

Application Type Renewal  
Facility Type Sewage  
Major / Minor Major

**NPDES PERMIT FACT SHEET  
ADDENDUM**

Application No. PA0021148  
APS ID 1064579  
Authorization ID 1398267

**Applicant and Facility Information**

Applicant Name	<u>Municipal Authority of Westmoreland County (MAWC)</u>	Facility Name	<u>Mt Pleasant Borough STP</u>
Applicant Address	<u>124 Park &amp; Pool Road</u> <u>New Stanton, PA 15672</u>	Facility Address	<u>360 Clay Avenue</u> <u>Mount Pleasant, PA 15666-1910</u>
Applicant Contact	<u>Norman Stout</u>	Facility Contact	<u>Same as applicant</u>
Applicant Phone	<u>(724) 755-5921</u>	Facility Phone	<u>Same as applicant</u>
Client ID	<u>64197</u>	Site ID	<u>271476</u>
SIC Code	<u>4952</u>	Municipality	<u>Mount Pleasant Township</u>
SIC Description	<u>Trans. &amp; Utilities - Sewerage Systems</u>	County	<u>Westmoreland</u>
Date Published in PA Bulletin	<u>March 11, 2023</u>	EPA Waived?	<u>No</u>
Comment Period End Date	<u>April 10, 2023</u>	If No, Reason	<u>Major facility</u>
Purpose of Application	<u>Application for a renewal of an NPDES permit for discharge of treated Sewage</u>		

**Internal Review and Recommendations**

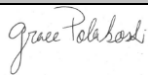
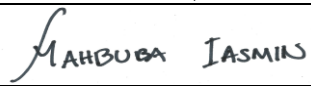
The draft permit notification was published in the PA Bulletin on March 11, 2023.

The comment period ended on April 10, 2023. Comments were received from US EPA Region III and the Municipal Authority of Westmoreland County. This NPDES Permit will be drafted a second time in order to address the changes made as a result of comments received.

In an email dated March 20, 2023, the DEP received the following comments from US EPA Region III. The comments are reproduced below with DEP responses. The full correspondence can be found in Attachment A.

*Regarding RP*

*Page 12 of the draft fact sheet states "Because MAWC elected to perform 10 additional samples, any samples that were considered to be "outliers" were removed from consideration." EPA's TSD guidance recommends using maximum concentrations using RP, as does PADEP's SOP on Establishing WQBELs and Permit Conditions for Toxic Pollutants in NPDES Permits. Section 3.3.2 of the TSD guidance states that its statistical approach for RP assessments takes into account effluent variability and inherent uncertainty due to limited number of data, and uses the maximum concentration to evaluate RP. PADEP's SOP states for sample sizes less than 10 the maximum reported effluent concentration should be used, and for sample sizes greater than or equal to 10 the average monthly effluent concentration (AMEC) should be used as determined by TOXCONC. It further states that "For sample sizes less than 10, the application manager may not remove data perceived to be outliers unless there are extenuating circumstances such as laboratory or sampling error that are documented in the fact sheet. For sample sizes greater than or equal to 10, if outliers are suspected, the median rather than the AMEC should be used to determine whether a pollutant is a candidate for modeling." In either case, the SOP does not instruct permit writers to remove data that are perceived to be outliers. EPA's concern is that removing outliers could remove*

Approve	Deny	Signatures	Date
X		 Grace Polakoski, E.I.T. / Environmental Engineering Specialist	July 14, 2023
X		 Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineer Manager	August 8, 2023

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a valid high data point that would otherwise be used in the RP assessment. EPA’s Guidance for Data Quality Assessment (<https://www.epa.gov/sites/default/files/2015-06/documents/g9-final.pdf>) discusses some of the outlier tests that are available for use, but also provides a number of cautions. In section 4.4.1, it explains that outlier tests alone cannot determine whether a statistical outlier should be discarded within a data set. This decision should be based on judgmental or scientific grounds. It also explains that discarding an outlier from a data set should be done with extreme caution, particularly for environmental data sets, which often contain legitimate extreme values. If PADEP is going to remove outliers, the fact sheet should fully document the test(s) that was used and include a justification for the decision to discard any data value(s) such as those described in PADEP’s SOP.

**DEP Response:** Based on EPA comments, RP for all toxic pollutant was re-evaluated according to DEP SOP “Establishing Water-Quality Based Effluent Limitations (WQBELs) and Permit Conditions for Toxic Pollutants in NPDES Permits for Existing Dischargers” (SOP No. BCW-PMT-037, Rev. May 20, 2021). For all toxics with 10 or more samples, the available data was analyzed to determine if outlier values were suspected. If no outliers were suspected, the samples were analyzed in TOX\_CONC to determine the AMEC value. If outliers were suspected, the median of the samples was taken. Outlier values were not disregarded. Outliers were only suspected for Free Cyanide so the median value of the available samples for Free Cyanide was entered into the TMS. Outliers were not suspected for Total Copper, Dissolved Iron, Chloroform, Dichlorobromomethane, Benzo(k)fluoranthene, Bis(2-Ethylhexyl)Phthalate, or Indeno(1,2,3-cd)Pyrene so the AMEC value was entered into the TMS for those parameters. The decision matrix can be found in the table below, TOX\_CONC Modeling can be found in Attachment B, and TMS Modeling can be found in Attachment C.

Parameter	Are there more than 10 samples?	Is an outlier suspected?	AMEC or MEDIAN	TMS Input Value (µg/L)
Total Copper	Yes	No	AMEC	11.56
Free Cyanide	Yes	Yes	MEDIAN	7
Dissolved Iron	Yes	No	AMEC	54.26
Chloroform	Yes	No	AMEC	19.6
Dichlorobromomethane	Yes	No	AMEC	5.06
Benzo(k)fluoranthene	Yes	No	AMEC	0.373
Bis(2-Ethylhexyl)Phthalate	Yes	No	AMEC	2.22
Indeno(1,2,3-cd)Pyrene	Yes	No	AMEC	0.47

*Regarding WET*

For the permit renewal, MAWC performed 3 chronic WET Tests at a TIWC of 95%. It is understood that MAWC did not acquire the plant until 2020 and the previous permittee had not performed a WET Test for 2019. The NPDES Test of Significant Toxicity (TST) Technical Document (<https://www3.epa.gov/npdes/pubs/tst-techdoc.pdf>) and the NPDES Test of Significant Toxicity Implementation Document ([https://www3.epa.gov/npdes/pubs/wet\\_final\\_tst\\_implementation2010.pdf](https://www3.epa.gov/npdes/pubs/wet_final_tst_implementation2010.pdf)) explain that in order to evaluate Reasonable Potential (RP) using the TST, 4 WET tests are necessary. The documents state that a minimum of four valid WET tests are necessary to address effluent representativeness. Therefore, since there are only 3 WET tests available, it is EPA’s expectation that the first WET test conducted during the first year of permit reissuance will be considered the fourth test necessary to complete the WET RP assessment using the current dilution series. PADEP will need to evaluate RP after the receipt of the fourth WET test and may need to amend the permit to include WET limits if RP is documented.

**DEP Response:** MAWC submitted 2023 WET Testing to the DEP on May 17, 2023. In accordance with the above comment, DEP re-evaluated RP including 2023 WET Test (see Attachment D). RP was not established therefore no WET limits will be added to the permit. The TIWC remains 99% and the dilution series remains 25%, 50%, 74%, 99%, and 100%.

*Regarding the CSO Provisions in the LTCP, Fact Sheet, and Permit*

- a. The draft NPDES permit did not include or authorize discharges from the CSO outfalls in Part A or Part C. Please revise the NPDES permit accordingly and include the CSO outfall numbers, receiving streams, and locations.

**DEP Response:** The CSO Outfall list was left out in error and has been added back in the second draft of the NPDES Permit in Part A. I. F. The CSO Outfall names and locations have also been updated at MAWC’s request.

**Internal Review and Recommendations**

- b. *Mount Pleasant's LTCP Update evaluated CSO control alternatives consistent with the 1994 CSO Policy. The LTCP states that MAWC intends to capture 94% by volume as its performance standard; however, the permit contains the 85% capture WQBEL requirement. The permit needs to include the CSO performance standard for the selected controls in the approved LTCP. PADEP will need to revise the performance standard to 94% as defined in the LTCP and LTCP Update.*

**DEP Response: The Performance Standard in Part C.II.C.2 of the NPDES Permit has been updated to 94% per the above comment.**

- c. *E. Coli monitoring must be included in post-construction compliance monitoring (PCCM) plans to verify compliance with the water quality standard and designated uses. The permit record must be revised to include a description of how PADEP intends to verify compliance with the E. Coli water quality standard for combined sewer discharges.*

**DEP Response: Language was added in Part C.II.C.3 of the NPDES Permit to inform the permittee of the E. Coli monitoring requirement.**

- d. *The compliance schedule and CSO Water Quality-Based Effluent Limit condition, Part C.C.2, does not clearly state when the performance standard applies which will become effective during this upcoming permit cycle. PADEP should include the LTCP compliance date as part of the schedule and define when the performance standard becomes effective.*

**DEP Response: A milestone was added to the LTCP Implementation Schedule in Part C.II.C.3 defining the LTCP Compliance Date and designating when the performance standard becomes effective.**

In a letter dated March 24, 2023, the DEP received the following comments from MAWC. The comments are reproduced below with DEP responses. The full correspondence can be found in Attachment E.

*Page 1*

*Mt. Pleasant Borough STP is technically located in the municipality of Mt. Pleasant Township.*

**DEP Response: This has been updated in all relevant locations.**

*Page 3, 4*

*Benzo(k)fluoranthene, Bis(2-ethylhexyl)Phthalate, and Indeno(1,2,3-cd)Pyrene were added to the effluent limitations even though all the sample results for these parameters were non-detect during the 10 weeks of effluent resampling.*

**DEP Response: The resampling data does not replace the data provided in the renewal application, it is considered additional information. It should be noted that the effluent data reported on the NPDES Renewal application did not meet DEP criteria for resampling, as reflected in the Pre-Draft Letter dated June 28, 2022. MAWC elected to collect additional data anyway.**

*Pages 5, 6*

*The effluent limitations for TRC and CBOD were made significantly more stringent, but the justification for this change is unclear. What specific data for the model has changed since the previous permit? Did the input data for the stream itself change, or did the input data for the discharge change?*

**DEP Response: There are many factors that affect CBOD<sub>5</sub> limitations. First, at the time the last permit was issued for Mt. Pleasant Borough STP, the DEP was using an older version of the WQM modeling software to evaluate CBOD<sub>5</sub>, ammonia-nitrogen, and dissolved oxygen. The DEP now uses the most updated version of the software (WQM7.0). MAWC is advised to refer to Page 11 of the first Draft NPDES Fact Sheet for a comprehensive listing of model inputs. It should also be noted that Mt. Pleasant Borough STP can immediately comply with the updated CBOD<sub>5</sub> effluent limitations, as determined by a review of past eDMR data. The most updated version of the TRC model was used for this permit renewal and likely explains the change in effluent limitations for TRC.**

Internal Review and Recommendations

Page 6

*The BOD influent and TSS influent monitoring requirements were changed from "Report Daily Max" to "Report Weekly Average." The DEP Influent & Process Control Supplemental Report form does not calculate maximum weekly averages. It only calculates the maximum daily value. Therefore, MAWC requests that the BOD influent and TSS influent monitoring requirements remain as "Report Daily Max."*

**DEP Response: The requested changes were made.**

Page 7

*The fact sheet states that the weekly average concentration limits for ammonia nitrogen were removed, but there are still values listed in this column in the effluent limitations table in Part A.*

