

SOUTHWEST REGIONAL OFFICE  
 CLEAN WATER PROGRAM

 Application Type Renewal  
 Facility Type Sewage  
 Major / Minor Major

 NPDES PERMIT FACT SHEET  
 ADDENDUM

 Application No. PA0110663  
 APS ID 923532  
 Authorization ID 1374225

## Applicant and Facility Information

|                               |  |                  |   |
|-------------------------------|--|------------------|---|
| Applicant Name                | <b>Cresson Borough Municipal Authority<br/>Cambria County</b>                | Facility Name    | <b>Cresson Borough STP</b>                |
| Applicant Address             | 631 Second Street<br>Cresson, PA 16630                                       | Facility Address | 1 Street Helens Lane<br>Cresson, PA 16630 |
| Applicant Contact             | Mark Scowden   | Facility Contact | Same as applicant                         |
| Applicant Phone               | (814) 886-4022   | Facility Phone   | Same as applicant                         |
| Client ID                     | 161502   | Site ID          | 531246                                    |
| SIC Code                      | 4952   | Municipality     | Cresson Borough                           |
| SIC Description               | Trans. & Utilities - Sewerage Systems  | County           | Cambria                                   |
| Date Published in PA Bulletin | February 24, 2024  | EPA Waived?      | No  |
| Comment Period End Date       | March 25, 2024   | If No, Reason    | Major Facility                            |
| Purpose of Application        | Application for a renewal of an NPDES permit for discharge of treated Sewage |                  |   |

## Internal Review and Recommendations

The draft permit was issued on 2/7/2024. The public notice was published in the PA Bulletin on 2/24/2024. The following response was received on 3/11/2024 from EPA during the comment period which ended on 3/25/2024. These comments and responses were shared with the applicant via Department's email on 3/26/2024. The applicant responded back on May 9 and May 15, 2024 (see page 8).

**EPA Comment no. 1:** We offer the following comments on WET:

a. There were four endpoint failures in the WET test summary provided in the fact sheet which, as stated, represents reasonable potential (RP) for WET. There was no indication in the fact sheet that the STP has identified the source of toxicity, conducted a toxicity reduction evaluation (TRE) and addressed these reoccurring failures. As discussed in a phone call with PADEP on March 6, 2024, PADEP may look into this further.

Response : DEP shared EPA comments with the applicant and their response was (see pages 8-13) that they identified the toxicity within the 2019 & 2020 WET samplings as a contamination due to Bis 2 Ethyl hexyl phthalate, which was introduced as a new WQBEL parameter during the previous permit. Beside the reviewed TRE progress reports (see page 15 of the first draft permit factsheet under Bis(2-Ethylhexyl) Phthalate Section), via email on May 15, 2024, the authority explained their actions to control the contamination by modifying the sampling procedure. Samples collected after modifications did not produce a reasonable potential for Bis 2 Ethyl hexyl phthalate and the reviewed DMRs didn't show any limits violations (see page 15 of the first draft factsheet Under Reasonable Potential Section). Additionally, 2024 WET results are all "pass". Using the last four years of WET sampling (2021-2024), the DEP WET spreadsheet produced no reasonable potential with no

| Approve | Return | Deny | Signatures  | Date               |
|---------|--------|------|---|--------------------|
| X       |        |      | <br>Hazim Aldalli / Environmental Engineering Specialist           | July 26, 2024      |
| X       |        |      | <br>Mahbuba Iasmin, Ph.D., P.E./ Environmental Engineering Manager | September 27, 2024 |

### Internal Review and Recommendations

limits. The facility-specific Target In-Stream Waste Concentration (TIWCc) will not change from the first draft with the value of 97% and a dilution series of 24%, 49%, 73%, 97%, and 100%. (See page 21).

b. EPA regulations at 40 C.F.R. 122.44(d)(1)(v) require NPDES permits to contain WET limits where a discharge has been shown to cause, have the reasonable potential to cause, or contribute to an in-stream excursion of a narrative criterion unless the permitting authority demonstrates chemical-specific limits are appropriate to address the toxicity. As discussed in the permit writer's manual (page 6-40), chemical-specific limits may be appropriate when the permitting authority has been able to determine the specific pollutants are the source of toxicity. The fact sheet states PADEP believes the new toxic WQBELs (copper, free cyanide, and carbon tetrachloride) will likely control the toxicity noted in the effluent; however, the basis for that statement is unclear and it does not appear the demonstration required by the regulation has been made. EPA's Technical Support Document, March 1991, Section 3.3.7, provides some guidance on this scenario: "To make this demonstration that chemical-specific limits are sufficient, additional effluent information will be needed. EPA recommends that the discharger conduct a toxicity identification evaluation to identify the causative agent(s) in the effluent. Where the permitting authority determines that the demonstration required by 40 CFR 122.44(d)(1)(v) has been made, limits on whole effluent toxicity need not be imposed."

Unless a demonstration can be made that one or several of those specific pollutants are the source of toxicity, limits for WET must be imposed in the permit. In addition, whether WET limits or chemical-specific permit limits are ultimately imposed in the permit, because PADEP has determined that there is RP for WET, EPA would recommend quarterly WET testing be imposed in the permit.

**Response :** As stated in Response to Comment 1.a, the permittee identified Bis 2 Ethyl hexyl phthalate as a reason for 2019 and 2020 WET test failures. In May 2024, the permittee conducted additional sampling for the newly proposed parameters in the Draft Permit 1 which (included Copper, Carbon Tetrachloride, and Free Cyanide) in addition to sampling for Bis 2 Ethyl hexyl phthalate. All parameters were reported "non-detect" following DEP's Quantitation Limits (QLs). Additionally, 2024 WET results were included in WET evaluation following PADEP's WET SOP (SOP No. BPNPSM-PMT-031, Version 1.4) and no WET limits were recommended (see page 21). Therefore, annual WET testing will be continued in the revised Draft Permit.

c. The permit does not include the updated TIWC and dilution series from the fact sheet as identified in the email correspondence on February 20, 2024.

**Response :** DEP acknowledges the comment, Part C.IV.A.3 of the final permit will have the dilution series and TIWC updated to reflect the renewal application WET analysis results as indicated in DEP response to the Comment 1.a.

**Comment 2:** In the February 20, 2024 email correspondence between EPA and PADEP, EPA noted the fact sheet incorrectly used the pretreatment term categorical in describing two industrial users. EPA recommends removing the term categorical as the industrial discharges are not categorical dischargers. It was also noted the permittee didn't disclose the two industrial dischargers in the application.

**Response :** DEP acknowledges the comment. The applicant informed DEP when asked about this comment that Sheetz Corp. store is no more discharging to the Cresson STP, and Norfolk Southern discharge information will be updated through the 2024 CH94 report and the upcoming renewal application (See page 14).

#### Total Copper

The new Site Specific Criteria Study (SSCS) and Toxicity Reduction Evaluation (TRE) with corrosion control feasibility study requirements for Total Copper were inadvertently excluded in the original Draft Permit. Part C112 A and Part C113 have been included in the revised Draft Permit.

