- WVSA objected to the Annual WET Testing requirement. WVSA noted that previously submitted WET Test data did not show any toxicity at up to 100% effluent concentrations, let alone with the estimated 76% dilution (24% effluent). WVSA stated a 40 CFR 122.44(d) reasonable potential analysis demonstrate no risk of water quality standards violation and that no effluent limit or monitoring is necessary except for the next NPDES Permit Renewal Application submittal (citing 40 CFR 122.21(j)(5)(iv)(A)). WVSA expressed concerns that the permit is likely to remain in effect for several years beyond the "nominal" 5-year permit term, without any legal or technical justification to continue annual testing other than the four annual WET tests for permit renewal. The Department could not concur. The WET Conditions are the standard conditions for a Major Sewage Treatment Plant. The Department has broad authority to require additional monitoring requirements and permit conditions per existing statutes and regulations (in addition to minimum application requirements). In practical terms, WVSA can ensure a quick NPDES Permit renewal by submitting a complete and technically adequate NPDES Permit Renewal Application date if it wants to avoid additional WET Tests outside the 5-year NPDES permit time-frame.
- WVSA believed the WET Test Condition Section IX.B had unrealistic retest requirements. WVSA believes it would be physically impossible to submit the Final Report within 45 days of test completion and initiation of retesting within 45 days of test completion if the report indicated a "failure". WVSA noted that determination of a "failure" requires review of the data by qualified individuals, with discussion and confirmation of the reported results by the laboratory and "agreement by DEP that a "failure" occurred". WVSA recommended that a retest on failure would be initiated within 30 days submission of the final test results to DEP (that report to be submitted within 45 days of test completion), unless the laboratory affirms within that time period that the reported results are in error and that no "failure" actually occurred, such affirmation to be provided to DEP within 30 days. The Department does not concur. These are standard requirements being met by other permittees.
  - The testing laboratory and/or other WVSA consultant can make the determination of a "failure" or "invalid" WET Test if WVSA feels unable to determine if a WET Test was a failure or invalid. WVSA,

not the laboratory or consultant, retains ultimate responsibility for compliance with permit requirements. The Department would not expect to see any invalid WET Tests per Part C.IX.A.5.

• The retesting requirement is mandatory, triggered upon lab/WVSA/WVSA consultant determination, <u>not</u> requiring any Department review or approval. See the permit condition for the pass/fail criteria and requirements for a valid WET Test. Other WET Test information is available at the DEP WET Test webpage.

WQBELs below Quantitation Limits (Part C.X.A): WVSA objected to having to meet DEP Target Quantitation Limits (QLs) for compliance reporting purposes (DMRs) when the WQBELs were below the Target QLs. WVSA objected that the Fact Sheet did not explain how the DEP QLs were achieved. WVSA noted that wastewater testing (analytical) results can be influenced by multiple factors and that any QLs were developed by some theoretical process not using the WVSA POTW's site-specific effluent, based upon "erroneous undocumented assumptions adopted as mandatory compliance requirements by a permit writer". The WVSA expressed concerns that it might be subjected to the threat of multiple Clean Water Act (CWA) violations if the QLs are not met. WVSA requested the Permit Condition be revised to acknowledge that the QLs used by the Department "may or may not be valid for this particular effluent, and that the laboratory may establish an appropriate achievable QL for each parameter tested". WVSA also stated that the requirements for the laboratory to achieve the DEP's "undocumented "target quantitation limits"" is unreasonable. Chemistry of wastewater is subject to the laws of chemistry, not arbitrary "target" values not developed for this particular wastewater. As the record show, some of DEP's QL values are substantially higher than the actual results obtained, while others are lower. Conditioning expensive testing that can go on for years on arbitrary criteria not related to the Authority's effluent is not reasonable. The Department could not concur with this request:

- <u>The DEP Target Quantitation Limits are not "arbitrary"</u>: The Target QLs are intended to meet the requirements of EPA's "Sufficiently Sensitive Methods" rule (79 FR 49001) and explicitly addressed in the NPDES Permit Application Instructions. See Chapter 252 (Environmental Laboratory Accreditation), Chapter 16.102 (Approved EPA and DEP analytical methods and detection limits), the EPA "Sufficiently Sensitive Rule-making (and related technical documents) and the Department Fact Sheet "Management of "Non-Detect" Results for Discharge Monitoring Reports" (3800-FS-DEP4262, Rev. 11/2011) for general information on how to report "Non-Detect" results. The Department of Laboratories assisted in the development of the DEP Target QLs specifically for wastewater.
  - "Detection Limit" is defined in 25 Pa. Code Chapter 252.1 (Environmental Laboratory Accreditation) as "The lowest concentration or amount of the target analyte that can be identified, measured and reported with confidence that the analyte concentration is not zero."
  - "Quantitation Limit" is defined in Chapter 252.1 as "The minimum concentration or activity of the component, compound, element or isotope that can be reported with a specified degree of confidence. Typically it is the concentration that produces a signal ten standard deviations above the reagent water blank signal."
  - When a laboratory's QL is greater than the Target QL in the NPDES Permit Application Instructions Attachment B, but the Method Detection Limit (MDL) is at or below the Target QL, DEP will accept estimated values ("J" values) at the Target QL (e.g., "< 0.5 μg/L J" and/or for DMR reporting purposes.
  - When the Laboratory detects a constituent below the DEP Target QL, the information is used in the Reasonable Potential Analysis (unless an insensitive ND concentration was higher, such as happened with a-BHC).
- <u>Site-specific QLs</u>:
  - The proposed reliance on WVSA's laboratory's judgement/limitations in terms of MDL/QLs would be arbitrary at best. WVSA is not limited to a single laboratory. See the DEP Bureau of Laboratories webpage for an online tool to identify accredited laboratories able to analyze for any specific constituent.
  - You are free to propose "case-specific" MDLs (Chapter 16.102(5)) during the three-year Part C.VIII schedule of compliance, but the burden falls on the permittee to make any technical case and meet both regulatory (see above) and permit requirements. The Department Bureau of Laboratories would evaluate any submitted data and advise the Regional Office of their decision. Until an NPDES Permit Amendment is issued, the existing QLs would remain in effect. In event the Bureau of Laboratories concurred with a different QL/MDL, WVSA could then submit an application for NPDES Major Amendment to incorporate the proposed alternate limit.

- <u>WQBELs below QLs</u>: WQBELs are often below the DEP Target Quantitation Limits due to low Chapter 93 Water Quality Standards.
  - In the absence of this condition, the burden would be on WVSA to detect the listed constituents at the actual WQBEL concentration, increasing WVSA costs and the likelihood for compliance action.
  - The Department has updated the condition to remove those constituents which WVSA showed the "J" Option would have applied (sufficiently sensitive MDLs).