**DEP Response: The statement on Page 13 of the first Draft NPDES Fact Sheet may have been misleading. According to DEP SOP "Establishing Effluent Limitations for Individual Sewage Permits" (BCW-PMT-003, Rev. March 24, 2021), only average monthly mass loading limits are generally established for ammonia-nitrogen. Therefore, the previously-imposed average weekly mass loading limits were removed during this permit cycle. Average weekly concentration limits for ammonia-nitrogen will remain in the permit.**

Pages 3, 4, 7

*MAWC believes that a sample frequency of 1/week is excessive for non-conventional parameters (Total Copper, Free Cyanide, Benzo(k)fluoranthene, Dichlorobromomethane, Bis(2-ethylhexyl)Phthalate, Chloroform, Indeno(1,2,3-cd)Pyrene, Dissolved Iron, Total Zinc) that have been added to this permit for the first time. The sampling cost for Mt. Pleasant Borough STP is going to increase substantially when going from 0 samples per year to 52 samples per year for these parameters, especially since some of them are VOCs and SVOCs.*

**DEP Response: For pollutants where only monitoring is required, DEP can decrease the sampling frequency from 1/week to 1/month. This would apply to Dissolved Iron and Total Zinc. For pollutants that have a numeric effluent limitation, the sampling frequency must remain at 1/week. Thus, sampling for Total Copper, Free Cyanide, Chloroform, Dichlorobromomethane, Benzo(k)fluoranthene, Bis(2-Ethylhexyl)Phthalate, and Indeno(1,2,3-cd)pyrene will remain at 1/week.**

Page 25

*The permit states that no stormwater shall be directly admitted to the sanitary sewers, but this is a combined sewer system.*

**DEP Response: This language is a standard condition but has been removed in the second draft of the NPDES Permit for clarity.**

*The permit states that no hauled-in waste can be accepted when the instantaneous flow exceeds 3.0 MGD, but the hydraulic design capacity of the plant (1.5 MGD) multiplied by a peaking factor of three is 4 MGD.*

**DEP Response: Part C.I.C has been updated to reflect the correct value of 4.0 MGD.**

*The CSO outfalls are not listed in Part A.*

**DEP Response: The CSO Outfall list was left out in error and has been added back in the second draft of the NPDES Permit in Part A. I. F. The CSO Outfall names and locations have also been updated at MAWC's request.**

Page 26

*MAWC is not responsible for street cleaning or cleaning storm sewers. This work is the responsibility of the municipality (Mt. Pleasant Borough).*

**DEP Response: DEP acknowledges this comment. No changes will be made to the NPDES permit.**

*Please provide clarification on the specific requirements for implementation of a pollution prevention program.*

Internal Review and Recommendations

DEP Response: EPA Guidance Document “Combined Sewer Overflows: Guidance for Nine Minimum Controls” (1995) lists the following activities as potential components of a Pollution Prevention Plan:

- Street cleaning: either mechanically or by flushing during dry periods
- Public education programs to bring awareness to the issue and provide guidance on proper disposal of different types of wastes
- Solid waste collection and recycling
- Product ban/substitution
- Control of product use (i.e. fertilizer, road salt)
- Control of illegal dumping
- Bulk refuse disposal
- Hazardous waste collection
- Water conservation
- Commercial/industrial pollution prevention

MAWC is advised to refer to the two following EPA Guidance documents in addition to the list above: “Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices” (1992) and “Municipal Wastewater Management Fact Sheets – Storm Water Best Management Practices” (1993). If MAWC has specific questions about the Pollution Prevention Plan for Mt. Pleasant Borough STP, they may submit the plan to the DEP for review.

*Please provide clarification on the specific requirements for public notification. Does posting signs at each CSO outfall satisfy this requirement?*

DEP Response: EPA Guidance Document “Combined Sewer Overflows: Guidance for Nine Minimum Controls” (1995) states the following about the public notification minimum control: “the intent of the eighth minimum control, public notification, is to inform the public of the location of CSO outfalls, actual occurrences of CSOs, the possible health and environmental effects of CSOs, and the recreational or commercial activities (e.g. swimming and shellfish harvesting) curtailed as a result of CSOs. Public notification is of particular concern at beach and recreation areas directly or indirectly affected by CSOs. Potential risk is generally indicated by the exceedance of relevant water quality criteria.”

While the selection of appropriate control measures is best left up to MAWC, the DEP recommends implementing a system to notify resident when a CSO event occurs, in addition to posting signs at each CSO outfall. The above-referenced EPA Guidance also provides a list of potential control measures to implement for the Public Notification minimum control.

*Please provide clarification on the specific requirements for monitoring CSO outfalls to characterize impacts and efficacy of controls. Do twice weekly and post-rain event inspections of the outfall pipe to visually check for debris and other visible stream impacts satisfy this requirement?*

DEP Response: The ninth minimum control involves visual inspections and other simple methods to determine the occurrence and apparent impacts of CSOs. This minimum control is an initial characterization of the Combined Sewer System (CSS) to collect and document information on overflow occurrences and known water quality problems and incidents that reflect use impairments caused by CSOs. This minimum control is the precursor to the more extensive characterization and monitoring efforts to be conducted as part of the LTCP to assess changes in pollutant loadings or receiving water conditions. Chapter 10 of EPA’s manual “Combined Sewer Overflow – Guidance for Nine Minimum Controls (May 1995)” addresses the requirements associated with the ninth minimum control – Monitoring to Characterize CSO Impacts and the Efficacy of CSO Controls.

In general, as long as MAWC is fulfilling the obligations as set forth in the previously-approved Nine Minimum Controls Plan, the requirements under this NMC are considered satisfied. However, MAWC must evaluate and determine if the information received through this monitoring requirement is working toward overall compliance with EPA’s CSO Control Policy.

**Internal Review and Recommendations**

*The Pretreatment Program section is written for continued implementation of an existing program, rather than for development of a new program. Mt. Pleasant Borough STP is not currently covered by an EPA-approved Pretreatment Program.*

**DEP Response:** For permittees with existing Pretreatment Programs, the DEP has elected to include the Part C Condition "POTW Pretreatment Program Implementation" per the recommendation of the EPA. It is expected that permittees with existing Pretreatment Programs will incorporate POTWs not previously covered under the Pretreatment Program into their existing ones.

*Page 32*

*MAWC does not believe that Benzo(k)fluoranthene, Bis(2-ethylhexyl)Phthalate, and Indeno(1,2,3-cd)Pyrene should be included in the WQBELs table and TRE requirement because all of the sample results for these parameters were non-detect during the 10 weeks of effluent sampling.*

**DEP Response:** Refer to Attachment D for the updated modeling for Benzo(k)fluoranthene, Bis(2-ethylhexyl)Phthalate, and Indeno(1,2,3-cd)Pyrene.

*Pages 32-33*

*The Final WQBEL Compliance Report schedule for Mt. Pleasant Borough STP is more stringent than the schedule that was included in the draft permit for Jeannette WWTP. Why would these timeframes not be consistent for all facilities that are subject to this requirement?*

**DEP Response:** Compliance schedules are, to some extent, up to the discretion of the permit writer. Most compliance schedules last 2 years. MAWC may request a reasonable extension (with supporting justification and evidence) from the DEP if they feel that the compliance schedule associated with the new TRC limits to the TRE is not feasible.

*Page 39*

*The stormwater outfalls listed in this table do not include two roof drains shown on the "Mount Pleasant Borough Sewage Treatment Plant Proposed Outfall Locations for the Municipal Authority of Westmoreland County" map that was included as an attachment to the permit renewal application. Are roof drain outfall pipes not required to be counted as stormwater outfalls?*

**DEP Response:** The roof drains were left out of the Draft NPDES Permit due to a miscommunication. Roof Drain 1 will be added to the permit as Stormwater Outfall 024 and Roof Drain 2 will be added to the permit as Stormwater Outfall 025, to comply with the current numbering scheme. Stormwater Outfall 021 was removed from the permit at the request of Gibson-Thomas Engineering.

*Questions/Comments Regarding the Fact Sheet*

*Pages 12-13*

*Attachment E*

*The CBOD5 output lists 17.85 mg/L, but the draft permit lists 17.0 mg/L.*

**DEP Response:** Page 13 of the Draft Fact Sheet indicates that any Mass Loading Limitations have been rounded according to DEP rounding guidance. DEP rounding guidance can be found in Chapter 5, Section C.2 of "Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits" (362-0400-001).

*Attachment F*

*Why is the "Chlorine Demand of Discharge" input 0?*

*Why is the Decay Coefficient (K) left blank?*

**DEP Response:** These are model defaults for the TRC\_CALC program.

*Attachment J*

**Internal Review and Recommendations**

*For Total Copper, Dichlorobromomethane, Benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, and indeno(1,2,3-cd)pyrene, there is an extra sample result labeled 05/27/22 that was not part of this resampling.*

**DEP Response:** The sample result labeled 05/27/22 reflected the data provided on the NPDES Renewal Application. The NPDES Renewal Application data was still considered as part of the reasonable potential analysis.

*For Dichlorobromomethane, there is a missing sample results of 0.620 µg/L from 8/31/22.*

**DEP Response:** Previously, this has been identified as the “outlier” value for Dichlorobromomethane. It has been included in the new AMEC analysis.

*For Benzo(k)fluoranthene, bis(2-ethylhexyl)Phthalate, and Indeno(1,2,3-cd)Pyrene, the less than symbol was not included to show that these were all non-detect results.*

**DEP Response:** All of the comments on Attachment J of the previous Fact Sheet are addressed in the re-run of the TMS, which can be found in Attachment C of this Fact Sheet.

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DEP would also like to note that both the first draft of this NPDES Permit (issued on February 24, 2023) and in the enclosed draft of this NPDES permit includes an updated LTCP Compliance Schedule. MAWC requested an extension to the LTCP Implementation Schedule within their NPDES Permit Renewal Application in May 2022. DEP approved the new timeline on November 9, 2022 (as stated in the previous Fact Sheet).

Upon review of the previous/current active NPDES Permit, it is clear that a CSO performance standard is not included in the permit and the only LTCP Implementation Schedule listed consists of Interim Milestones only, without indication of a Final Compliance Date in which DEP and EPA expect the permittee to comply with Water Quality Standards. Per a discussion between DEP and US EPA Region III personnel on July 12, 2023, extending Interim Milestones does not require an anti-backsliding analysis. Additionally, this second draft of the NPDES permit includes a CSO Performance Standard in Part C.II.C.2 and an LTCP Implementation Schedule with a Final Compliance Date in Part C.II.C.3. Including a CSO Performance Standard and a Final Compliance Date within the NPDES permit, makes the enclosed draft NPDES permit more stringent than the one that was previously issued. Thus, no anti-backsliding analysis has been conducted for this permit cycle.

The permittee should note, however, that if an extension to the LTCP compliance schedule is proposed during this upcoming permit cycle, they must submit an application for a Major NPDES Amendment that includes appropriate justification for their requests.