#### PFAS

Pursuant to 25 Pa. code § 92a.61(b), annual monitoring for PFAS-related compounds (i.e., PFOA, PFOS, HFPO-DA or PFBS) has been imposed at Outfall 001 to determine if PFAS will be a pollutant of concern in accordance with PADEP SOP

#### Internal Review and Recommendations

No. BCW-PMT-033 revised February 5, 2024 under Section G.3. Additionally, a footnote has been added to Part A of the revised Draft Permit that states,

*"The permittee may discontinue monitoring for PFOA, PFOS, HFPO-DA, and PFBS if the results in 4 consecutive monitoring periods indicate non-detect results at or below Quantitation Limits of 4.0 ng/L for PFOA, 3.7 ng/L for PFOS, 3.5 ng/L for PFBS and 6.4 ng/L for HFPO-DA. When monitoring is discontinued, permittees must enter a No Discharge Indicator (NODI) Code of "GG" on DMRs."*

Issuance of the permit re-draft is recommended.

**Proposed Effluent Limitations and Monitoring Requirements**

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

**Outfall 001, Effective Period: Permit Effective Date through End of Thirty-Sixth (36<sup>th</sup>) Month Following Permit Issuance.**

| Parameter            | Effluent Limitations                |                   |                       |                   |                   |                  | Monitoring Requirements                         |                      |
|----------------------|-------------------------------------|-------------------|-----------------------|-------------------|-------------------|------------------|---|----------------------|
|                      | Mass Units (lbs/day) <sup>(1)</sup> |                   | Concentrations (µg/L) |                   |                   |                  | Minimum <sup>(2)</sup><br>Measurement Frequency | Required Sample Type |
|                      | Average Monthly                     | Average Weekly    | Minimum               | Average Monthly   | Maximum           | Instant. Maximum |   |                      |
| Free Cyanide         | Report                              | XXX               | XXX                   | Report            | XXX               | Report Daily Max | 1/week  | Grab                 |
| Total Copper         | 0.53<br>Avg Qrtly                   | 0.94<br>Daily Max | XXX                   | 42.0<br>Avg Qrtly | 75.0<br>Daily Max | XXX              | 1/quarter                                       | 8-Hr Composite       |
| Carbon Tetrachloride | Report                              | XXX               | XXX                   | Report            | XXX               | Report Daily Max | 1/week  | 8-Hr Composite       |

Compliance Sampling Location: Outfall 001.

Other Comments: None.

**Proposed Effluent Limitations and Monitoring Requirements**

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

**Outfall 001, Effective Period: Beginning of Thirty Seventh (37<sup>th</sup>) Month Following Permit Issuance through Permit Expiration Date.**

| Parameter            | Effluent Limitations                |                |                       |                 |         |                  | Monitoring Requirements                         |                      |
|----------------------|-------------------------------------|----------------|-----------------------|-----------------|---------|------------------|---|----------------------|
|                      | Mass Units (lbs/day) <sup>(1)</sup> |                | Concentrations (ug/L) |                 |         |                  | Minimum <sup>(2)</sup><br>Measurement Frequency | Required Sample Type |
|                      | Average Monthly                     | Average Weekly | Minimum               | Average Monthly | Maximum | Instant. Maximum |   |                      |
| Total Copper         | 0.18                                | XXX            | XXX                   | 14.4            | 21.6    | Daily Max        | XXX   | 1/week               |
| Free Cyanide         | 0.05                                | XXX            | XXX                   | 4.14            | 6.21    | Daily Max        | XXX   | 1/week               |
| Carbon Tetrachloride | 0.007                               | XXX            | XXX                   | 0.55            | 0.82    | Daily Max        | XXX   | 1/week               |

Compliance Sampling Location: Outfall 001.

Other Comments: None.

**Proposed Effluent Limitations and Monitoring Requirements**

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

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

| Parameter  | Effluent Limitations                |                  |                       |                  |                  |                  | Monitoring Requirements                         |                      |
|--|-------------------------------------|------------------|-----------------------|------------------|------------------|------------------|---|----------------------|
|  | Mass Units (lbs/day) <sup>(1)</sup> |                  | Concentrations (mg/L) |                  |                  |                  | Minimum <sup>(2)</sup><br>Measurement Frequency | Required Sample Type |
|  | Average Monthly                     | Weekly Average   | Minimum               | Average Monthly  | Weekly Average   | Instant. Maximum |   |                      |
| Flow (MGD)   | Report                              | Report Daily Max | XXX                   | XXX              | XXX              | XXX              | Continuous                                      | Recorded             |
| pH (S.U.)  | XXX                                 | XXX              | 6.0                   | XXX              | 9.0 Max          | XXX              | 1/day   | Grab                 |
| Dissolved Oxygen   | XXX                                 | XXX              | 6.0                   | XXX              | XXX              | XXX              | 1/day   | Grab                 |
| Carbonaceous Biochemical Oxygen Demand (CBOD5)<br>Nov 1 - Apr 30 | 312.75                              | 469.12           | XXX                   | 25.0             | 37.5             | 50               | 2/week  | 8-Hr Composite       |
| Carbonaceous Biochemical Oxygen Demand (CBOD5)<br>May 1 - Oct 31 | 250.2                               | 375.3            | XXX                   | 20.0             | 30.0             | 40               | 2/week  | 8-Hr Composite       |
| Biochemical Oxygen Demand (BOD5)<br>Raw Sewage Influent          | Report                              | Report Daily Max | XXX                   | Report           | XXX              | XXX              | 2/week  | 8-Hr Composite       |
| Total Suspended Solids   | 375.3                               | 562.95           | XXX                   | 30.0             | 45.0             | 60               | 2/week  | 8-Hr Composite       |
| Total Suspended Solids<br>Raw Sewage Influent                    | Report                              | Report Daily Max | XXX                   | Report           | XXX              | XXX              | 2/week  | 8-Hr Composite       |
| Fecal Coliform (No./100 ml)<br>Oct 1 - Apr 30                    | XXX                                 | XXX              | XXX                   | 2000<br>Geo Mean | XXX              | 10000            | 2/week  | Grab                 |
| Fecal Coliform (No./100 ml)<br>May 1 - Sep 30                    | XXX                                 | XXX              | XXX                   | 200<br>Geo Mean  | XXX              | 1000             | 2/week  | Grab                 |
| Ultraviolet Light Intensity (mw/cm <sup>2</sup> )                | XXX                                 | XXX              | Report                | XXX              | XXX              | XXX              | 1/day   | Recorded             |
| Ammonia-Nitrogen<br>Nov 1 - Apr 30                               | 31.3                                | XXX              | XXX                   | 2.5              | XXX              | 5.0              | 2/week  | 8-Hr Composite       |
| Ammonia-Nitrogen<br>May 1 - Oct 31                               | 18.76                               | XXX              | XXX                   | 1.5              | XXX              | 3.0              | 2/week  | 8-Hr Composite       |
| Total Boron  | Report                              | XXX              | XXX                   | Report           | Report Daily Max | XXX              | 1/week  | 8-Hr Composite       |