#### Stormwater-Related Requirements (part C.XI):

- <u>Grab Sampling & IMAX Reporting Requirements</u>: WVSA objected to the requirement for IMAX values for the "intermittent, small-volume, short-duration stormwater discharges into a receiving stream with high stormwater-induced flow": The semi-annual stormwater sampling requirement is for grab samples at the individual Stormwater Outfalls during the precipitation event, if possible within the first half-hour of the stormwater discharge to catch the "first flush effect".
  - Only <u>instantaneous</u> constituent concentrations/values can be obtained by grab sampling. In the absence of any WVSA commitment for multiple grab samples during the same storm event for the same stormwater outfall, the NPDES Permit requires reporting the Instantaneous Minimum (pH only) and Instantaneous Maximum (IMAX) values.
  - Representative sampling is required. It would require additional sampling to establish any representative daily or weekly average values for stormwater. If WVSA wants to calculate and report such average stormwater discharge values, it can do so voluntarily in the EDMR comment section (with attached analytical results and technical analysis of the meaning of the results) but the Department would still need to know the IMAX (and pH Instantaneous Minimum) values.
- <u>Benchmarks (Part C.XI.F)</u>: WVSA objected to the use of stormwater Benchmarks (30 mg/l BOD5; 100 mg/l TSS; and 120 mg/l COD IMAX values) requiring corrective actions (enhanced stormwater Best Management Practices) if exceeded during two consecutive semi-annual sampling events. WVSA stated it "recognizes the goal of reducing pollution in stormwater" and proposed alternative benchmark values of 60 mg/l BOD5, 200 mg/l TSS and 150 mg/l COD. WVSA noted that the Outfall No. 001 wastewater permit limits had a weekly 45 mg/l BOD5 limit in accordance with sewage Secondary Treatment Water, with the stormwater benchmark being 2/3rds of the weekly value.
  - Stormwater means the runoff from precipitation, snow melt runoff, and surface runoff and drainage. WVSA cited the secondary treatment standards for treated sewage, which is not applicable for IW Stormwater. If applicable, the <u>permit limits</u> (not benchmarks) would be 60.0 mg/I BOD5 IMAX and 60.0 mg/I TSS IMAX. Weekly permit limits assume weekly monitoring (at minimum). If WVSA is willing to commit to meeting these IMAX permit limits and/or weekly stormwater monitoring, the Department would be willing to incorporate such requirements into the NPDES Permit.
  - Benchmarks are given as an indicator (or "metric" value) that the existing site-implemented Stormwater Best Management Practices (BMPs) require enhancement. The benchmarks are found in the IW Stormwater General NPDES Permit PAG-03. Exceedance of any benchmark <u>should</u> trigger WVSA investigation into the cause of the exceedance, and potential corrective action as needed. Some causes might be one-time events (ash-containing truck accident) while others would indicate an ongoing release of pollutants into the environment. A written corrective action plan (to demonstrate compliance or to come into compliance with the permit-listed stormwater BMPs) is only required when two consecutive semi-annual sampling events show exceedances of the benchmarks.
- <u>PPC Plan Requirements</u>: WVSA noted the Redraft NPDES Permit cover letter indicated the WVSA Preparedness, Prevention, and Contingency (PPC) Plan did not meet requirements. WVSA inquired as to details on the PPC Plan deficiencies. The Redraft NPDES Permit Cover Letter Item 8.b noted the September 2008 WVSA Spill Prevention, Control, and Countermeasure (SPCC) Plan, found in the available Department files, did not address the NPDES Permit Part C.XI (Stormwater) requirements and otherwise contained outdated information (now 14 years old). In the absence of a submitted copy of the <u>current</u> WVSA site-specific PPC/SPCC Plan (with all attachments), the Department cannot provide any more detailed guidance at this time. To repeat general guidance:
  - The Department letter cited the Part C.XI-incorporated-by-reference PPC Plan Guidelines Stormwater NPDES Addendum requirements as applicable requirements.
  - The WVSA SPCC/PPC Plan should also be updated to address all other NPDES Permit Part C.XI requirements as needed.
  - The PPC/SPCC Plan should incorporate the ("in effect") NPDES Permit for quick reference.

**Responsible Certified Operator (Part C.XII.E)**: WVSA indicated it thought this condition was ambiguous and undefined. WVSA noted Chapter 302 defines two kinds of operators (Available Operator and Operator in Responsible Charge) with the latter position filled at the sole discretion of the Owner (WVSA). WVSA assumed the condition pertained only to the "Available Operator" since it was unaware of any regulatory requirement to designate an Operator in Responsible Charge. WVSA requested the condition be corrected to use the regulatorily-defined terms. The Department has granted this request for clarification. The Department is requiring WVSA to identify the "Operator In Responsible Charge" in accordance under its broad regulatory authority to require information from a permittee. In practical terms, the Operator in Responsible Charge must be a Certified Operator per regulation and permit condition, and ensure proper Operations & Maintenance (O&M) for the POTW (as defined in Part A.II to include Treatment Plant and collection/conveyance system). WVSA has the option of splitting up duties if it wanted to assign a (separate) certified operator responsibility over collection/conveyance system O&M.