**ATTACHMENT A:**  
**EPA Correspondence (March 20, 2023)**



**Polakoski, Grace**

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**From:** Fulton, Jennifer <Fulton.Jennifer@epa.gov>  
**Sent:** Monday, March 20, 2023 3:55 PM  
**To:** Polakoski, Grace  
**Cc:** Iasmin, Mahbuba; Furjanic, Sean; Schumack, Maria; Martinsen, Jessica; Hales, Dana; Shuart, Ryan  
**Subject:** [External] Mount Pleasant Borough (PA0021148)  
**Attachments:** 4 15 POLICY WP Memo to Begin Rulemaking Chapter 92a - final approved.pdf; CSO\_LETTER\_TO\_EPA\_09June2020\_.pdf

**ATTENTION:** This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the [Report Phishing button in Outlook](#).

Grace,

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

**Mount Pleasant Borough**  
**Municipal Authority of Westmoreland County (MAWC)**  
**NPDES Number: PA0021148**  
**EPA Received: 2/28/2023**  
**30-day response due date: 3/30/2023**

This is a major permit that discharges to Shupe Run. EPA has chosen to perform a limited review of the following: the CSO provisions; WET; Pretreatment Requirements; the compliance schedule and RP analysis for total copper, free cyanide, dissolved iron, total zinc, total residual chlorine, dichlorobromomethane, benzo(k)fluoranthene, bis(2-Ethylhexyl)Phthalate, and indeno(1,2,3-cd)pyrene. EPA has completed its review and offers the following comments:

Regarding RP

1. Page 12 of the draft fact sheet states "Because MAWC elected to perform 10 additional samples, any samples that were considered to be "outliers" were removed from consideration". EPA's TSD guidance recommends using maximum concentrations to evaluate RP, as does PADEP's SOP on Establishing WQBELs and Permit Conditions for Toxic Pollutants in NPDES Permits. Section 3.3.2 of the TSD guidance states that its statistical approach for RP assessments takes into account effluent variability and inherent uncertainty due to limited number of data, and uses the maximum concentration to evaluate RP. PADEP's SOP states for sample sizes less than 10 the maximum reported effluent concentration should be used, and for sample sizes greater than or equal to 10 the average monthly effluent concentration (AMEC) should be used as determined by TOXCONC. It further states that "For sample sizes less than 10, the application manager may not remove data perceived to be outliers unless there are extenuating circumstances such as laboratory or sampling error that are documented in the fact sheet. For sample sizes greater than or equal to 10, if outliers are suspected, the median rather than the AMEC should be used to determine whether a pollutant is a candidate for modeling." In either case, the SOP does not instruct permit writers to remove data that are perceived to be outliers. EPA's concern is that removing outliers could remove a valid high data point that would otherwise be used in the RP assessment. EPA's Guidance for Data Quality Assessment (<https://www.epa.gov/sites/default/files/2015-06/documents/g9-final.pdf>) discusses some of the outlier tests that are available for use, but also provides a number of cautions. In section 4.4.1, it explains that outlier tests alone cannot determine whether a statistical outlier should be discarded within a data set. This decision should be based on judgmental or scientific grounds. It also explains

that discarding an outlier from a data set should be done with extreme caution, particularly for environmental data sets, which often contain legitimate extreme values. If PADEP is going to remove outliers, the fact sheet should fully document the test(s) that was used and include a justification for the decision to discard any data value(s) such as those described in PADEP's SOP.

Regarding WET

2. For the permit renewal, MAWC performed 3 chronic WET Tests at a TIWC of 95%. It is understood that MAWC did not acquire the plant until 2020 and the previous permittee had not performed a WET Test for 2019. The NPDES Test of Significant Toxicity (TST) Technical Document (<https://www3.epa.gov/npdes/pubs/tst-techdoc.pdf>) and the NPDES Test of Significant Toxicity Implementation Document ([https://www3.epa.gov/npdes/pubs/wet\\_final\\_tst\\_implementation2010.pdf](https://www3.epa.gov/npdes/pubs/wet_final_tst_implementation2010.pdf)) explain that in order to evaluate Reasonable Potential (RP) using the TST, 4 WET tests are necessary. The documents state that a minimum of four valid WET tests are necessary to address effluent representativeness. Therefore, since there are only 3 WET tests available, it is EPA's expectation that the first WET test conducted during the first year of the permit reissuance will be considered the fourth test necessary to complete the WET RP assessment using the current dilution series. PADEP will need to evaluate RP after receipt of the fourth WET test and may need amend the permit to include WET limits if RP is documented.

Regarding the CSO Provisions in the LTCP, Fact Sheet and Permit

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

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

EPA offers the following CSO comments based on the draft permit, LTCP and supporting documents

- a. The draft NPDES permit did not include or authorize discharges from the CSO outfalls in Part A or Part C. Please revise the NPDES permit accordingly and include the CSO outfall numbers, receiving streams and locations.
- b. Mount Pleasant's LTCP Update evaluated CSO control alternatives consistent with the 1994 CSO Policy. The LTCP states that MAWC intends to capture 94% by volume as its performance standard; however, the permit contains the 85% capture WQBEL requirement. The permit needs to include the CSO

performance standard for the selected controls in the approved LTCP. PADEP will need to revise the performance standard to 94% as defined in the LTCP and LTCP Update.

- c. E. coli monitoring must be included in post-construction compliance monitoring (PCCM) plans to verify compliance with the water quality standard and designated uses. The permit record must be revised to include a description of how PADEP intends to verify compliance with the E. coli water quality standard for combined sewer discharges.
- d. The compliance schedule and CSO Water Quality-Based Effluent Limit condition, Part C.C.2, does not clearly state when the performance standard applies which will become effective during this upcoming permit cycle. PADEP should include the LTCP compliance date as part of the schedule and define when the performance standard becomes effective.

Please address the above and provide us with any changes to the draft permit and/or fact sheet, if necessary. Should you have any questions, please feel free to reach out to Ryan Shuart, copied on this email. If there are any additional changes to the permit documents, please be sure to reach out to EPA as additional review may be necessary.

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)  
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**ATTACHMENT B:**  
**TOX\_CONC Model Results**

**NPDES Permit Fact Sheet  
Mt Pleasant Borough STP**

**NPDES Permit No. PA0021148**

Facility: Mt Pleasant Borough STP  
 NPDES #: PA0021148  
 Outfall No: 001  
 n (Samples/Month): 4  
 Reviewer/Permit Engineer: GRP

Parameter Name	enzo(k)fluoranthene				
Units	µg/L				
Detection Limit	0.315				
Sample Date	<i>When entering values below the detection limit, enter "ND" or use the &lt; notation (eg. &lt;0.02)</i>				
05/27/22	0.135				
07/27/22	<.312				
08/03/22	<.309				
08/10/22	<.312				
08/17/22	<.312				
08/24/22	<.312				
08/31/22	0.315				
09/07/22	<.306				
09/14/22	<.309				
09/21/22	<.312				
09/28/22	<.306				

Parameter	Distribution Applied	Coefficient of Variation (daily)	Avg. Monthly
enzo(k)fluoranthene (µg/L)	Delta-Lognormal	0.2444981	0.3731036

Facility: Mt Pleasant Borough STP  
 NPDES #: PA0021148  
 Outfall No: 001  
 n (Samples/Month): 4  
 Reviewer/Permit Engineer: GRP

Parameter Name	2-Ethylhexyl)Phthalate				
Units	µg/L				
Detection Limit	1.49				
Sample Date	<i>When entering values below the detection limit, enter "ND" or use the &lt; notation (eg. &lt;0.02)</i>				
05/27/22	2.7				
07/27/22	<1.48				
08/03/22	<1.46				
08/10/22	<1.48				
08/17/22	<1.48				
08/24/22	<1.48				
08/31/22	1.49				
09/07/22	<1.45				
09/14/22	<1.46				
09/21/22	<1.48				
09/28/22	<1.45				

Parameter	Distribution Applied	Coefficient of Variation (daily)	Avg. Monthly
2-Ethylhexyl)Phthalate (µ	Delta-Lognormal	0.3040141	2.2190183

Facility: Mt Pleasant Boro STP  
 NPDES #: PA0021148  
 Outfall No: 001  
 n (Samples/Month): 4  
 Reviewer/Permit Engineer: GRP

Parameter Name	Chloroform				
Units	µg/L				
Detection Limit	0.5				
Sample Date	<i>When entering values below the detection limit, enter "ND" or use the &lt; notation (eg. &lt;0.02)</i>				
05/27/22	20.7				
08/03/22	16.3				
08/10/22	11.5				
08/17/22	10				
08/24/22	13				
08/31/22	4.16				
09/07/22	6.58				
09/14/22	14.6				
09/21/22	12.4				
09/28/22	8.83				
10/12/22	9.59				

Parameter	Distribution Applied	Coefficient of Variation (daily)	Avg. Monthly
Chloroform (µg/L)	Lognormal	0.4648595	19.6054488

Facility: Mt Pleasant Boro STP  
 NPDES #: PA0021148  
 Outfall No: 001  
 n (Samples/Month): 4  
 Reviewer/Permit Engineer: GRP

Parameter Name	chlorobromomethane				
Units	µg/L				
Detection Limit	0.5				
Sample Date	<i>When entering values below the detection limit, enter "ND" or use the &lt; notation (eg. &lt;0.02)</i>				
05/27/22	2.5				
08/03/22	3.41				
08/10/22	2.98				
08/17/22	3.3				
08/24/22	3.83				
08/31/22	0.62				
09/07/22	1.22				
09/14/22	4				
09/21/22	2.48				
09/28/22	1.67				
10/12/22	1.86				

Parameter	Distribution Applied	Coefficient of Variation (daily)	Avg. Monthly
chlorobromomethane (µg/L)	Lognormal	0.6134639	5.0692298

Facility: Mt Pleasant Boro STP  
 NPDES #: PA0021148  
 Outfall No: 001  
 n (Samples/Month): 4  
 Reviewer/Permit Engineer: GRP

Parameter Name	Dissolved Iron				
Units	µg/L				
Detection Limit	20				
Sample Date	<i>When entering values below the detection limit, enter "ND" or use the &lt; notation (eg. &lt;0.02)</i>				
05/27/22	64				
07/27/22	31				
08/03/22	37				
08/10/22	21				
08/17/22	46				
08/24/22	23				
08/31/22	39				
09/07/22	36				
09/14/22	<20				
09/21/22	30				
09/28/22	48				

Parameter	Distribution Applied	Coefficient of Variation (daily)	Avg. Monthly
Dissolved Iron (µg/L)	Delta-Lognormal	0.3738918	54.2610333

Facility: Mt Pleasant Borough STP  
 NPDES #: PA0021148  
 Outfall No: 001  
 n (Samples/Month): 4  
 Reviewer/Permit Engineer: GRP

Parameter Name	deo(1,2,3-cd)Pyrene				
Units	µg/L				
Detection Limit	0.369				
Sample Date	<i>When entering values below the detection limit, enter "ND" or use the &lt; notation (eg. &lt;0.02)</i>				
05/27/22	0.125				
07/27/22	<0.365				
08/03/22	<0.362				
08/10/22	<0.365				
08/17/22	<0.365				
08/24/22	<0.365				
08/31/22	0.369				
09/07/22	<0.358				
09/14/22	<0.362				
09/21/22	<0.365				
09/28/22	<0.358				

Parameter	Distribution Applied	Coefficient of Variation (daily)	Avg. Monthly
deo(1,2,3-cd)Pyrene (µg/L)	Delta-Lognormal	0.3216236	0.4709753

Facility: Mt Pleasant Boro STP  
 NPDES #: PA0021148  
 Outfall No: 001  
 n (Samples/Month): 4  
 Reviewer/Permit Engineer: GRP

Parameter Name	Total Copper				
Units	µg/L				
Detection Limit	5				
<b>Sample Date</b>	<i>When entering values below the detection limit, enter "ND" or use the &lt; notation (eg. &lt;0.02)</i>				
05/27/22	11				
07/27/22	10				
08/03/22	10				
08/10/22	9				
08/17/22	10				
08/24/22	9				
08/31/22	12				
09/07/22	9				
09/14/22	8				
09/21/22	10				
09/28/22	12				

Parameter	Distribution Applied	Coefficient of Variation (daily)	Avg. Monthly
Total Copper (µg/L)	Lognormal	0.1262327	11.5647064



**ATTACHMENT C:**  
**TMS Revised Model Results**



## Discharge Information

Instructions Discharge Stream

Facility: Mount Pleasant STP NPDES Permit No.: PA0021148 Outfall No.: 001

Evaluation Type: Major Sewage / Industrial Waste Wastewater Description: sewage

Discharge Characteristics								
Design Flow (MGD)*	Hardness (mg/l)*	pH (SU)*	Partial Mix Factors (PMFs)				Complete Mix Times (min)	
			AFC	CFC	THH	CRL	Q <sub>7-10</sub>	Q <sub>n</sub>
1.5	100	7.3						