| Parameter                           | Effluent Limitations                |                |                       |                  |                  |                  | Monitoring Requirements                         |                      |
|-------------------------------------|-------------------------------------|----------------|-----------------------|------------------|------------------|------------------|---|----------------------|
|                                     | Mass Units (lbs/day) <sup>(1)</sup> |                | Concentrations (mg/L) |                  |                  |                  | Minimum <sup>(2)</sup><br>Measurement Frequency | Required Sample Type |
|                                     | Average Monthly                     | Weekly Average | Minimum               | Average Monthly  | Weekly Average   | Instant. Maximum |   |                      |
| Dissolved Iron                      | Report                              | XXX            | XXX                   | Report           | Report Daily Max | XXX              | 1/week  | 8-Hr Composite       |
| Total Silver                        | Report                              | XXX            | XXX                   | Report           | Report Daily Max | XXX              | 1/week  | 8-Hr Composite       |
| Total Zinc                          | Report                              | XXX            | XXX                   | Report           | Report Daily Max | XXX              | 1/week  | 8-Hr Composite       |
| <i>E.Coli</i> (No./100 ml)          | XXX                                 | XXX            | XXX                   | XXX              | XXX              | Report           | 1/month   | Grab                 |
| Total Nitrogen                      | XXX                                 | XXX            | XXX                   | Report Daily Max | XXX              | XXX              | 1/quarter                                       | 8-Hr Composite       |
| Total Phosphorus                    | XXX                                 | XXX            | XXX                   | Report Daily Max | XXX              | XXX              | 1/quarter                                       | 8-Hr Composite       |
| Bis(2-Ethyl-hexyl) Phthalate (µg/L) | XXX                                 | XXX            | XXX                   | 1.45             | XXX              | 2.5 Daily Max    | 1/month   | 8-Hr Composite       |
| Aluminum, Total                     | XXX                                 | XXX            | XXX                   | Report Daily Max | XXX              | XXX              | 1/quarter                                       | 8-Hr Composite       |
| Iron, Total                         | XXX                                 | XXX            | XXX                   | Report Daily Max | XXX              | XXX              | 1/quarter                                       | 8-Hr Composite       |
| Manganese, Total                    | XXX                                 | XXX            | XXX                   | Report Daily Max | XXX              | XXX              | 1/quarter                                       | 8-Hr Composite       |
| Hardness (as CaCO <sub>3</sub> )    | XXX                                 | XXX            | XXX                   | Report Daily Max | XXX              | XXX              | 1/quarter                                       | 8-Hr Composite       |
| PFOA* (ng/L)                        | XXX                                 | XXX            | XXX                   | Report Daily Max | XXX              | XXX              | 1/year  | Grab                 |
| PFOS* (ng/L)                        | XXX                                 | XXX            | XXX                   | Report Daily Max | XXX              | XXX              | 1/year  | Grab                 |
| HFPO-DA* (ng/L)                     | XXX                                 | XXX            | XXX                   | Report Daily Max | XXX              | XXX              | 1/year  | Grab                 |
| PFBS* (ng/L)                        | XXX                                 | XXX            | XXX                   | Report Daily Max | XXX              | XXX              | 1/year  | Grab                 |

\* The permittee may discontinue monitoring for PFOA, PFOS, HFPO-DA, and PFBS if the results in 4 consecutive monitoring periods indicate non-detect results at or below Quantitation Limits of 4.0 ng/L for PFOA, 3.7 ng/L for PFOS, 3.5 ng/L for PFBS and 6.4 ng/L for HFPO-DA. When monitoring is discontinued, permittees must enter a No Discharge Indicator (NODI) Code of "GG" on DMRs.

Compliance Sampling Location: Outfall 001.

Other Comments: N/A.

**Aldalli, Hazim**

**From:** Stu Sibold <ssibold@eadsgroup.com>  
**Sent:** Thursday, May 9, 2024 3:06 PM  
**To:** Aldalli, Hazim  
**Cc:** Iasmin, Mahbuba; cressonwwtp@gmail.com  
**Subject:** [External] RE: Cresson Borough STP Draft Permit, PA0110663  
**Attachments:** Extracted pages from ESL080619-Cresson Borough.pdf

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Mr. Aldalli - We met with our local laboratory representative on Wednesday May 1, 2024 and have had two conference calls subsequently with them. We discussed the recent WET test results that were submitted to PaDEP with our NPDES Permit Renewal Application or subsequent to the original application filing date (for the 2023 WET Test Report ).

The last six years of WET testing including the most recent WET test of July 31, 2023 contained summaries which concluded that all testing resulted in "Pass" for survival and for reproduction/growth for the two species tested except for year 2020 for C.dubia reproduction. The table below summarizes those WET findings:

| Species               | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|-----------------------|------|------|------|------|------|------|
| C. dubia survival     | Pass | Pass | Pass | Pass | Pass | Pass |
| C. dubia reproduction | Pass | Pass | Fail | Pass | Pass | Pass |
| P. promelas Survival  | Pass | Pass | Pass | Pass | Pass | Pass |
| P. promelas Growth    | Pass | Pass | Pass | Pass | Pass | Pass |

We think USEPA ought to be aware of the results of the 2023 WET testing. That means we have 3 years of passing results.

EnviroScience lab personnel made me aware that at least one of the 2019 end point failures cited in the Fact Sheet for P. promelas was deemed a fail because the 99 % effluent series showed fail results while the 100 % effluent series showed passing results. This seems unusual as one would expect 99 % effluent and 100 % effluent to show very similar results. The 100 % effluent should be the most stressful environment for the P. promelas yet the lab results differ significantly from the 99 %. EnviroScience personnel apparently thought so and considered the 99 % result as an anomaly and used the 100 % result on which to base their conclusion. See attached pages showing this situation.

That said, we (Cresson) are getting ready now to do the sampling for this year's WET testing during the 3 rd week of May. I have asked the operators and the lab to collect samples and test for each day of the WET sampling to also test for copper, free cyanide, carbon tetrachloride and Bis 2 ethyl hexyl phthalate so trying to be proactive. If we have a failure for the WET testing for 2024, then I will have a lab result of the same plant effluent for copper, free cyanide, carbon tetrachloride and Bis 2 ethyl hexyl phthalate.

It seems to me that the last 3 years of passing WET results should be indicative of a non-toxic effluent at Cresson. We wonder if conducting a toxicity identification evaluation will result in anything meaningful if for 3 years straight, the WET results show passing. The problem if indeed there was one, was last detected in 2020. We are willing to perform some

additional sampling of certain chemicals or perhaps go to twice a year WET testing for another year or two. If we get 2 more years of WET tests passing then we could drop back to once per year WET Testing.

Thank you for the opportunity to comment.

Stuart W. Sibold PE  
EADS Group, Inc.  
1126 Eighth Avenue  
Altoona, PA. 16602

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**From:** Aldalli, Hazim <haldalli@pa.gov>  
**Sent:** Wednesday, April 24, 2024 10:38 AM  
**To:** Stu Sibold <ssibold@eadsgroup.com>  
**Cc:** Iasmin, Mahbuba <moiasmin@pa.gov>; cressonwwtp@gmail.com  
**Subject:** RE: [External] Cresson Borough STP Draft Permit, PA0110663

Mr. Sibold,

Please let me know if you still have any questions/comments that I can answer to have your response to EPA and DEP comments on the draft permit.