# Combines Sewer Overflow (CSO) Related (NPDES Permit Part A.I.H; Part A.I Additional Requirements Item 2: Part C.III (Maximizing Flow at the POTW), and Part C.IV (Combined Sewer Overflows (CSO)):

- **Operation of the WWTP CSO:** WVSA provided two clarifications:
  - <u>WWTP Schematic of Wastewater Flows</u>: WVSA noted that effluent sampling locations (after clarification on the four treatment trains) had been accidentally omitted from the NPDES Permit Renewal Application figure, and provided an updated figure. "During wet weather events, when the CSO treatment facility is discharging, the secondary flow sampling point is relocated. The secondary effluent permit parameter samples are collected by composite samplers at the discharge from the four treatment train clarifiers. The four samples are then combined and the analyses are performed on this sample. This assures WWTP effluent without dilution by CSO flow is sampled and reported. This method of effluent sampling was approved by the Department and EPA and WVSA has been following this procedure for approximately 30 years". This historical wet weather sampling methodology is no longer allowed for compliance monitoring and reporting. Previous related permit language had been deleted from the April 15, 2022 Redraft NPDES Permit issued for public comment. All compliance monitoring must be done at the existing post-chlorine contact tank discharge sampling point (with flow-proportional 24-hour composite sampling tied to a calibrated effluent flow meter) upon Final NPDES Permit Effective Date.
    - This historic sampling methodology/location does not result in representative sampling of actual wet weather discharges to the waters of the Commonwealth during peak wet weather flows, because there is no sampling point for the (commingling) CSO wet weather treatment bypass flows discharging at >50 MGD wet weather influent flows. See also NPDES Permit Part A.I Additional Requirements Item 4, Part A.III.A, Part C.II, Part C.III, and Part C.IV requirements.
    - Any historic approval is irrelevant due to present regulatory and permit requirements. The historic monitoring data is considered biased to an unknown degree due to unsampled peak wet weather CSO bypass flows.
    - WVSA can sample anywhere for process monitoring/evaluation purposes.
  - Maximum Discharge Flow from the WWTP: WVSA clarified that the Fact Sheet-identified 58.9 MGD flow (May 2020), as reported by eDMR, was the "highest daily average through the secondary treatment process". The IMAX combined discharge flow (secondary plus CSO treatment effluent) for the last four years were identified as: 99.1 MGD (2018); 99.2 MGD (2019); 102.5 MGD (2020), and 105.6 MGD (2021). The Department acknowledges this clarification. Please note that DMR/EDMR reported maximum daily flows and monthly average flows must address the combined flows (CSO bypass flows and secondary treatment train discharges). See also Part C.II requirements.
- <u>2021 LTCP Update</u>: WVSA indicated it thought the 2021 LTCP Update could not be approved by the Department due to unaddressed public participation requirements. Partially correct. The Department previously noted concerns that the LTCP Update might not meet the updated NPDES permit requirements in the Redraft NPDES Permit Cover Letter Item 4. The LTCP Update was also missing other required information, analysis, and WVSA commitments.
- <u>LTCP Schedule of Implementation</u>: WVSA noted that the NPDES Permit included time for WVSA to address comments provided by the Department and prepare a Redraft LTCP Update. WVSA noted the Department was requesting an evaluation of each CSO in relation to its receiving sewer systems hydraulic capacities as it relates to possibly being able to divert more flow to the POTW. Time will be required for this analysis, testing, and public

process (estimated at 9 -12 months). WVSA understands the final date of compliance is December 31, 2042, with WVSA able to propose alternate interim milestone dates in the public comments. **Correct, but permit conditions** are more than "comments" (such as found in the Fact Sheets). In terms of requested alternate Interim Compliance Milestones:

- Part C.I.H (Identification of Combined Sewer Overflows): WVSA requests more time to continue the calibration of its CSO model (via a calibrating method of estimating, using the daily monitoring data and flow data collected to date; including time to reprogram all radar units located in each WVSA diversion chambers) to provide the frequency, duration and quantity (volume) of flow required by the DEP Annual CSO Status Report Forms and monthly CSO Supplemental Forms. The required time was estimated to range from three (3) to six (6) months. WVSA noted that it has read and understands the monthly Supplemental Form and Annual CSO Status Report Form requirements. The Department has added this requested interim milestone (six months after PED) to the LTCP Schedule of Implementation. The Department notes WVSA has been gathering data to calibrate its CSO model/methodology since before the previous LTCP Update was submitted in 2009.
- Part A.I.C and Part A.I Additional Requirements Item 2 (85% minimum monthly average reduction of BOD5/TSS unless Chapter 92a.47(g,h) requirements are met): WVSA request opportunity to evaluate a "request for relief" of the 85% BOD5/CBOD5 and TSS based on the presumptive goal and evaluation of determining if any additional flows could be directed to the POTW. The Department can only grant this request in part. The Part A.I.C requirement has been changed to "report" only for the present. WVSA has the burden of adequately addressing the Chapter 92a.47(g, h) regulatory requirements for relief in the next LTCP Update. Any LTCP Update evaluation would have to address the POTW's documented wet weather hydraulic capacity (NPDES Permit Part C.II) and available historical data (comparing influent loadings to effluent loadings at the historic range of influent flows). In practical terms, the 85% requirement will pertain unless WVSA addresses the regulatory requirements for relief.
- <u>Control of Solid and Floatable Materials in CSOs NMC (Part C.IV.B.6)</u>: WVSA noted the 2010 NPDES Permit Amendment (incorporated the most recent approved LTCP Update by reference) included installation of (netting) controls at Discharge Chambers DC-52 and 53. WVSA indicated the CSO priorities have been altered, and requested that these DCs be addressed in the Final LTCP Update. The Department could only grant this request in part. The DC-52 and DC-53 have been deleted from the condition's listing of DCs with netting controls. The LTCP Schedule of Implementation requires an interim LTCP Update (within 18 months of PED) including an updated LTCP Schedule of Compliance addressing all CSOrelated projects and permit requirements. The Department expects a general reprioritization of projects to address all NMC/LTCP requirements, with tentative dates for completion at minimum. You will be free to determine which CSOs/DCs still require solid & floatable material controls and what type of controls should be installed.
- Monitor to Effectively Characterize CSO Impacts and the Efficiency of CSO Nine Minimum Controls (Part C.IV.B.9): WVSA requests additional time to prepare an updated Post Construction Compliance Monitoring (PCCM) Plan as required to explicitly address the updated LTCP goals for each CSO. The Department could only grant this request in part, in the absence of a proposed alternate interim milestone. The Department has separated the PCCM Plan from the In-stream Water Quality Monitoring Plan and moved it to the interim LTCP Update (due within 18 months of PED). Please note that the LTCP Goal applies POTW-wide (the entire combined sewer system and all CSO-receiving streams as a whole). To clarify the LTCP Schedule of Compliance requirements in terms of PCCM and other monitoring requirements:
  - <u>Upon Permit Effective Date</u>: The approved 2009 LTCP Update requirements remain in effect, including any stream monitoring plan and any PCCM Plan monitoring as previously incorporated into the LTCP. In practical terms, any WVSA collected In-stream Water Quality Modeling/PCCM Plan monitoring data (current and/or historically collected since the previous NPDES Permit renewal) must be submitted with the Annual CSO Status Report and next LTCP Update.
  - <u>Within 12 months of PED</u>: Submittal of In-Stream Water Quality Monitoring Plan for all discharging CSO Outfalls and streams receiving CSO discharges, that addresses all applicable Water Quality Standards, permittee-proposed LTCP Goals, and permit requirements. In practical terms, WVSA will need to select a tentative LTCP Goal and consider LTCP Goal-related PCCM Plan requirements when developing the updated In-Stream Water Quality Monitoring Plan in order to avoid unnecessary redundant costs.