Discharge Pollutant	Units	Max Discharge Conc	0 if left blank		0.5 if left blank		0 if left blank			1 if left blank	
			Trib Conc	Stream Conc	Daily CV	Hourly CV	Stream CV	Fate Coeff	FOS	Criteria Mod	Chem Transl
Group 1	Total Dissolved Solids (PWS)	mg/L	517								
	Chloride (PWS)	mg/L	165								
	Bromide	mg/L	0.273								
	Sulfate (PWS)	mg/L	1050								
	Fluoride (PWS)	mg/L									
Group 2	Total Aluminum	µg/L	75								
	Total Antimony	µg/L	0.3								
	Total Arsenic	µg/L	< 0.4								
	Total Barium	µg/L	63								
	Total Beryllium	µg/L	< 1								
	Total Boron	µg/L	135								
	Total Cadmium	µg/L	< 0.1								
	Total Chromium (III)	µg/L	< 2								
	Hexavalent Chromium	µg/L	0.2								
	Total Cobalt	µg/L	< 0.2								
	Total Copper	µg/L	11.56								
	Free Cyanide	µg/L	7								
	Total Cyanide	µg/L	3								
	Dissolved Iron	µg/L	54.26								
	Total Iron	µg/L	57.4								
	Total Lead	µg/L	< 0.3								
	Total Manganese	µg/L	10								
	Total Mercury	µg/L	< 0.1								
	Total Nickel	µg/L	< 2								
	Total Phenols (Phenolics) (PWS)	µg/L	27								
	Total Selenium	µg/L	< 0.5								
	Total Silver	µg/L	< 0.2								
	Total Thallium	µg/L	< 0.05								
Total Zinc	µg/L	28									
Total Molybdenum	µg/L	< 4									
Acrolein	µg/L	< 0.9									
Acrylamide	µg/L	<									
Acrylonitrile	µg/L	< 0.3									
Benzene	µg/L	< 0.04									
Bromoform	µg/L	< 0.1									

Group 3	Carbon Tetrachloride	µg/L	<	0.1														
	Chlorobenzene	µg/L	<	0.07														
	Chlorodibromomethane	µg/L		0.07														
	Chloroethane	µg/L	<	0.06														
	2-Chloroethyl Vinyl Ether	µg/L	<	0.1														
	Chloroform	µg/L		19.6														
	Dichlorobromomethane	µg/L		5.06														
	1,1-Dichloroethane	µg/L	<	0.06														
	1,2-Dichloroethane	µg/L	<	0.08														
	1,1-Dichloroethylene	µg/L	<	0.07														
	1,2-Dichloropropane	µg/L	<	0.1														
	1,3-Dichloropropylene	µg/L	<	0.06														
	1,4-Dioxane	µg/L	<	0.1														
	Ethylbenzene	µg/L	<	0.06														
	Methyl Bromide	µg/L	<	0.1														
	Methyl Chloride	µg/L	<	0.09														
	Methylene Chloride	µg/L		0.02														
	1,1,2,2-Tetrachloroethane	µg/L	<	0.1														
	Tetrachloroethylene	µg/L	<	0.09														
	Toluene	µg/L		0.06														
	1,2-trans-Dichloroethylene	µg/L	<	0.1														
	1,1,1-Trichloroethane	µg/L	<	0.06														
1,1,2-Trichloroethane	µg/L	<	0.08															
Trichloroethylene	µg/L	<	0.1															
Vinyl Chloride	µg/L	<	0.1															
Group 4	2-Chlorophenol	µg/L	<	0.08														
	2,4-Dichlorophenol	µg/L	<	0.07														
	2,4-Dimethylphenol	µg/L	<	0.4														
	4,6-Dinitro-o-Cresol	µg/L	<	0.11														
	2,4-Dinitrophenol	µg/L	<	0.04														
	2-Nitrophenol	µg/L	<	2.9														
	4-Nitrophenol	µg/L	<	0.04														
	p-Chloro-m-Cresol	µg/L	<	0.09														
	Pentachlorophenol	µg/L	<	0.1														
	Phenol	µg/L	<	0.04														
	2,4,6-Trichlorophenol	µg/L	<	0.09														
	Acenaphthene	µg/L	<	0.1														
	Acenaphthylene	µg/L	<	0.09														
	Anthracene	µg/L	<	0.08														
	Benzidine	µg/L	<	4.9														
	Benzo(a)Anthracene	µg/L	<	0.06														
	Benzo(a)Pyrene	µg/L	<	0.07														
	3,4-Benzofluoranthene	µg/L	<	0.04														
	Benzo(ghi)Perylene	µg/L	<	0.08														
	Benzo(k)Fluoranthene	µg/L	<	0.373														
	Bis(2-Chloroethoxy)Methane	µg/L	<	0.08														
	Bis(2-Chloroethyl)Ether	µg/L	<	0.07														
	Bis(2-Chloroisopropyl)Ether	µg/L	<	0.08														
Bis(2-Ethylhexyl)Phthalate	µg/L		2.22															
4-Bromophenyl Phenyl Ether	µg/L	<	0.106															
Butyl Benzyl Phthalate	µg/L	<	0.06															
2-Chloronaphthalene	µg/L	<	0.08															
4-Chlorophenyl Phenyl Ether	µg/L	<	0.09															
Chrysene	µg/L	<	0.07															
Dibenzo(a,h)Anthracene	µg/L	<	0.05															
1,2-Dichlorobenzene	µg/L	<	0.08															
1,3-Dichlorobenzene	µg/L	<	0.07															
1,4-Dichlorobenzene	µg/L	<	0.08															
3,3-Dichlorobenzidine	µg/L	<	0.1															
Diethyl Phthalate	µg/L		0.65															
Dimethyl Phthalate	µg/L	<	0.23															
Di-n-Butyl Phthalate	µg/L		0.495															
2,4-Dinitrotoluene	µg/L	<	0.8															

	2,6-Dinitrotoluene	µg/L	<	0.01											
	Di-n-Octyl Phthalate	µg/L	<	0.07											
	1,2-Diphenylhydrazine	µg/L	<	0.11											
	Fluoranthene	µg/L	<	0.08											
	Fluorene	µg/L	<	0.1											
	Hexachlorobenzene	µg/L	<	0.08											
	Hexachlorobutadiene	µg/L	<	0.08											
	Hexachlorocyclopentadiene	µg/L	<	0.04											
	Hexachloroethane	µg/L	<	0.06											
	Indeno(1,2,3-cd)Pyrene	µg/L		0.47											
	Isophorone	µg/L	<	0.09											
	Naphthalene	µg/L	<	0.06											
	Nitrobenzene	µg/L	<	0.06											
	n-Nitrosodimethylamine	µg/L	<	0.06											
	n-Nitrosodi-n-Propylamine	µg/L	<	0.09											
	n-Nitrosodiphenylamine	µg/L	<	0.2											
	Phenanthrene	µg/L	<	0.09											
	Pyrene	µg/L		0.252											
	1,2,4-Trichlorobenzene	µg/L	<	0.09											
Group 6	Aldrin	µg/L	<												
	alpha-BHC	µg/L	<												
	beta-BHC	µg/L	<												
	gamma-BHC	µg/L	<												
	delta BHC	µg/L	<												
	Chlordane	µg/L	<												
	4,4-DDT	µg/L	<												
	4,4-DDE	µg/L	<												
	4,4-DDD	µg/L	<												
	Dieldrin	µg/L	<												
	alpha-Endosulfan	µg/L	<												
	beta-Endosulfan	µg/L	<												
	Endosulfan Sulfate	µg/L	<												
	Endrin	µg/L	<												
	Endrin Aldehyde	µg/L	<												
	Heptachlor	µg/L	<												
	Heptachlor Epoxide	µg/L	<												
	PCB-1016	µg/L	<												
	PCB-1221	µg/L	<												
	PCB-1232	µg/L	<												
	PCB-1242	µg/L	<												
	PCB-1248	µg/L	<												
PCB-1254	µg/L	<													
PCB-1260	µg/L	<													
PCBs, Total	µg/L	<													
Toxaphene	µg/L	<													
2,3,7,8-TCDD	ng/L	<													
Group 7	Gross Alpha	pCi/L													
	Total Beta	pCi/L	<												
	Radium 226/228	pCi/L	<												
	Total Strontium	µg/L	<												
	Total Uranium	µg/L	<												
Osmotic Pressure	mOs/kg														

### Stream / Surface Water Information

Mount Pleasant STP, NPDES Permit No. PA0021148, Outfall 001

Instructions Discharge **Stream**

Receiving Surface Water Name: **Shupe Run (WWF)**

No. Reaches to Model: **1**

- Statewide Criteria
- Great Lakes Criteria
- ORSANCO Criteria

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi <sup>2</sup> )*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	037958	1.14	1052	3.05			Yes
End of Reach 1	037958	0.54	1047	3.48			Yes

**Q<sub>7-10</sub>**

Location	RMI	LFY (cfs/mi <sup>2</sup> )*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	1.14	0.0105			28.25							100	7		
End of Reach 1	0.54	0.0107			28.25										

**Q<sub>h</sub>**

Location	RMI	LFY (cfs/mi <sup>2</sup> )*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness	pH	Hardness	pH
Point of Discharge	1.14														
End of Reach 1	0.54														

### Model Results

Mount Pleasant STP, NPDES Permit No. PA0021148, Outfall 001

Instructions **Results**

RETURN TO INPUTS

SAVE AS PDF

PRINT

- All
- Inputs
- Results
- Limits

Hydrodynamics

**Q<sub>7-10</sub>**

RMI	Stream Flow (cfs)	PWS Withdrawal (cfs)	Net Stream Flow (cfs)	Discharge Analysis Flow (cfs)	Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Travel Time (days)	Complete Mix Time (min)
1.14	0.03		0.03	2.321	0.002	0.588	16.6	28.25	0.241	0.152	0.004
0.54	0.04		0.037					28.250			

**Q<sub>h</sub>**

RMI	Stream Flow (cfs)	PWS Withdrawal (cfs)	Net Stream Flow (cfs)	Discharge Analysis Flow (cfs)	Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Travel Time (days)	Complete Mix Time (min)
1.14	0.37		0.37	2.321	0.002	0.623	16.6	26.642	0.26	0.141	0.361
0.54	0.413		0.41								

Wasteload Allocations

AFC

CCT (min): **0.004**

PMF: **1**

Analysis Hardness (mg/l): **100**

Analysis pH: **7.29**

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	750	750	760	
Total Antimony	0	0		0	1,100	1,100	1,115	
Total Arsenic	0	0		0	340	340	345	Chem Translator of 1 applied
Total Barium	0	0		0	21,000	21,000	21,290	
Total Boron	0	0		0	8,100	8,100	8,212	
Total Cadmium	0	0		0	2.014	2.13	2.16	Chem Translator of 0.944 applied
Total Chromium (III)	0	0		0	569.763	1,803	1,828	Chem Translator of 0.316 applied
Hexavalent Chromium	0	0		0	16	16.3	16.5	Chem Translator of 0.982 applied
Total Cobalt	0	0		0	95	95.0	96.3	
Total Copper	0	0		0	13.439	14.0	14.2	Chem Translator of 0.96 applied
Free Cyanide	0	0		0	22	22.0	22.3	