Thanks,

Hazim Aldalli | Environmental Engineer  
Department of Environmental Protection | Clean Water  
South West Regional Office Building  
400 Waterfront Drive | Pittsburgh, PA 15222  
Phone: (412) 442-4117

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**From:** Stu Sibold <ssibold@eadsgroup.com>  
**Sent:** Wednesday, March 27, 2024 10:51 AM  
**To:** Aldalli, Hazim <haldalli@pa.gov>  
**Cc:** Iasmin, Mahbuba <moiasmin@pa.gov>; cressonwwtp@gmail.com  
**Subject:** RE: [External] Cresson Borough STP Draft Permit, PA0110663

Mr. Aldalli - the new email address at the Cresson sewage plant is :

[cressonwwtp@gmail.com](mailto:cressonwwtp@gmail.com)

please revise your contact information for the plant operator, Mark Scowden.

Stuart Sibold PE

---

**From:** Aldalli, Hazim <[haldalli@pa.gov](mailto:haldalli@pa.gov)>  
**Sent:** Tuesday, March 26, 2024 1:43 PM  
**To:** Stu Sibold <[ssibold@eadsgroup.com](mailto:ssibold@eadsgroup.com)>; Mark Scowden ([cressonwwtp@hotmail.com](mailto:cressonwwtp@hotmail.com)) <[cressonwwtp@hotmail.com](mailto:cressonwwtp@hotmail.com)>  
**Cc:** lasmin, Mahbuba <[mojasmin@pa.gov](mailto:mojasmin@pa.gov)>  
**Subject:** FW: [External] Cresson Borough STP Draft Permit, PA0110663

Dear Mr. Sibold,

I want to share with you EPA comments regarding the draft renewal permit PA0110663 for Cresson Borough STP, I'd like to have your feedback on Comment 1 for a. & b. Basically EPA wants to have more information about the authority efforts and the work done towards having the WET results back to show "Pass" for the failed endpoints, this determination is based on the new received WET reports for the years 2022 and 2023. Also, based on the new DEP policy (came into effect on March 15) for PFAS monitoring for major permits, the Cresson STP will have PFAS monitoring requirements added to the permit effluent limitations table and a justification in the factsheet. And based on these changes DEP will re-draft the permit.

I will have a phone call with you tomorrow around 10:30 (if your schedule allowed) to discuss these comments further. Please let me know if you can take my call tomorrow, or you want to schedule it for different time and date.

Thanks,

Hazim Aldalli| Environmental Engineer  
Department of Environmental Protection | Clean Water  
South West Regional Office Building  
400 Waterfront Drive | Pittsburgh, PA 15222  
Phone: (412) 442-4117

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---

**From:** Fulton, Jennifer <[Fulton.Jennifer@epa.gov](mailto:Fulton.Jennifer@epa.gov)>  
**Sent:** Monday, March 11, 2024 1:52 PM  
**To:** Aldalli, Hazim <[haldalli@pa.gov](mailto:haldalli@pa.gov)>  
**Cc:** lasmin, Mahbuba <[mojasmin@pa.gov](mailto:mojasmin@pa.gov)>; Furjanic, Sean <[sefurjanic@pa.gov](mailto:sefurjanic@pa.gov)>; Schumack, Maria <[maschumack@pa.gov](mailto:maschumack@pa.gov)>; Moncavage, Carissa (she/her/hers) <[Moncavage.Carissa@epa.gov](mailto:Moncavage.Carissa@epa.gov)>; Hales, Dana <[Hales.Dana@epa.gov](mailto:Hales.Dana@epa.gov)>; Camperson, Joseph <[Camperson.Joseph@epa.gov](mailto:Camperson.Joseph@epa.gov)>  
**Subject:** [External] Cresson Borough STP Draft Permit, PA0110663

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Hazim,

According to our Memorandum of Agreement, the Environmental Protection Agency (EPA) Region III has received the draft National Pollutant Discharge Elimination System (NPDES) permit for:

**Cresson Borough STP**  
**Cresson Borough Municipal Authority Cambria County (CBMA)**  
**NPDES Number: PA0110663**  
**EPA Received: February 8, 2024**  
**30-day response due date: March 9, 2024**

This is a major permit that discharges to the Little Conemaugh River. EPA has chosen to perform a limited review of the draft permit based on the copper, whole effluent toxicity (WET) and wasteload allocation (WLA) requirements of the approved Kiskiminetas River Basin TMDL. EPA has completed its review and offers the following comments:

1. We offer the following comments on WET:

- a. There were four endpoint failures in the WET test summary provided in the fact sheet which, as stated, represents reasonable potential (RP) for WET. There was no indication in the fact sheet that the STP has identified the source of toxicity, conducted a toxicity reduction evaluation (TRE) and addressed these reoccurring failures. As discussed in a phone call with PADEP on March 6, 2024, PADEP may look into this further.
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Unless a demonstration can be made that one or several of those specific pollutants are the source of toxicity, limits for WET must be imposed in the permit. In addition, whether WET limits or chemical-specific permit limits are ultimately imposed in the permit, because PADEP has determined that there is RP for WET, EPA would recommend quarterly WET testing be imposed in the permit.

- c. The permit does not include the updated TIWC and dilution series from the fact sheet as identified in email correspondence on February 20, 2024.
2. In the February 20, 2024 email correspondence between EPA and PADEP, EPA noted the fact sheet incorrectly used the pretreatment term categorical in describing two industrial users. EPA recommends removing the term

categorical as the industrial discharges are not categorical dischargers. It was also noted the permittee didn't disclose the two industrial dischargers in the application.

Please address the above and provide us with any changes to the draft permit and/or fact sheet, if necessary. Please contact Joe Camperson on my staff via telephone at 215-814-5784 or via electronic mail at [camperson.joseph@epa.gov](mailto:camperson.joseph@epa.gov).

Thank you,

Jen Fulton



Jennifer Fulton (she/her)  
Acting Chief, Clean Water Branch  
US EPA Mid-Atlantic Region  
Phone 304-234-0248  
Email [fulton.jennifer@epa.gov](mailto:fulton.jennifer@epa.gov)



**Aldalli, Hazim**

---

**From:** Stu Sibold <ssibold@eadsgroup.com>  
**Sent:** Wednesday, May 15, 2024 12:00 PM  
**To:** Iasmin, Mahbuba; Aldalli, Hazim  
**Cc:** cressonwwtp@gmail.com  
**Subject:** RE: [External] RE: Cresson Borough STP Draft Permit, PA0110663

Mr. Iasmin - We think that Bis 2 Ethyl hexyl phthalate might have been the reason for the end point failures. Our focus has been our continued efforts to remove infiltration and inflow through sewer lateral replacements and pressure testing of sewer laterals in Cresson Borough. We have successfully removed substantial amounts of infiltration and inflow, perhaps as much as 50,000 gallons per day. Also we did find and remove plastic components from all of our sampling equipment and replace these items with Teflon or glass components to prevent self – contamination of the sampling equipment with Bis-2 ethyl hexyl phthalate leaching from plastic tubing and sample containers. Composite sampling container cleaning procedures were changed and the source of de-ionized distilled water was replaced as part of that process to eliminate possible sources of Bis-2 ethyl hexyl phthalate. These efforts seem to have been successful.