# Internal Review and Recommendations Within 18 months of PED: Submittal of stand-alone LTCP Update with chosen LTCP Goal, addressing all requirements with all supporting data/analysis (with summarization tables) and information, and updated LTCP Schedule of Compliance addressing all CSO-related projects and permit requirements (including PCCM Plan). In practical terms, WVSA will have to select its LTCP Goal and propose a workable Stream Monitoring Plan and PCCM Plan able to show whether the chosen goal has been met. Within 54 months of PED: Submittal of Final LTCP to meet CSO LTCP Goal by LTCP Final Compliance Date with (Final) Post-Construction Compliance Monitoring (PCCM) Plan. WVSA-chosen LTCP Goal (Part C.VI.C.2): WVSA requested additional time to select its chosen LTCP Goal (Presumptive Goal options mentioned) to allow completion of the individual CSO evaluation to assure compliance can be achieved within the 20-year period as required. The Department cannot grant this request at this time. The approved 2009 LTCP explicitly chose the Demonstration LTCP Goal and is incorporated into the NPDES permit by reference (except that Part C.IV explicitly allows for a future change in chosen LTCP Goal). The LTCP Schedule of Compliance requires the next LTCP Update (with identified LTCP Goal) within 18 months of PED, which gives ample time for basic decision making. WVSA will have the option of proposing future LTCP Goal changes in future NPDES Permit Renewal/Amendments Applications (with LTCP updates). WVSA did not identify what CSO evaluation that it was referencing and/or its proposed timeframe. The LTCP Schedule of Implementation's CSO evaluation requirements would be completed 6 months prior to the next LTCP Update submittal milestone date. Please note the following regarding LTCP Goal requirements: The LTCP Goal is an enforceable narrative Water Quality-Based Effluent Limit which is applicable POTW-wide (Treatment Plant and collection/conveyance system with all CSO-receiving streams). The requirements of all chosen LTCP Goals will have to be met POTW-wide. The Presumption LTCP Goals are not automatically applicable. The Presumption Goals presume that the CSO-receiving streams are not impaired by CSO discharges (including pathogen impairment, i.e. E Coli and Fecal Coliforms). Any future In-Stream WQ Monitoring Plan and PCCM Plan will have to address all CSO-receiving Tributaries and potential CSO-related impairments (including pathogens, AMD metals, Chesapeake Bay nutrients, any additional known stream-specific impairment) to verify that the Presumption Goals are applicable and/or to address Demonstration Goal requirements. Status and progress in attaining any chosen LTCP Goal is required in the Part C.IV conditions. At minimum, reporting of status and progress in meeting the 85% volume LTCP Presumption Goal is being required in the Part C.IV.h condition to provide a metric for WVSA status and progress in addressing CSO requirements. Compliance History: No open violations per the August 16, 2022 WMS Query (Open Violations by Client Number):

Permit: PA0026107 Client ID: 78918 Client: All

Open Violations: 0 No data was found using the criteria entered. Please revise your choices and try again.

# Updated Communications Log:

- <u>5/9/2022</u>: WVSA E-mail requesting conference call on CSO LTCP requirements. The Department e-mailed back several potential dates for WVSA.
- <u>5/23/2022</u>: DEP (Berger) E-mail to EPA requesting confirmation on receipt of forwarded Application documents (2021 LTCP Update and Drawings) via File Transfer Site (too big for Outlook PDF). EPA confirmed receipt and indicated they were under review.