Dissolved Iron	0	0	0	N/A	N/A	N/A	
Total Iron	0	0	0	N/A	N/A	N/A	
Total Lead	0	0	0	64.581	81.6	82.8	Chem Translator of 0.791 applied
Total Manganese	0	0	0	N/A	N/A	N/A	
Total Mercury	0	0	0	1.400	1.65	1.67	Chem Translator of 0.85 applied
Total Nickel	0	0	0	468.236	469	476	Chem Translator of 0.998 applied
Total Phenols (Phenolics) (PWS)	0	0	0	N/A	N/A	N/A	
Total Selenium	0	0	0	N/A	N/A	N/A	Chem Translator of 0.922 applied
Total Silver	0	0	0	3.217	3.78	3.84	Chem Translator of 0.85 applied
Total Thallium	0	0	0	65	65.0	65.9	
Total Zinc	0	0	0	117.180	120	121	Chem Translator of 0.978 applied
Acrolein	0	0	0	3	3.0	3.04	
Acrylonitrile	0	0	0	650	650	659	
Benzene	0	0	0	640	640	649	
Bromoform	0	0	0	1,800	1,800	1,825	
Carbon Tetrachloride	0	0	0	2,800	2,800	2,839	
Chlorobenzene	0	0	0	1,200	1,200	1,217	
Chlorodibromomethane	0	0	0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0	0	18,000	18,000	18,248	
Chloroform	0	0	0	1,900	1,900	1,926	
Dichlorobromomethane	0	0	0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0	0	15,000	15,000	15,207	
1,1-Dichloroethylene	0	0	0	7,500	7,500	7,604	
1,2-Dichloropropane	0	0	0	11,000	11,000	11,152	
1,3-Dichloropropylene	0	0	0	310	310	314	
Ethylbenzene	0	0	0	2,900	2,900	2,940	
Methyl Bromide	0	0	0	550	550	558	
Methyl Chloride	0	0	0	28,000	28,000	28,386	
Methylene Chloride	0	0	0	12,000	12,000	12,166	
1,1,2,2-Tetrachloroethane	0	0	0	1,000	1,000	1,014	
Tetrachloroethylene	0	0	0	700	700	710	
Toluene	0	0	0	1,700	1,700	1,723	
1,2-trans-Dichloroethylene	0	0	0	6,800	6,800	6,894	
1,1,1-Trichloroethane	0	0	0	3,000	3,000	3,041	
1,1,2-Trichloroethane	0	0	0	3,400	3,400	3,447	
Trichloroethylene	0	0	0	2,300	2,300	2,332	
Vinyl Chloride	0	0	0	N/A	N/A	N/A	
2-Chlorophenol	0	0	0	560	560	568	
2,4-Dichlorophenol	0	0	0	1,700	1,700	1,723	
2,4-Dimethylphenol	0	0	0	660	660	669	
4,6-Dinitro-o-Cresol	0	0	0	80	80.0	81.1	
2,4-Dinitrophenol	0	0	0	660	660	669	
2-Nitrophenol	0	0	0	8,000	8,000	8,110	
4-Nitrophenol	0	0	0	2,300	2,300	2,332	
p-Chloro-m-Cresol	0	0	0	160	160	162	
Pentachlorophenol	0	0	0	11.724	11.7	11.9	
Phenol	0	0	0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0	0	460	460	466	

Acenaphthene	0	0	0	83	83.0	84.1	
Anthracene	0	0	0	N/A	N/A	N/A	
Benzidine	0	0	0	300	300	304	
Benzo(a)Anthracene	0	0	0	0.5	0.5	0.51	
Benzo(a)Pyrene	0	0	0	N/A	N/A	N/A	
3,4-Benzofluoranthene	0	0	0	N/A	N/A	N/A	
Benzo(k)Fluoranthene	0	0	0	N/A	N/A	N/A	
Bis(2-Chloroethyl)Ether	0	0	0	30,000	30,000	30,414	
Bis(2-Chloroisopropyl)Ether	0	0	0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0	0	4,500	4,500	4,562	
4-Bromophenyl Phenyl Ether	0	0	0	270	270	274	
Butyl Benzyl Phthalate	0	0	0	140	140	142	
2-Chloronaphthalene	0	0	0	N/A	N/A	N/A	
Chrysene	0	0	0	N/A	N/A	N/A	
Dibenzo(a,h)Anthracene	0	0	0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0	0	820	820	831	
1,3-Dichlorobenzene	0	0	0	350	350	355	
1,4-Dichlorobenzene	0	0	0	730	730	740	
3,3-Dichlorobenzidine	0	0	0	N/A	N/A	N/A	
Diethyl Phthalate	0	0	0	4,000	4,000	4,055	
Dimethyl Phthalate	0	0	0	2,500	2,500	2,535	
Di-n-Butyl Phthalate	0	0	0	110	110	112	
2,4-Dinitrotoluene	0	0	0	1,600	1,600	1,622	
2,6-Dinitrotoluene	0	0	0	990	990	1,004	
1,2-Diphenylhydrazine	0	0	0	15	15.0	15.2	
Fluoranthene	0	0	0	200	200	203	
Fluorene	0	0	0	N/A	N/A	N/A	
Hexachlorobenzene	0	0	0	N/A	N/A	N/A	
Hexachlorobutadiene	0	0	0	10	10.0	10.1	
Hexachlorocyclopentadiene	0	0	0	5	5.0	5.07	
Hexachloroethane	0	0	0	60	60.0	60.8	
Indeno(1,2,3-cd)Pyrene	0	0	0	N/A	N/A	N/A	
Isophorone	0	0	0	10,000	10,000	10,138	
Naphthalene	0	0	0	140	140	142	
Nitrobenzene	0	0	0	4,000	4,000	4,055	
n-Nitrosodimethylamine	0	0	0	17,000	17,000	17,235	
n-Nitrosodi-n-Propylamine	0	0	0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0	0	300	300	304	
Phenanthrene	0	0	0	5	5.0	5.07	
Pyrene	0	0	0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0	0	130	130	132	

CFC      CCT (min):       PMF:       Analysis Hardness (mg/l):       Analysis pH:

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	

Chloride (PWS)	0	0	0	N/A	N/A	N/A	
Sulfate (PWS)	0	0	0	N/A	N/A	N/A	
Total Aluminum	0	0	0	N/A	N/A	N/A	
Total Antimony	0	0	0	220	220	223	
Total Arsenic	0	0	0	150	150	152	Chem Translator of 1 applied
Total Barium	0	0	0	4,100	4,100	4,157	
Total Boron	0	0	0	1,600	1,600	1,622	
Total Cadmium	0	0	0	0.246	0.27	0.27	Chem Translator of 0.909 applied
Total Chromium (III)	0	0	0	74.115	86.2	87.4	Chem Translator of 0.86 applied
Hexavalent Chromium	0	0	0	10	10.4	10.5	Chem Translator of 0.962 applied
Total Cobalt	0	0	0	19	19.0	19.3	
Total Copper	0	0	0	8.956	9.33	9.46	Chem Translator of 0.96 applied
Free Cyanide	0	0	0	5.2	5.2	5.27	
Dissolved Iron	0	0	0	N/A	N/A	N/A	
Total Iron	0	0	0	1,500	1,500	1,521	WQC = 30 day average; PMF = 1
Total Lead	0	0	0	2.517	3.18	3.23	Chem Translator of 0.791 applied
Total Manganese	0	0	0	N/A	N/A	N/A	
Total Mercury	0	0	0	0.770	0.91	0.92	Chem Translator of 0.85 applied
Total Nickel	0	0	0	52.007	52.2	52.9	Chem Translator of 0.997 applied
Total Phenols (Phenolics) (PWS)	0	0	0	N/A	N/A	N/A	
Total Selenium	0	0	0	4.600	4.99	5.06	Chem Translator of 0.922 applied
Total Silver	0	0	0	N/A	N/A	N/A	Chem Translator of 1 applied
Total Thallium	0	0	0	13	13.0	13.2	
Total Zinc	0	0	0	118.139	120	121	Chem Translator of 0.986 applied
Acrolein	0	0	0	3	3.0	3.04	
Acrylonitrile	0	0	0	130	130	132	
Benzene	0	0	0	130	130	132	
Bromoform	0	0	0	370	370	375	
Carbon Tetrachloride	0	0	0	560	560	568	
Chlorobenzene	0	0	0	240	240	243	
Chlorodibromomethane	0	0	0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0	0	3,500	3,500	3,548	
Chloroform	0	0	0	390	390	395	
Dichlorobromomethane	0	0	0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0	0	3,100	3,100	3,143	
1,1-Dichloroethylene	0	0	0	1,500	1,500	1,521	
1,2-Dichloropropane	0	0	0	2,200	2,200	2,230	
1,3-Dichloropropylene	0	0	0	61	61.0	61.8	
Ethylbenzene	0	0	0	580	580	588	
Methyl Bromide	0	0	0	110	110	112	
Methyl Chloride	0	0	0	5,500	5,500	5,576	
Methylene Chloride	0	0	0	2,400	2,400	2,433	
1,1,2,2-Tetrachloroethane	0	0	0	210	210	213	
Tetrachloroethylene	0	0	0	140	140	142	
Toluene	0	0	0	330	330	335	



1,2-trans-Dichloroethylene	0	0	0	1,400	1,400	1,419
1,1,1-Trichloroethane	0	0	0	610	610	618
1,1,2-Trichloroethane	0	0	0	680	680	689
Trichloroethylene	0	0	0	450	450	456
Vinyl Chloride	0	0	0	N/A	N/A	N/A
2-Chlorophenol	0	0	0	110	110	112
2,4-Dichlorophenol	0	0	0	340	340	345
2,4-Dimethylphenol	0	0	0	130	130	132
4,6-Dinitro-o-Cresol	0	0	0	16	16.0	16.2
2,4-Dinitrophenol	0	0	0	130	130	132
2-Nitrophenol	0	0	0	1,600	1,600	1,622
4-Nitrophenol	0	0	0	470	470	476
p-Chloro-m-Cresol	0	0	0	500	500	507
Pentachlorophenol	0	0	0	8.995	8.99	9.12
Phenol	0	0	0	N/A	N/A	N/A
2,4,6-Trichlorophenol	0	0	0	91	91.0	92.3
Acenaphthene	0	0	0	17	17.0	17.2
Anthracene	0	0	0	N/A	N/A	N/A
Benzidine	0	0	0	59	59.0	59.8
Benzo(a)Anthracene	0	0	0	0.1	0.1	0.1
Benzo(a)Pyrene	0	0	0	N/A	N/A	N/A
3,4-Benzofluoranthene	0	0	0	N/A	N/A	N/A
Benzo(k)Fluoranthene	0	0	0	N/A	N/A	N/A
Bis(2-Chloroethyl)Ether	0	0	0	6,000	6,000	6,083
Bis(2-Chloroisopropyl)Ether	0	0	0	N/A	N/A	N/A
Bis(2-Ethylhexyl)Phthalate	0	0	0	910	910	923
4-Bromophenyl Phenyl Ether	0	0	0	54	54.0	54.7
Butyl Benzyl Phthalate	0	0	0	35	35.0	35.5
2-Chloronaphthalene	0	0	0	N/A	N/A	N/A
Chrysene	0	0	0	N/A	N/A	N/A
Dibenzo(a,h)Anthracene	0	0	0	N/A	N/A	N/A
1,2-Dichlorobenzene	0	0	0	160	160	162
1,3-Dichlorobenzene	0	0	0	69	69.0	70.0
1,4-Dichlorobenzene	0	0	0	150	150	152
3,3-Dichlorobenzidine	0	0	0	N/A	N/A	N/A
Diethyl Phthalate	0	0	0	800	800	811
Dimethyl Phthalate	0	0	0	500	500	507
Di-n-Butyl Phthalate	0	0	0	21	21.0	21.3
2,4-Dinitrotoluene	0	0	0	320	320	324
2,6-Dinitrotoluene	0	0	0	200	200	203
1,2-Diphenylhydrazine	0	0	0	3	3.0	3.04
Fluoranthene	0	0	0	40	40.0	40.6
Fluorene	0	0	0	N/A	N/A	N/A
Hexachlorobenzene	0	0	0	N/A	N/A	N/A
Hexachlorobutadiene	0	0	0	2	2.0	2.03