WET Testing results should be available from the laboratory Enviroscience by mid-July 2024. We will forward these results to you as soon as we receive them from the lab. We will keep you apprised in case there are any problems with complying with this schedule.

Stuart W. Sibold PE  
EADS Group, Inc.  
1126 Eighth Avenue  
Altoona, PA. 16602

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**From:** Iasmin, Mahbuba <moiasmin@pa.gov>  
**Sent:** Wednesday, May 15, 2024 11:24 AM  
**To:** Stu Sibold <ssibold@eadsgroup.com>; Aldalli, Hazim <haldalli@pa.gov>  
**Cc:** cressonwwtp@gmail.com  
**Subject:** RE: [External] RE: Cresson Borough STP Draft Permit, PA0110663

Mr. Sibold,

At this time, to be able to respond to EPA comments, we are looking for the reason(s) for past end point failures and what actions were taken to overcome the failures.

We will wait for this year's WET testing results. Please let us know when you expect to submit these results by.

Sincerely,

**Mahbuba Iasmin, Ph.D., P.E. | Environmental Engineer Manager**  
Sewage and Planning Section | Clean Water Program  
PA Department of Environmental Protection | Southwest Regional Office  
400 Waterfront Drive | Pittsburgh, PA 15222  
Phone: 412.442.4102  
[www.dep.pa.gov](http://www.dep.pa.gov)

3800-PM-BCW0009b Rev. 6/2019  
Permit Application

Applicant: Mun Auth of Cresson Borough

| INDUSTRIAL USER INFORMATION   |   |   |
|---|---|---|
| <p>Complete this section for industrial users (IUs) connected to the sewer system. Two IUs can be recorded per page. Attach additional pages as necessary. See Table 1 of the instructions to determine whether the IU is a "Categorical Industry."</p> <p><input type="checkbox"/> Check here if there are NO industrial users.</p> <p><input type="checkbox"/> Check here if the applicant is implementing an approved pretreatment program administered by EPA.</p> <p>Date of most recent approval of local limits by EPA: _____</p>  |   |   |
| 1. Industrial User Name:  | Norfolk Southern  |   |
| Address:  | Arch street   |   |
| Municipality / County:  | Cresson / Cambria County  |   |
| 2. Categorical Industry? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>Applicable Pretreatment (PT) Standard: 40 CFR Part: _____   |   |   |
| 3. Description of Industry and Wastewater Characteristics:<br>Former railroad locomotive switching and car storage yard. Now inactive. Wastewater is now stormwater runoff from the tank containment and from locomotive refueling pans that are no longer in use and were cleaned by Norfolk Southern's environmental cleanup contractor   |   |   |
| 4. Is this industry a significant industrial user (SIU)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  |   |   |
| 5. Is this industry a non-significant categorical industrial user (NSCIU)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  |   |   |
| 6. Does the IU truck or haul waste to the POTW? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   |   |   |
| 7. Has an industrial user permit been issued by the POTW or permittee? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  |   |   |
| 8. Subpart Letter   | Subpart Title   | 9. Wastewater Flows (GPD)                                       |
|   |   | Process: 700  |
|   |   | NCCW: 0   |
|   |   | Sanitary: 0   |
|   |   | Other: 0  |
|   |   | Total: 700 estimated; flow is highly dependent on precipitation |
| 10. Has the IU been the known or suspected source of any problems at the POTW (e.g., upsets, pass through, interference) in the past four and one-half years? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>If Yes, provide an explanation: IU has an oil/water separator followed by granular activated carbon (GAC) pressure filter to remove contaminants. The existing diesel fuel storage tank was emptied and cleaned out by a licensed environmental firm. Diesel fuel storage tank is now abandoned in place and disconnected. Tank containment exists but is only generating flow when a precipitation event occurs. Norfolk Southern ceased locomotive refueling operations in Cresson in September 2021, 4 years ago at this writing. The only discharges from this IU occur when precipitation occurs and all precipitation-induced flow passes through the oil/water separator and GAC filtration system before it is pumped into the Cresson sewer system. |   |   |
| 11. List any other pollutant(s) with Chapter 93 WQS that may be discharged from the IU and are not identified in Pollutant Groups 1 – 6.<br>None  |   |   |
| 1. Industrial User Name:  | 2. Categorical Industry? <input type="checkbox"/> Yes <input type="checkbox"/> No |   |
| Address:  | Applicable Pretreatment (PT) Standard:  |   |
| Municipality / County:  | 40 CFR Part: _____  |   |
| 3. Description of Industry and Wastewater Characteristics:  |   |   |
| 4. Is this industry a significant industrial user (SIU)? <input type="checkbox"/> Yes <input type="checkbox"/> No   |   |   |
| 5. Is this industry a non-significant categorical industrial user (NSCIU)? <input type="checkbox"/> Yes <input type="checkbox"/> No   |   |   |
| 6. Does the IU truck or haul wastewater to the POTW? <input type="checkbox"/> Yes <input type="checkbox"/> No   |   |   |
| 7. Has an industrial user permit been issued by the POTW or permittee? <input type="checkbox"/> Yes <input type="checkbox"/> No   |   |   |
| 8. Subpart Letter   | Subpart Title   | 9. Wastewater Flows (GPD)                                       |
|   |   | Process:  |
|   |   | NCCW:   |
|   |   | Sanitary:   |

**Aldalli, Hazim**

---

**From:** Stu Sibold <ssibold@eadsgroup.com>  
**Sent:** Monday, September 16, 2024 11:01 AM  
**To:** Aldalli, Hazim; cressonwwtp@gmail.com  
**Cc:** Iasmin, Mahbuba; Todd Beiswenger  
**Subject:** [External] RE: Cresson Borough STP Draft Permit PA0110663

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Mr. Aldalli – Sheetz store discontinued the industrial discharge several years ago. They rebuilt the store and removed the car wash and its wastewater treatment system in 2015. I was unaware of this as the Sheetz store is in Cresson Township, not Cresson Borough. We will revise our Chapter 94 Attachment 8 and also the Page 9 of the NPDES permit application.

I have a site visit scheduled with Norfolk Southern for Tuesday Sept 24 at 1:30 pm to view their treatment system and get more particulars/details and perhaps correct or revise the Chapter 94 Attachment 8 information as well as the Page 9 information.

Thanks,  
Stuart Sibold



Stuart W. Sibold, PE  
Project Manager  
  
814.944.5035 ext. 122  
814.935.5035 Mobile  
1126 8th Avenue, Altoona, PA 16602  
  
[ssibold@eadsgroup.com](mailto:ssibold@eadsgroup.com)

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**From:** Stu Sibold <ssibold@eadsgroup.com>  
**Sent:** Monday, September 16, 2024 9:04 AM  
**To:** Aldalli, Hazim <haldalli@pa.gov>; cressonwwtp@gmail.com  
**Cc:** Iasmin, Mahbuba <moiasmin@pa.gov>  
**Subject:** RE: Cresson Borough STP Draft Permit PA0110663

Mr. Aldalli – I have received your email and will respond with update to Page 9 regarding industrial dischargers. Norfolk Southern closed its railroad yard in Cresson a few years ago. I am trying to track down a knowledgeable Norfolk Southern official who can help us with the abandonment/closure of that facility which would have eliminated the industrial connection mentioned.