| Internal Review and Recommendations  |
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| <ul> <li><u>5/24/2022</u>: WVSA-requested conference call on CSO LTCP Issues. Highlights:</li> </ul>   |
| o <u>Participants</u> :  |
| <ul> <li><u>WVSA</u>: Jim Tomaine, Brent Berger, Bernard Biga and Mr. Truhilly(?)</li> </ul>   |
| <ul> <li><u>DEP</u>: Amy Bellanca, Sandy Insalaco, James Berger</li> <li><u>LTCP and Redraft NPDES Permit Public Comment Time-frames</u>: WVSA asked for clarification.</li> </ul>   |
| <ul> <li>The Department clarified that the Redraft NPDES Permit public comment period starts 6/4/2022 for the minimum 30-day public comment period, with another 15 days available. The Department also noted that changes in the Permit might mean another Redraft NPDES Permit with its own public comment period. WVSA indicated it would be submitting public comments on the Redraft NPDES Permit.</li> <li>The Department is not requiring a LTCP update in the Redraft NPDES Permit public comment</li> </ul>   |
| <ul> <li>period. The 2009/2010 LTCP (as modified by permit conditions, regulations and technical guidance documents) was in effect as the 2021 LTCP Update had not gone through the required public participation process, and might not meet all of the revised CSO permit conditions. The NPDES Permit Part C LTCP Implementation Schedule sets forth a schedule for updating the Long Term Control Plan (LTCP). The Redraft NPDES Permit gives a year for data collection and 18-months for a LTCP Update. The WVSA public comments should address a LTCP Implementation Schedule that WVSA can live with, with final compliance with all CSO LTCP Goals by the December 31, 2042 target date. The goal is a schedule that everyone can live with.</li> <li>There are separate Chapter 94 Report/Annual CSO Status Report requirements in terms of updating status of CSO-related issues.</li> </ul>      |
| <ul> <li><u>85% Minimum Monthly Average Reduction Requirements (CBOD5 and TSS)</u>: WVSA indicated that it might</li> </ul>  |
| <ul> <li>pursue the regulatory options for relief due to CSS or I&amp;I issues under Chapter 92a.47(g, h). The Department noted that it might change the requirement to Part A monitoring &amp; reporting, with WVSA having the opportunity to show that it can meet the regulatory requirements for relief in the LTCP. If not, the 85% requirement would be in the next NPDES Permit amendment or renewal.</li> <li><u>LTCP and Public Participation</u>: WVSA asked if it could submit something prior to public participation for</li> </ul>   |
| comment. The Department indicated WVSA could send in a draft LTCP Update for feedback before going through the mandatory LTCP public participation process.  |
| <ul> <li><u>CSO Bypass System sampling</u>: WVSA indicated it has composite samplers on the four Final Clarifiers for<br/>the CSO bypass system sampling (not shown on application drawings), and will update the drawings to<br/>show their presence. They will have to meet bypass sampling requirements.</li> </ul>   |
| <ul> <li>LTCP Goals: WVSA indicated it had discussed potential LTCP goals with the EPA, but was still confused. WVSA indicated it might not be able to meet the 4 – 6 CSO Events/year goal or 85% capture goal on all CSOs during all discharge events. Some CSOs might be compliant, but others might not be. WVSA was thinking about maybe a combination of Goals. WVSA asked if discharge to an AMD-impaired stream brought any relief. WVSA had doubts if it could meet the demonstration goal.</li> <li>The LTCP Goals are System-wide for all CSOs. For example, if they choose the 4 - 6 CSO Events/year Presumption goal, that applies to all CSOs. If they had more than 4 – 6 wet weather events triggering CSO discharges, they would not be compliant. The 85% Presumption goal is by (CSS system-wide) volume unless they plan to capture/treat the discharges to show that they can</li> </ul> |
| <ul> <li>meet it by mass.</li> <li>They should pick the goal that they think that they can meet by the 2042 target date.</li> <li>The Demonstration Goal is more stringent than the Presumption Goals (and requires more than</li> </ul>   |
| <ul> <li>simply comparing upstream to downstream conditions).</li> <li>Discharges to AMD-impaired stream has no benefits in terms of meeting LTCP Goals, but might have benefits in terms of Post-Construction Compliance Monitoring. Sometimes discharges can even benefit an AMD-impaired stream.</li> </ul>   |
| <ul> <li><u>5/3/2022</u>: EPA (Hales) E-mail indicating EPA was unable to access DEP On-Base documents. <u>NOTE</u>: Had misunderstood Central Office communications to indicate EPA had access to On-Base. Size of WVSA On-Base PDF files did not allow for e-mailing copies to EPA and could not print out of legible full-sized drawings for mailing. Central Office was later able to use a file share site to forward the application documents.</li> <li><u>5/23/2022</u>: EPA e-mail confirming receipt of WVSA application documents.</li> <li><u>6/2/2022</u>: EPA E-mailed public comments on Redraft NPDES Permit.</li> </ul>   |
| <ul> <li><u>7/1/2022</u>: WVSA On-Base submittal (Reference No. 61963) of public comments on Redraft NPDES Permit. Hard<br/>courtesy copy of revised Drawing subsequently received.</li> </ul>   |