Hexachlorocyclopentadiene	0	0		0	1	1.0	1.01	
Hexachloroethane	0	0		0	12	12.0	12.2	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	2,100	2,100	2,129	
Naphthalene	0	0		0	43	43.0	43.6	
Nitrobenzene	0	0		0	810	810	821	
n-Nitrosodimethylamine	0	0		0	3,400	3,400	3,447	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	59	59.0	59.8	
Phenanthrene	0	0		0	1	1.0	1.01	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	26	26.0	26.4	

**THH**      CCT (min):       PMF:       Analysis Hardness (mg/l):       Analysis pH:

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	500,000	500,000	N/A	
Chloride (PWS)	0	0		0	250,000	250,000	N/A	
Sulfate (PWS)	0	0		0	250,000	250,000	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	5.6	5.6	5.68	
Total Arsenic	0	0		0	10	10.0	10.1	
Total Barium	0	0		0	2,400	2,400	2,433	
Total Boron	0	0		0	3,100	3,100	3,143	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	
Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Cobalt	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Free Cyanide	0	0		0	4	4.0	4.06	
Dissolved Iron	0	0		0	300	300	304	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	1,000	1,000	1,014	
Total Mercury	0	0		0	0.050	0.05	0.051	
Total Nickel	0	0		0	610	610	618	
Total Phenols (Phenolics) (PWS)	0	0		0	5	5.0	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	
Total Silver	0	0		0	N/A	N/A	N/A	
Total Thallium	0	0		0	0.24	0.24	0.24	
Total Zinc	0	0		0	N/A	N/A	N/A	
Acrolein	0	0		0	3	3.0	3.04	
Acrylonitrile	0	0		0	N/A	N/A	N/A	
Benzene	0	0		0	N/A	N/A	N/A	

Bromoform	0	0		0	N/A	N/A	N/A
Carbon Tetrachloride	0	0		0	N/A	N/A	N/A
Chlorobenzene	0	0		0	100	100.0	101
Chlorodibromomethane	0	0		0	N/A	N/A	N/A
2-Chloroethyl Vinyl Ether	0	0		0	N/A	N/A	N/A
Chloroform	0	0		0	5.7	5.7	5.78
Dichlorobromomethane	0	0		0	N/A	N/A	N/A
1,2-Dichloroethane	0	0		0	N/A	N/A	N/A
1,1-Dichloroethylene	0	0		0	33	33.0	33.5
1,2-Dichloropropane	0	0		0	N/A	N/A	N/A
1,3-Dichloropropylene	0	0		0	N/A	N/A	N/A
Ethylbenzene	0	0		0	68	68.0	68.9
Methyl Bromide	0	0		0	100	100.0	101
Methyl Chloride	0	0		0	N/A	N/A	N/A
Methylene Chloride	0	0		0	N/A	N/A	N/A
1,1,2,2-Tetrachloroethane	0	0		0	N/A	N/A	N/A
Tetrachloroethylene	0	0		0	N/A	N/A	N/A
Toluene	0	0		0	57	57.0	57.8
1,2-trans-Dichloroethylene	0	0		0	100	100.0	101
1,1,1-Trichloroethane	0	0		0	10,000	10,000	10,138
1,1,2-Trichloroethane	0	0		0	N/A	N/A	N/A
Trichloroethylene	0	0		0	N/A	N/A	N/A
Vinyl Chloride	0	0		0	N/A	N/A	N/A
2-Chlorophenol	0	0		0	30	30.0	30.4
2,4-Dichlorophenol	0	0		0	10	10.0	10.1
2,4-Dimethylphenol	0	0		0	100	100.0	101
4,6-Dinitro-o-Cresol	0	0		0	2	2.0	2.03
2,4-Dinitrophenol	0	0		0	10	10.0	10.1
2-Nitrophenol	0	0		0	N/A	N/A	N/A
4-Nitrophenol	0	0		0	N/A	N/A	N/A
p-Chloro-m-Cresol	0	0		0	N/A	N/A	N/A
Pentachlorophenol	0	0		0	N/A	N/A	N/A
Phenol	0	0		0	4,000	4,000	4,055
2,4,6-Trichlorophenol	0	0		0	N/A	N/A	N/A
Acenaphthene	0	0		0	70	70.0	71.0
Anthracene	0	0		0	300	300	304
Benzidine	0	0		0	N/A	N/A	N/A
Benzo(a)Anthracene	0	0		0	N/A	N/A	N/A
Benzo(a)Pyrene	0	0		0	N/A	N/A	N/A
3,4-Benzofluoranthene	0	0		0	N/A	N/A	N/A
Benzo(k)Fluoranthene	0	0		0	N/A	N/A	N/A
Bis(2-Chloroethyl)Ether	0	0		0	N/A	N/A	N/A
Bis(2-Chloroisopropyl)Ether	0	0		0	200	200	203
Bis(2-Ethylhexyl)Phthalate	0	0		0	N/A	N/A	N/A
4-Bromophenyl Phenyl Ether	0	0		0	N/A	N/A	N/A

Butyl Benzyl Phthalate	0	0	0	0.1	0.1	0.1	
2-Chloronaphthalene	0	0	0	800	800	811	
Chrysene	0	0	0	N/A	N/A	N/A	
Dibenzo(a,h)Anthracene	0	0	0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0	0	1,000	1,000	1,014	
1,3-Dichlorobenzene	0	0	0	7	7.0	7.1	
1,4-Dichlorobenzene	0	0	0	300	300	304	
3,3-Dichlorobenzidine	0	0	0	N/A	N/A	N/A	
Diethyl Phthalate	0	0	0	600	600	608	
Dimethyl Phthalate	0	0	0	2,000	2,000	2,028	
Di-n-Butyl Phthalate	0	0	0	20	20.0	20.3	
2,4-Dinitrotoluene	0	0	0	N/A	N/A	N/A	
2,6-Dinitrotoluene	0	0	0	N/A	N/A	N/A	
1,2-Diphenylhydrazine	0	0	0	N/A	N/A	N/A	
Fluoranthene	0	0	0	20	20.0	20.3	
Fluorene	0	0	0	50	50.0	50.7	
Hexachlorobenzene	0	0	0	N/A	N/A	N/A	
Hexachlorobutadiene	0	0	0	N/A	N/A	N/A	
Hexachlorocyclopentadiene	0	0	0	4	4.0	4.06	
Hexachloroethane	0	0	0	N/A	N/A	N/A	
Indeno(1,2,3-cd)Pyrene	0	0	0	N/A	N/A	N/A	
Isophorone	0	0	0	34	34.0	34.5	
Naphthalene	0	0	0	N/A	N/A	N/A	
Nitrobenzene	0	0	0	10	10.0	10.1	
n-Nitrosodimethylamine	0	0	0	N/A	N/A	N/A	
n-Nitrosodi-n-Propylamine	0	0	0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0	0	N/A	N/A	N/A	
Phenanthrene	0	0	0	N/A	N/A	N/A	
Pyrene	0	0	0	20	20.0	20.3	
1,2,4-Trichlorobenzene	0	0	0	0.07	0.07	0.071	

**CRL**      CCT (min):       PMF:       Analysis Hardness (mg/l):       Analysis pH:

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	N/A	N/A	N/A	
Total Arsenic	0	0		0	N/A	N/A	N/A	
Total Barium	0	0		0	N/A	N/A	N/A	
Total Boron	0	0		0	N/A	N/A	N/A	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	

Hexavalent Chromium	0	0		0	N/A	N/A	N/A
Total Cobalt	0	0		0	N/A	N/A	N/A
Total Copper	0	0		0	N/A	N/A	N/A
Free Cyanide	0	0		0	N/A	N/A	N/A
Dissolved Iron	0	0		0	N/A	N/A	N/A
Total Iron	0	0		0	N/A	N/A	N/A
Total Lead	0	0		0	N/A	N/A	N/A
Total Manganese	0	0		0	N/A	N/A	N/A
Total Mercury	0	0		0	N/A	N/A	N/A
Total Nickel	0	0		0	N/A	N/A	N/A
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A
Total Selenium	0	0		0	N/A	N/A	N/A
Total Silver	0	0		0	N/A	N/A	N/A
Total Thallium	0	0		0	N/A	N/A	N/A
Total Zinc	0	0		0	N/A	N/A	N/A
Acrolein	0	0		0	N/A	N/A	N/A
Acrylonitrile	0	0		0	0.06	0.06	0.069
Benzene	0	0		0	0.58	0.58	0.67
Bromoform	0	0		0	7	7.0	8.11
Carbon Tetrachloride	0	0		0	0.4	0.4	0.46
Chlorobenzene	0	0		0	N/A	N/A	N/A
Chlorodibromomethane	0	0		0	0.8	0.8	0.93
2-Chloroethyl Vinyl Ether	0	0		0	N/A	N/A	N/A
Chloroform	0	0		0	N/A	N/A	N/A
Dichlorobromomethane	0	0		0	0.95	0.95	1.1
1,2-Dichloroethane	0	0		0	9.9	9.9	11.5
1,1-Dichloroethylene	0	0		0	N/A	N/A	N/A
1,2-Dichloropropane	0	0		0	0.9	0.9	1.04
1,3-Dichloropropylene	0	0		0	0.27	0.27	0.31
Ethylbenzene	0	0		0	N/A	N/A	N/A
Methyl Bromide	0	0		0	N/A	N/A	N/A
Methyl Chloride	0	0		0	N/A	N/A	N/A
Methylene Chloride	0	0		0	20	20.0	23.2
1,1,2,2-Tetrachloroethane	0	0		0	0.2	0.2	0.23
Tetrachloroethylene	0	0		0	10	10.0	11.6
Toluene	0	0		0	N/A	N/A	N/A
1,2-trans-Dichloroethylene	0	0		0	N/A	N/A	N/A
1,1,1-Trichloroethane	0	0		0	N/A	N/A	N/A
1,1,2-Trichloroethane	0	0		0	0.55	0.55	0.64
Trichloroethylene	0	0		0	0.6	0.6	0.69
Vinyl Chloride	0	0		0	0.02	0.02	0.023
2-Chlorophenol	0	0		0	N/A	N/A	N/A
2,4-Dichlorophenol	0	0		0	N/A	N/A	N/A
2,4-Dimethylphenol	0	0		0	N/A	N/A	N/A
4,6-Dinitro-o-Cresol	0	0		0	N/A	N/A	N/A