Thanks,  
Stu



Stuart W. Sibold, PE  
Project Manager

814.944.5035 ext. 122  
814.935.5035 Mobile  
1126 8th Avenue, Altoona, PA 16602  
[ssibold@eadsgroup.com](mailto:ssibold@eadsgroup.com)

---

**From:** Aldalli, Hazim <[haldalli@pa.gov](mailto:haldalli@pa.gov)>  
**Sent:** Monday, September 16, 2024 8:16 AM  
**To:** Stu Sibold <[ssibold@eadsgroup.com](mailto:ssibold@eadsgroup.com)>; [cressonwwtp@gmail.com](mailto:cressonwwtp@gmail.com)  
**Cc:** Iasmin, Mahbuba <[mojasmin@pa.gov](mailto:mojasmin@pa.gov)>  
**Subject:** Cresson Borough STP Draft Permit PA0110663

Mr. Sibold,

In regard EPA comment no. 2, I think Cresson Borough needs to update Page 9 of the renewal application to include the industrial dischargers that were stated within the draft factsheet and in the CH94 report for 2022 under Attachment 8. Please let me know if you have any questions.

Thanks,

Hazim Aldalli| Environmental Engineering Specialist  
Department of Environmental Protection | Clean Water  
Southwest Regional Office Building  
400 Waterfront Drive | Pittsburgh, PA 15222  
Phone: (412) 442-4117

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<https://www.dep.pa.gov/DataandTools/ElectronicSubmissions/Pages/default.aspx>

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| DEP Whole Effluent Toxicity (WET) Analysis Spreadsheet |              |        |                  |                     |        |
|--|--------------|--------|------------------|---------------------|--------|
| Type of Test   | Chronic      |        |                  | Facility Name       |        |
| Species Tested   | Ceriodaphnia |        |                  | Cresson Borough STP |        |
| Endpoint   | Reproduction |        |                  | Permit No.          |        |
| TIWC (decimal)   | 0.99         |        |                  | PA0110663           |        |
| No. Per Replicate                                      | 1            |        |                  |                     |        |
| TST b value  | 0.75         |        |                  |                     |        |
| TST alpha value  | 0.2          |        |                  |                     |        |
| Test Completion Date                                   |              |        |                  |                     |        |
| Replicate No.  | 7/26/2021    |        | Replicate No.    | 7/28/2022           |        |
|  | Control      | TIWC   |                  | Control             | TIWC   |
| 1  | 28           | 36     | 1                | 17                  | 24     |
| 2  | 31           |        | 2                | 24                  | 21     |
| 3  | 27           | 29     | 3                | 25                  | 23     |
| 4  | 31           | 30     | 4                | 21                  | 20     |
| 5  | 25           | 18     | 5                | 27                  | 27     |
| 6  | 25           | 34     | 6                | 27                  | 29     |
| 7  | 26           | 28     | 7                | 22                  | 19     |
| 8  | 29           | 24     | 8                | 29                  | 19     |
| 9  | 24           | 20     | 9                | 16                  | 27     |
| 10   | 23           | 25     | 10               | 23                  | 19     |
| 11   |              |        | 11               |                     |        |
| 12   |              |        | 12               |                     |        |
| 13   |              |        | 13               |                     |        |
| 14   |              |        | 14               |                     |        |
| 15   |              |        | 15               |                     |        |
| Mean   | 26.900       | 27.111 | Mean             | 23.100              | 22.800 |
| Std Dev.   | 2.807        | 5.988  | Std Dev.         | 4.254               | 3.795  |
| # Replicates   | 10           | 9      | # Replicates     | 10                  | 10     |
| T-Test Result  | 3.2963       |        | T-Test Result    | 3.4921              |        |
| Deg. of Freedom  | 11           |        | Deg. of Freedom  | 17                  |        |
| Critical T Value                                       | 0.8755       |        | Critical T Value | 0.8633              |        |
| Pass or Fail   | PASS         |        | Pass or Fail     | PASS                |        |
| Test Completion Date                                   |              |        |                  |                     |        |
| Replicate No.  | 7/24/2023    |        | Replicate No.    | 6/27/2024           |        |
|  | Control      | TIWC   |                  | Control             | TIWC   |
| 1  | 28           | 31     | 1                | 26                  | 28     |
| 2  | 27           | 34     | 2                | 27                  | 32     |
| 3  | 23           | 0      | 3                | 23                  | 29     |
| 4  | 26           | 39     | 4                | 19                  | 30     |
| 5  | 14           | 22     | 5                | 27                  | 28     |
| 6  | 26           | 33     | 6                | 17                  | 35     |
| 7  | 23           | 35     | 7                | 25                  | 33     |
| 8  | 22           | 36     | 8                | 24                  | 27     |
| 9  | 24           | 37     | 9                | 24                  | 36     |
| 10   | 21           | 33     | 10               | 31                  | 24     |
| 11   |              |        | 11               |                     |        |
| 12   |              |        | 12               |                     |        |
| 13   |              |        | 13               |                     |        |
| 14   |              |        | 14               |                     |        |
| 15   |              |        | 15               |                     |        |
| Mean   | 23.400       | 30.000 | Mean             | 24.300              | 30.200 |
| Std Dev.   | 4.006        | 11.499 | Std Dev.         | 4.029               | 3.765  |
| # Replicates   | 10           | 10     | # Replicates     | 10                  | 10     |
| T-Test Result  | 3.3127       |        | T-Test Result    | 7.8436              |        |
| Deg. of Freedom  | 12           |        | Deg. of Freedom  | 16                  |        |
| Critical T Value                                       | 0.8726       |        | Critical T Value | 0.8647              |        |
| Pass or Fail   | PASS         |        | Pass or Fail     | PASS                |        |