2,4-Dinitrophenol	0	0		0	N/A	N/A	N/A	
2-Nitrophenol	0	0		0	N/A	N/A	N/A	
4-Nitrophenol	0	0		0	N/A	N/A	N/A	
p-Chloro-m-Cresol	0	0		0	N/A	N/A	N/A	
Pentachlorophenol	0	0		0	0.030	0.03	0.035	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	1.5	1.5	1.74	
Acenaphthene	0	0		0	N/A	N/A	N/A	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	0.0001	0.0001	0.0001	
Benzo(a)Anthracene	0	0		0	0.001	0.001	0.001	
Benzo(a)Pyrene	0	0		0	0.0001	0.0001	0.0001	
3,4-Benzofluoranthene	0	0		0	0.001	0.001	0.001	
Benzo(k)Fluoranthene	0	0		0	0.01	0.01	0.012	
Bis(2-Chloroethyl)Ether	0	0		0	0.03	0.03	0.035	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	0.32	0.32	0.37	
4-Bromophenyl Phenyl Ether	0	0		0	N/A	N/A	N/A	
Butyl Benzyl Phthalate	0	0		0	N/A	N/A	N/A	
2-Chloronaphthalene	0	0		0	N/A	N/A	N/A	
Chrysene	0	0		0	0.12	0.12	0.14	
Dibenzo(a,h)Anthracene	0	0		0	0.0001	0.0001	0.0001	
1,2-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
1,3-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
1,4-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
3,3-Dichlorobenzidine	0	0		0	0.05	0.05	0.058	
Diethyl Phthalate	0	0		0	N/A	N/A	N/A	
Dimethyl Phthalate	0	0		0	N/A	N/A	N/A	
Di-n-Butyl Phthalate	0	0		0	N/A	N/A	N/A	
2,4-Dinitrotoluene	0	0		0	0.05	0.05	0.058	
2,6-Dinitrotoluene	0	0		0	0.05	0.05	0.058	
1,2-Diphenylhydrazine	0	0		0	0.03	0.03	0.035	
Fluoranthene	0	0		0	N/A	N/A	N/A	
Fluorene	0	0		0	N/A	N/A	N/A	
Hexachlorobenzene	0	0		0	0.00008	0.00008	0.00009	
Hexachlorobutadiene	0	0		0	0.01	0.01	0.012	
Hexachlorocyclopentadiene	0	0		0	N/A	N/A	N/A	
Hexachloroethane	0	0		0	0.1	0.1	0.12	
Indeno(1,2,3-cd)Pyrene	0	0		0	0.001	0.001	0.001	
Isophorone	0	0		0	N/A	N/A	N/A	
Naphthalene	0	0		0	N/A	N/A	N/A	
Nitrobenzene	0	0		0	N/A	N/A	N/A	
n-Nitrosodimethylamine	0	0		0	0.0007	0.0007	0.0008	
n-Nitrosodi-n-Propylamine	0	0		0	0.005	0.005	0.006	
n-Nitrosodiphenylamine	0	0		0	3.3	3.3	3.82	

Phenanthrene	0	0		0	N/A	N/A	N/A	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	N/A	N/A	N/A	

**Recommended WQBELs & Monitoring Requirements**

No. Samples/Month: **4**

Pollutants	Mass Limits		Concentration Limits				Governing WQBEL	WQBEL Basis	Comments
	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units			
Total Copper	0.12	0.18	9.46	14.2	14.2	µg/L	9.46	CFC	Discharge Conc ≥ 50% WQBEL (RP)
Free Cyanide	0.051	0.079	4.06	6.33	10.1	µg/L	4.06	THH	Discharge Conc ≥ 50% WQBEL (RP)
Dissolved Iron	Report	Report	Report	Report	Report	µg/L	304	THH	Discharge Conc > 10% WQBEL (no RP)
Total Zinc	Report	Report	Report	Report	Report	µg/L	120	AFC	Discharge Conc > 10% WQBEL (no RP)
Chloroform	0.072	0.11	5.78	9.02	14.4	µg/L	5.78	THH	Discharge Conc ≥ 50% WQBEL (RP)
Dichlorobromomethane	0.014	0.021	1.1	1.72	2.75	µg/L	1.1	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Benzo(k)Fluoranthene	0.0001	0.0002	0.012	0.018	0.029	µg/L	0.012	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Bis(2-Ethylhexyl)Phthalate	0.005	0.007	0.37	0.58	0.93	µg/L	0.37	CRL	Discharge Conc ≥ 50% WQBEL (RP)
Indeno(1,2,3-cd)Pyrene	0.00001	0.00002	0.001	0.002	0.003	µg/L	0.001	CRL	Discharge Conc ≥ 50% WQBEL (RP)

**Other Pollutants without Limits or Monitoring**

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential to exceed water quality criteria was not determined and the discharge concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive analytical method was used (e.g., <= Target QL).

Pollutants	Governing WQBEL	Units	Comments
Total Dissolved Solids (PWS)	N/A	N/A	PWS Not Applicable
Chloride (PWS)	N/A	N/A	PWS Not Applicable
Bromide	N/A	N/A	No WQS
Sulfate (PWS)	N/A	N/A	PWS Not Applicable
Total Aluminum	750	µg/L	Discharge Conc ≤ 10% WQBEL
Total Antimony	5.68	µg/L	Discharge Conc ≤ 10% WQBEL
Total Arsenic	N/A	N/A	Discharge Conc < TQL
Total Barium	2,433	µg/L	Discharge Conc ≤ 10% WQBEL
Total Beryllium	N/A	N/A	No WQS
Total Boron	1,622	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cadmium	0.27	µg/L	Discharge Conc < TQL
Total Chromium (III)	87.4	µg/L	Discharge Conc < TQL
Hexavalent Chromium	10.5	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cobalt	19.3	µg/L	Discharge Conc < TQL
Total Cyanide	N/A	N/A	No WQS
Total Iron	1,521	µg/L	Discharge Conc ≤ 10% WQBEL
Total Lead	3.23	µg/L	Discharge Conc < TQL
Total Manganese	1,014	µg/L	Discharge Conc ≤ 10% WQBEL

Total Mercury	0.051	µg/L	Discharge Conc < TQL
Total Nickel	52.9	µg/L	Discharge Conc < TQL
Total Phenols (Phenolics) (PWS)		µg/L	PWS Not Applicable
Total Selenium	5.06	µg/L	Discharge Conc < TQL
Total Silver	3.78	µg/L	Discharge Conc < TQL
Total Thallium	0.24	µg/L	Discharge Conc < TQL
Total Molybdenum	N/A	N/A	No WQS
Acrolein	3.0	µg/L	Discharge Conc < TQL
Acrylonitrile	0.069	µg/L	Discharge Conc < TQL
Benzene	0.67	µg/L	Discharge Conc < TQL
Bromoform	8.11	µg/L	Discharge Conc < TQL
Carbon Tetrachloride	0.46	µg/L	Discharge Conc < TQL
Chlorobenzene	101	µg/L	Discharge Conc < TQL
Chlorobromomethane	0.93	µg/L	Discharge Conc ≤ 25% WQBEL
Chloroethane	N/A	N/A	No WQS
2-Chloroethyl Vinyl Ether	3,548	µg/L	Discharge Conc < TQL
1,1-Dichloroethane	N/A	N/A	No WQS
1,2-Dichloroethane	11.5	µg/L	Discharge Conc < TQL
1,1-Dichloroethylene	33.5	µg/L	Discharge Conc < TQL
1,2-Dichloropropane	1.04	µg/L	Discharge Conc < TQL
1,3-Dichloropropylene	0.31	µg/L	Discharge Conc < TQL
1,4-Dioxane	N/A	N/A	No WQS
Ethylbenzene	68.9	µg/L	Discharge Conc < TQL
Methyl Bromide	101	µg/L	Discharge Conc < TQL
Methyl Chloride	5,576	µg/L	Discharge Conc < TQL
Methylene Chloride	23.2	µg/L	Discharge Conc ≤ 25% WQBEL
1,1,2,2-Tetrachloroethane	0.23	µg/L	Discharge Conc < TQL
Tetrachloroethylene	11.6	µg/L	Discharge Conc < TQL
Toluene	57.8	µg/L	Discharge Conc ≤ 25% WQBEL
1,2-trans-Dichloroethylene	101	µg/L	Discharge Conc < TQL
1,1,1-Trichloroethane	618	µg/L	Discharge Conc < TQL
1,1,2-Trichloroethane	0.64	µg/L	Discharge Conc < TQL
Trichloroethylene	0.69	µg/L	Discharge Conc < TQL
Vinyl Chloride	0.023	µg/L	Discharge Conc < TQL
2-Chlorophenol	30.4	µg/L	Discharge Conc < TQL
2,4-Dichlorophenol	10.1	µg/L	Discharge Conc < TQL
2,4-Dimethylphenol	101	µg/L	Discharge Conc < TQL
4,6-Dinitro-o-Cresol	2.03	µg/L	Discharge Conc < TQL
2,4-Dinitrophenol	10.1	µg/L	Discharge Conc < TQL
2-Nitrophenol	1,622	µg/L	Discharge Conc < TQL
4-Nitrophenol	476	µg/L	Discharge Conc < TQL
p-Chloro-m-Cresol	160	µg/L	Discharge Conc < TQL
Pentachlorophenol	0.035	µg/L	Discharge Conc < TQL
Phenol	4,055	µg/L	Discharge Conc < TQL
2,4,6-Trichlorophenol	1.74	µg/L	Discharge Conc < TQL

Acenaphthene	17.2	µg/L	Discharge Conc < TQL
Acenaphthylene	N/A	N/A	No WQS
Anthracene	304	µg/L	Discharge Conc < TQL
Benzidine	0.0001	µg/L	Discharge Conc < TQL
Benzo(a)Anthracene	0.001	µg/L	Discharge Conc < TQL
Benzo(a)Pyrene	0.0001	µg/L	Discharge Conc < TQL
3,4-Benzofluoranthene	0.001	µg/L	Discharge Conc < TQL
Benzo(ghi)Perylene	N/A	N/A	No WQS
Bis(2-Chloroethoxy)Methane	N/A	N/A	No WQS
Bis(2-Chloroethyl)Ether	0.035	µg/L	Discharge Conc < TQL
Bis(2-Chloroisopropyl)Ether	203	µg/L	Discharge Conc < TQL
4-Bromophenyl Phenyl Ether	54.7	µg/L	Discharge Conc < TQL
Butyl Benzyl Phthalate	0.1	µg/L	Discharge Conc < TQL
2-Chloronaphthalene	811	µg/L	Discharge Conc < TQL
4-Chlorophenyl Phenyl Ether	N/A	N/A	No WQS
Chrysenes	0.14	µg/L	Discharge Conc < TQL
Dibenzo(a,h)Anthracene	0.0001	µg/L	Discharge Conc < TQL
1,2-Dichlorobenzene	162	µg/L	Discharge Conc < TQL
1,3-Dichlorobenzene	7.1	µg/L	Discharge Conc < TQL
1,4-Dichlorobenzene	152	µg/L	Discharge Conc < TQL
3,3-Dichlorobenzidine	0.058	µg/L	Discharge Conc < TQL
Diethyl Phthalate	608	µg/L	Discharge Conc ≤ 25% WQBEL
Dimethyl Phthalate	507	µg/L	Discharge Conc < TQL
Di-n-Butyl Phthalate	20.3	µg/L	Discharge Conc ≤ 25% WQBEL
2,4-Dinitrotoluene	0.058	µg/L	Discharge Conc < TQL
2,6-Dinitrotoluene	0.058	µg/L	Discharge Conc < TQL
Di-n-Octyl Phthalate	N/A	N/A	No WQS
1,2-Diphenylhydrazine	0.035	µg/L	Discharge Conc < TQL
Fluoranthene	20.3	µg/L	Discharge Conc < TQL
Fluorene	50.7	µg/L	Discharge Conc < TQL
Hexachlorobenzene	0.00009	µg/L	Discharge Conc < TQL
Hexachlorobutadiene	0.012	µg/L	Discharge Conc < TQL
Hexachlorocyclopentadiene	1.01	µg/L	Discharge Conc < TQL
Hexachloroethane	0.12	µg/L	Discharge Conc < TQL
Isophorone	34.5	µg/L	Discharge Conc < TQL
Naphthalene	43.6	µg/L	Discharge Conc < TQL
Nitrobenzene	10.1	µg/L	Discharge Conc < TQL
n-Nitrosodimethylamine	0.0008	µg/L	Discharge Conc < TQL
n-Nitrosodi-n-Propylamine	0.006	µg/L	Discharge Conc < TQL
n-Nitrosodiphenylamine	3.82	µg/L	Discharge Conc < TQL
Phenanthrene	1.01	µg/L	Discharge Conc < TQL
Pyrene	20.3	µg/L	Discharge Conc ≤ 25% WQBEL
1,2,4-Trichlorobenzene	0.071	µg/L	Discharge Conc < TQL