| DEP Whole Effluent Toxicity (WET) Analysis Spreadsheet |              |       |  |                      |           |  |  |
|--|--------------|-------|--|----------------------|-----------|--|--|
| Type of Test   | Chronic      |       |  | Facility Name        |           |  |  |
| Species Tested   | Ceriodaphnia |       |  | Cresson Borough STP  |           |  |  |
| Endpoint   | Survival     |       |  | Permit No.           |           |  |  |
| TIWC (decimal)   | 0.99         |       |  | PA0110663            |           |  |  |
| No. Per Replicate                                      | 1            |       |  |                      |           |  |  |
| TST b value  | 0.75         |       |  |                      |           |  |  |
| TST alpha value  | 0.2          |       |  |                      |           |  |  |
| Test Completion Date                                   |              |       |  |                      |           |  |  |
| Replicate  | 7/26/2021    |       |  | Test Completion Date |           |  |  |
| No.  | Control      | TIWC  |  | Replicate            | 7/26/2022 |  |  |
| 1  | 1            | 1     |  | 1                    | 1         |  |  |
| 2  | 1            |       |  | 2                    | 1         |  |  |
| 3  | 1            | 1     |  | 3                    | 1         |  |  |
| 4  | 1            | 1     |  | 4                    | 1         |  |  |
| 5  | 1            | 1     |  | 5                    | 1         |  |  |
| 6  | 1            | 1     |  | 6                    | 1         |  |  |
| 7  | 1            | 1     |  | 7                    | 1         |  |  |
| 8  | 1            | 1     |  | 8                    | 1         |  |  |
| 9  | 1            | 1     |  | 9                    | 1         |  |  |
| 10   | 1            | 1     |  | 10                   | 1         |  |  |
| 11   |              |       |  | 11                   |           |  |  |
| 12   |              |       |  | 12                   |           |  |  |
| 13   |              |       |  | 13                   |           |  |  |
| 14   |              |       |  | 14                   |           |  |  |
| 15   |              |       |  | 15                   |           |  |  |
| Mean   | 1.000        | 1.000 |  | Mean                 | 1.000     |  |  |
| Std Dev.   | 0.000        | 0.000 |  | Std Dev.             | 0.000     |  |  |
| # Replicates   | 10           | 9     |  | # Replicates         | 10        |  |  |
| T-Test Result  |              |       |  | T-Test Result        |           |  |  |
| Deg. of Freedom  |              |       |  | Deg. of Freedom      |           |  |  |
| Critical T Value                                       |              |       |  | Critical T Value     |           |  |  |
| Pass or Fail   | PASS         |       |  | Pass or Fail         | PASS      |  |  |
| Test Completion Date                                   |              |       |  |                      |           |  |  |
| Replicate  | 7/24/2023    |       |  | Test Completion Date |           |  |  |
| No.  | Control      | TIWC  |  | Replicate            | 6/27/2024 |  |  |
| 1  | 1            | 1     |  | 1                    | 1         |  |  |
| 2  | 1            | 1     |  | 2                    | 1         |  |  |
| 3  | 1            | 1     |  | 3                    | 1         |  |  |
| 4  | 1            | 1     |  | 4                    | 1         |  |  |
| 5  | 0            | 1     |  | 5                    | 1         |  |  |
| 6  | 1            | 1     |  | 6                    | 1         |  |  |
| 7  | 1            | 1     |  | 7                    | 1         |  |  |
| 8  | 1            | 1     |  | 8                    | 1         |  |  |
| 9  | 1            | 1     |  | 9                    | 1         |  |  |
| 10   | 1            | 1     |  | 10                   | 1         |  |  |
| 11   |              |       |  | 11                   |           |  |  |
| 12   |              |       |  | 12                   |           |  |  |
| 13   |              |       |  | 13                   |           |  |  |
| 14   |              |       |  | 14                   |           |  |  |
| 15   |              |       |  | 15                   |           |  |  |
| Mean   | 0.900        | 1.000 |  | Mean                 | 1.000     |  |  |
| Std Dev.   | 0.316        | 0.000 |  | Std Dev.             | 0.000     |  |  |
| # Replicates   | 10           | 10    |  | # Replicates         | 10        |  |  |
| T-Test Result  |              |       |  | T-Test Result        |           |  |  |
| Deg. of Freedom  |              |       |  | Deg. of Freedom      |           |  |  |
| Critical T Value                                       |              |       |  | Critical T Value     |           |  |  |
| Pass or Fail   | PASS         |       |  | Pass or Fail         | PASS      |  |  |

| DEP Whole Effluent Toxicity (WET) Analysis Spreadsheet |            |                     |                  |           |       |
|--|------------|---------------------|------------------|-----------|-------|
| Type of Test   | Chronic    | Facility Name       |                  |           |       |
| Species Tested   | Pimephales | Cresson Borough STP |                  |           |       |
| Endpoint   | Survival   |                     |                  |           |       |
| TIWC (decimal)   | 0.99       | Permit No.          |                  |           |       |
| No. Per Replicate                                      | 10         | PA0110663           |                  |           |       |
| TST b value  | 0.75       |                     |                  |           |       |
| TST alpha value  | 0.25       |                     |                  |           |       |
| Test Completion Date                                   |            |                     |                  |           |       |
| Replicate No.  | 7/27/2021  |                     | Replicate No.    | 7/26/2022 |       |
|  | Control    | TIWC                |                  | Control   | TIWC  |
| 1  | 0.9        | 1                   | 1                | 1         | 0.9   |
| 2  | 0.6        | 1                   | 2                | 1         | 1     |
| 3  | 0.9        | 1                   | 3                | 1         | 1     |
| 4  | 0.9        | 1                   | 4                | 1         | 1     |
| 5  |            |                     | 5                |           |       |
| 6  |            |                     | 6                |           |       |
| 7  |            |                     | 7                |           |       |
| 8  |            |                     | 8                |           |       |
| 9  |            |                     | 9                |           |       |
| 10   |            |                     | 10               |           |       |
| 11   |            |                     | 11               |           |       |
| 12   |            |                     | 12               |           |       |
| 13   |            |                     | 13               |           |       |
| 14   |            |                     | 14               |           |       |
| 15   |            |                     | 15               |           |       |
| Mean   | 0.825      | 1.000               | Mean             | 1.000     | 0.975 |
| Std Dev.   | 0.150      | 0.000               | Std Dev.         | 0.000     | 0.050 |
| # Replicates   | 4          | 4                   | # Replicates     | 4         | 4     |
| T-Test Result  | 9.6890     |                     | T-Test Result    | 17.8623   |       |
| Deg. of Freedom  | 3          |                     | Deg. of Freedom  | 3         |       |
| Critical T Value                                       | 0.7649     |                     | Critical T Value | 0.7649    |       |
| Pass or Fail   | PASS       |                     | Pass or Fail     | PASS      |       |
| Test Completion Date                                   |            |                     |                  |           |       |
| Replicate No.  | 7/25/2023  |                     | Replicate No.    | 5/28/2024 |       |
|  | Control    | TIWC                |                  | Control   | TIWC  |
| 1  | 1          | 1                   | 1                | 0.9       | 1     |
| 2  | 1          | 1                   | 2                | 0.9       | 0.8   |
| 3  | 1          | 1                   | 3                | 1         | 0.9   |
| 4  | 1          | 1                   | 4                | 1         | 0.6   |
| 5  |            |                     | 5                |           |       |
| 6  |            |                     | 6                |           |       |
| 7  |            |                     | 7                |           |       |
| 8  |            |                     | 8                |           |       |
| 9  |            |                     | 9                |           |       |
| 10   |            |                     | 10               |           |       |
| 11   |            |                     | 11               |           |       |
| 12   |            |                     | 12               |           |       |
| 13   |            |                     | 13               |           |       |
| 14   |            |                     | 14               |           |       |
| 15   |            |                     | 15               |           |       |
| Mean   | 1.000      | 1.000               | Mean             | 0.950     | 0.825 |
| Std Dev.   | 0.000      | 0.000               | Std Dev.         | 0.058     | 0.171 |
| # Replicates   | 4          | 4                   | # Replicates     | 4         | 4     |
| T-Test Result  |            |                     | T-Test Result    | 3.3796    |       |
| Deg. of Freedom  |            |                     | Deg. of Freedom  | 4         |       |
| Critical T Value                                       |            |                     | Critical T Value | 0.7407    |       |
| Pass or Fail   | PASS       |                     | Pass or Fail     | PASS      |       |

| DEP Whole Effluent Toxicity (WET) Analysis Spreadsheet |            |       |  |                      |           |  |
|--|------------|-------|--|----------------------|-----------|--|
| Type of Test   | Chronic    |       |  | Facility Name        |           |  |
| Species Tested   | Pimephales |       |  | Cresson Borough STP  |           |  |
| Endpoint   | Growth     |       |  | Permit No.           |           |  |
| TIWC (decimal)   | 0.99       |       |  | PA0110663            |           |  |
| No. Per Replicate                                      | 10         |       |  |                      |           |  |
| TST b value  | 0.75       |       |  |                      |           |  |
| TST alpha value  | 0.25       |       |  |                      |           |  |
| Test Completion Date                                   |            |       |  |                      |           |  |
| Replicate  | 7/27/2021  |       |  | Test Completion Date |           |  |
| No.  | Control    | TIWC  |  | Replicate            | 7/26/2022 |  |
| 1  | 0.323      | 0.438 |  | No.                  | Control   |  |
| 2  | 0.336      | 0.352 |  | 1                    | 0.307     |  |
| 3  | 0.296      | 0.404 |  | 2                    | 0.284     |  |
| 4  | 0.356      | 0.399 |  | 3                    | 0.358     |  |
| 5  |            |       |  | 4                    | 0.411     |  |
| 6  |            |       |  | 5                    |           |  |
| 7  |            |       |  | 6                    |           |  |
| 8  |            |       |  | 7                    |           |  |
| 9  |            |       |  | 8                    |           |  |
| 10   |            |       |  | 9                    |           |  |
| 11   |            |       |  | 10                   |           |  |
| 12   |            |       |  | 11                   |           |  |
| 13   |            |       |  | 12                   |           |  |
| 14   |            |       |  | 13                   |           |  |
| 15   |            |       |  | 14                   |           |  |
|  |            |       |  | 15                   |           |  |
| Mean   | 0.328      | 0.398 |  | Mean                 | 0.340     |  |
| Std Dev.   | 0.025      | 0.035 |  | Std Dev.             | 0.057     |  |
| # Replicates   | 4          | 4     |  | # Replicates         | 4         |  |
| T-Test Result  | 7.6063     |       |  | T-Test Result        | 4.0901    |  |
| Deg. of Freedom  | 5          |       |  | Deg. of Freedom      | 5         |  |
| Critical T Value                                       | 0.7267     |       |  | Critical T Value     | 0.7267    |  |
| Pass or Fail   | PASS       |       |  | Pass or Fail         | PASS      |  |
| Test Completion Date                                   |            |       |  |                      |           |  |
| Replicate  | 7/24/2023  |       |  | Test Completion Date |           |  |
| No.  | Control    | TIWC  |  | Replicate            | 5/28/2024 |  |
| 1  | 0.327      | 0.437 |  | No.                  | Control   |  |
| 2  | 0.342      | 0.403 |  | 1                    | 0.269     |  |
| 3  | 0.335      | 0.461 |  | 2                    | 0.283     |  |
| 4  | 0.343      | 0.404 |  | 3                    | 0.29      |  |
| 5  |            |       |  | 4                    | 0.286     |  |
| 6  |            |       |  | 5                    |           |  |
| 7  |            |       |  | 6                    |           |  |
| 8  |            |       |  | 7                    |           |  |
| 9  |            |       |  | 8                    |           |  |
| 10   |            |       |  | 9                    |           |  |
| 11   |            |       |  | 10                   |           |  |
| 12   |            |       |  | 11                   |           |  |
| 13   |            |       |  | 12                   |           |  |
| 14   |            |       |  | 13                   |           |  |
| 15   |            |       |  | 14                   |           |  |
|  |            |       |  | 15                   |           |  |
| Mean   | 0.337      | 0.426 |  | Mean                 | 0.282     |  |
| Std Dev.   | 0.007      | 0.028 |  | Std Dev.             | 0.009     |  |
| # Replicates   | 4          | 4     |  | # Replicates         | 4         |  |
| T-Test Result  | 12.1521    |       |  | T-Test Result        | 4.6203    |  |
| Deg. of Freedom  | 3          |       |  | Deg. of Freedom      | 3         |  |
| Critical T Value                                       | 0.7649     |       |  | Critical T Value     | 0.7649    |  |
| Pass or Fail   | PASS       |       |  | Pass or Fail         | PASS      |  |

| WET Summary and Evaluation    |                                |                          |           |           |  |  |  |
|-------------------------------|--------------------------------|--------------------------|-----------|-----------|--|--|--|
| Facility Name                 | Cresson Borough STP            |                          |           |           |  |  |  |
| Permit No.                    | PA0110663                      |                          |           |           |  |  |  |
| Design Flow (MGD)             | 1.5                            |                          |           |           |  |  |  |
| Q <sub>7-10</sub> Flow (cfs)  | 0.0838                         |                          |           |           |  |  |  |
| PMF <sub>a</sub>              | 1                              |                          |           |           |  |  |  |
| PMF <sub>c</sub>              | 1                              |                          |           |           |  |  |  |
| Species                       |                                | Test Results (Pass/Fail) |           |           |  |  |  |
| Species                       | Endpoint                       | Test Date                | Test Date | Test Date |  |  |  |
|                               |                                | 7/26/21                  | 7/28/22   | 7/24/23   |  |  |  |
| Ceriodaphnia                  |                                | PASS                     | PASS      | PASS      |  |  |  |
| Species                       |                                | Test Results (Pass/Fail) |           |           |  |  |  |
| Species                       | Endpoint                       | Test Date                | Test Date | Test Date |  |  |  |
|                               |                                | 7/26/21                  | 7/26/22   | 7/24/23   |  |  |  |
| Ceriodaphnia                  |                                | PASS                     | PASS      | PASS      |  |  |  |
| Species                       |                                | Test Results (Pass/Fail) |           |           |  |  |  |
| Species                       | Endpoint                       | Test Date                | Test Date | Test Date |  |  |  |
|                               |                                | 7/27/21                  | 7/26/22   | 7/25/23   |  |  |  |
| Pimephales                    |                                | PASS                     | PASS      | PASS      |  |  |  |
| Species                       |                                | Test Results (Pass/Fail) |           |           |  |  |  |
| Species                       | Endpoint                       | Test Date                | Test Date | Test Date |  |  |  |
|                               |                                | 7/27/21                  | 7/26/22   | 7/24/23   |  |  |  |
| Pimephales                    |                                | PASS                     | PASS      | PASS      |  |  |  |
| Reasonable Potential?         |                                | NO                       |           |           |  |  |  |
| <b>Permit Recommendations</b> |                                |                          |           |           |  |  |  |
| Test Type                     | Chronic                        |                          |           |           |  |  |  |
| TIWC                          | 97 % Effluent                  |                          |           |           |  |  |  |
| Dilution Series               | 24, 49, 73, 97, 100 % Effluent |                          |           |           |  |  |  |
| Permit Limit                  | None                           |                          |           |           |  |  |  |
| Permit Limit Species          |                                |                          |           |           |  |  |  |