**ATTACHMENT D:**  
**Re-Evaluation of WET Testing**

DEP Whole Effluent Toxicity (WET) Analysis Spreadsheet

Type of Test: Chronic  
Species Tested: Ceriodaphnia  
Endpoint: Survival  
TIWC (decimal): 0.95  
No. Per Replicate: 1  
TST b value: 0.75  
TST alpha value: 0.2

Facility Name: Mt Pleasant STP  
Permit No.: PA0021148

Replicate No.	Test Completion Date: 4/13/2020	
	Control	TIWC
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11		
12		
13		
14		
15		

Replicate No.	Test Completion Date: 5/24/2021	
	Control	TIWC
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11		
12		
13		
14		
15		

Mean: 1.000, 1.000  
Std Dev.: 0.000, 0.000  
# Replicates: 10, 10

Mean: 1.000, 1.000  
Std Dev.: 0.000, 0.000  
# Replicates: 10, 10

T-Test Result  
Deg. of Freedom  
Critical T Value  
Pass or Fail: **PASS**

T-Test Result  
Deg. of Freedom  
Critical T Value  
Pass or Fail: **PASS**

Replicate No.	Test Completion Date: 5/9/2022	
	Control	TIWC
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11		
12		
13		
14		
15		

Replicate No.	Test Completion Date: 5/10/2023	
	Control	TIWC
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	0	1
7	0	0
8	1	1
9	1	1
10	1	0
11		
12		
13		
14		
15		

Mean: 1.000, 1.000  
Std Dev.: 0.000, 0.000  
# Replicates: 10, 10

Mean: 0.800, 0.800  
Std Dev.: 0.422, 0.422  
# Replicates: 10, 10

T-Test Result  
Deg. of Freedom  
Critical T Value  
Pass or Fail: **PASS**

T-Test Result  
Deg. of Freedom  
Critical T Value  
Pass or Fail: **PASS**

DEP Whole Effluent Toxicity (WET) Analysis Spreadsheet

Type of Test: Chronic  
Species Tested: Ceriodaphnia  
Endpoint: Reproduction  
TIWC (decimal): 0.95  
No. Per Replicate: 1  
TST b value: 0.75  
TST alpha value: 0.2

Facility Name: Mt Pleasant STP  
Permit No.: PA0021148

Replicate No.	Test Completion Date: 4/13/2020	
	Control	TIWC
1	27	24
2	25	25
3	25	20
4	25	26
5	22	24
6	20	26
7	19	25
8	18	25
9	21	23
10	17	19
11		
12		
13		
14		
15		

Replicate No.	Test Completion Date: 5/24/2021	
	Control	TIWC
1	36	32
2	36	31
3	38	32
4	35	30
5	32	31
6	26	29
7	35	30
8	33	29
9	34	32
10	29	34
11		
12		
13		
14		
15		

Mean: 21.900, 23.700  
Std Dev.: 3.446, 2.406  
# Replicates: 10, 10

Mean: 33.400, 31.000  
Std Dev.: 3.596, 1.563  
# Replicates: 10, 10

T-Test Result: 6.5147  
Deg. of Freedom: 17  
Critical T Value: 0.8633  
Pass or Fail: **PASS**

T-Test Result: 6.0353  
Deg. of Freedom: 17  
Critical T Value: 0.8633  
Pass or Fail: **PASS**

Replicate No.	Test Completion Date: 5/9/2022	
	Control	TIWC
1	27	30
2	31	36
3	27	31
4	28	33
5	24	29
6	24	32
7	24	39
8	25	30
9	21	30
10	20	21
11		
12		
13		
14		
15		

Replicate No.	Test Completion Date: 5/10/2023	
	Control	TIWC
1	23	24
2	29	32
3	24	24
4	3	19
5	25	23
6	14	23
7	11	0
8	27	32
9	25	32
10	22	4
11		
12		
13		
14		
15		

Mean: 24.900, 31.100  
Std Dev.: 3.143, 4.725  
# Replicates: 10, 10

Mean: 20.300, 21.300  
Std Dev.: 8.260, 11.166  
# Replicates: 10, 10

T-Test Result: 7.4415  
Deg. of Freedom: 14  
Critical T Value: 0.8681  
Pass or Fail: **PASS**

T-Test Result: 1.5044  
Deg. of Freedom: 15  
Critical T Value: 0.8662  
Pass or Fail: **PASS**

DE P Whole Effluent Toxicity (WET) Analysis Spreadsheet			
Type of Test	Chronic	Facility Name	
Species Tested	Pimephales	Mt Pleasant STP	
Endpoint	Survival	Permit No.	
TIWC (decimal)	0.95	PA0021148	
No. Per Replicate	10		
TST b value	0.75		
TST alpha value	0.25		

Test Completion Date			Test Completion Date		
Replicate	4/14/2020		Replicate	5/25/2021	
No.	Control	TIWC	No.	Control	TIWC
1	1	0.9	1	1	1
2	1	0.9	2	1	1
3	1	0.5	3	1	1
4	1	0.9	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	1.000	0.800	Mean	1.000	1.000
Std Dev.	0.000	0.200	Std Dev.	0.000	0.000
# Replicates	4	4	# Replicates	4	4

T-Test Result	2.2018	T-Test Result	
Deg. of Freedom	3	Deg. of Freedom	
Critical T Value	0.7649	Critical T Value	
Pass or Fail	PASS	Pass or Fail	PASS

Test Completion Date			Test Completion Date		
Replicate	5/10/2022		Replicate	5/9/2023	
No.	Control	TIWC	No.	Control	TIWC
1	0.9	0.7	1	0.9	1
2	1	0.9	2	1	0.9
3	0.9	0.9	3	1	0.9
4	1	0.7	4	1	0.8
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
11			11		
12			12		
13			13		
14			14		
15			15		

Mean	0.950	0.800	Mean	0.975	0.850
Std Dev.	0.058	0.115	Std Dev.	0.050	0.173
# Replicates	4	4	# Replicates	4	4

T-Test Result	4.5480	T-Test Result	3.4170
Deg. of Freedom	4	Deg. of Freedom	3
Critical T Value	0.7407	Critical T Value	0.7649
Pass or Fail	PASS	Pass or Fail	PASS

DE P Whole Effluent Toxicity (WET) Analysis Spreadsheet			
Type of Test	Chronic	Facility Name	
Species Tested	Pimephales	Mt Pleasant STP	
Endpoint	Growth	Permit No.	
TIWC (decimal)	0.95	PA0021148	
No. Per Replicate	10		
TST b value	0.75		
TST alpha value	0.25		

Test Completion Date			Test Completion Date		
Replicate	4/14/2020		Replicate	5/25/2021	
No.	Control	TIWC	No.	Control	TIWC
1	0.416	0.334	1	0.318	0.272
2	0.4	0.3811	2	0.331	0.282
3	0.351	0.312	3	0.316	0.289
4	0.366	0.355	4	0.3	0.281
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
11			11		
12			12		
13			13		
14			14		
15			15		

Mean	0.383	0.346	Mean	0.316	0.286
Std Dev.	0.030	0.030	Std Dev.	0.013	0.005
# Replicates	4	4	# Replicates	4	4

T-Test Result	3.1328	T-Test Result	5.2701
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			Test Completion Date		
Replicate	5/10/2022		Replicate	5/9/2023	
No.	Control	TIWC	No.	Control	TIWC
1	0.283	0.284	1	0.39	0.423
2	0.292	0.29	2	0.398	0.407
3	0.269	0.246	3	0.404	0.329
4	0.32	0.385	4	0.424	0.272
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
11			11		
12			12		
13			13		
14			14		
15			15		

Mean	0.291	0.301	Mean	0.404	0.358
Std Dev.	0.022	0.059	Std Dev.	0.015	0.070
# Replicates	4	4	# Replicates	4	4

T-Test Result	2.7080	T-Test Result	1.5374
Deg. of Freedom	4	Deg. of Freedom	3
Critical T Value	0.7407	Critical T Value	0.7649
Pass or Fail	PASS	Pass or Fail	PASS

**WET Summary and Evaluation**

Facility Name	Mt Pleasant STP		
Permit No.	PA0021148		
Design Flow (MGD)	1.5		
Q <sub>7-10</sub> Flow (cfs)	0.0319		
PMF <sub>a</sub>	1		
PMF <sub>c</sub>	1		

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Ceriodaphnia	Survival	4/13/20	5/24/21	5/9/22	5/10/23
		PASS	PASS	PASS	PASS

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Ceriodaphnia	Reproduction	4/13/20	5/24/21	5/9/22	5/10/23
		PASS	PASS	PASS	PASS

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Pimephales	Survival	4/14/20	5/25/21	5/10/22	5/9/23
		PASS	PASS	PASS	PASS

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Pimephales	Growth	4/14/20	5/25/21	5/10/22	5/9/23
		PASS	PASS	PASS	PASS

Reasonable Potential? NO

**Permit Recommendations**

Test Type                   Chronic  
 TIWC                        99 % Effluent  
 Dilution Series        25, 50, 74, 99, 100 % Effluent  
 Permit Limit             None  
 Permit Limit Species

**ATTACHMENT E:**  
**MAWC Comment Letter (March 24, 2023)**

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An Equal Opportunity Employer 124 Park and Pool Road  
New Stanton, PA 15672  
Phone: 724.755.5800  
1.800.442.6829



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Mailing Address  
P.O. Box 730  
Greensburg, PA 15601

www.mawc.org  
mawo@mawc.org

March 24, 2023

Ms. Grace Polakoski  
PA DEP Clean Water Program  
400 Waterfront Drive  
Pittsburgh, PA 15222

Re: Mt. Pleasant Borough STP (PA0021148)  
Draft NPDES Permit Comments

Dear Ms. Polakoski:

MAWC has reviewed the draft NPDES permit for Mt. Pleasant Borough STP and would like to provide the following comments:

Page 1

- Mt. Pleasant Borough STP is technically located in the municipality of Mt. Pleasant Township.

Pages 3, 4

- Benzo(k)Fluoranthene, Bis(2-Ethylhexyl)Phthalate, and Indeno(1,2,3-cd)Pyrene were added to the effluent limitations even though all of the sample results for these parameters were non-detect during the 10 weeks of effluent resampling.

Pages 5, 6

- The effluent limitations for TRC and CBOD were made significantly more stringent, but the justification for this change is unclear. What specific input data for the model has changed since the previous permit? Did the input data for the stream itself change, or did the input data for the discharge change?

Page 6

- The BOD influent and TSS influent monitoring requirements were changed from "Report Daily Max" to "Report Weekly Average". The DEP Influent & Process Control Supplemental Report form does not calculate maximum weekly averages. It only calculates the maximum daily value. Therefore, MAWC requests that the BOD influent and TSS influent monitoring requirements remain as "Report Daily Max".

Page 7

- The fact sheet states that the weekly average concentration limits for ammonia nitrogen were removed, but there are still values listed in this column in the effluent limitations table in Part A.

Pages 3, 4, 7

- MAWC believes that a sample frequency of 1/week is excessive for non-conventional parameters (Total Copper, Free Cyanide, Benzo(k)Fluoranthene, Dichlorobromomethane, Bis(2-Ethylhexyl)Phthalate, Chloroform, Indeno(1,2,3-cd)Pyrene, Dissolved Iron, Total Zinc) that have been added to this permit for the first time. The sampling cost for Mt. Pleasant Borough STP is going to increase substantially when going from 0 samples per year to 52 samples per year for these parameters, especially since some of them are VOCs and SVOCs.

Page 25

- The permit states that no stormwater shall be directly admitted to the sanitary sewers, but this is a combined sewer system.
- The permit states that no hauled-in waste can be accepted when the instantaneous flow exceeds 3.0 MGD, but the hydraulic design capacity of the plant (1.5 MGD) multiplied by a peaking factor of three is 4.5 MGD.
- The CSO outfalls are not listed in Part A.

Page 26

- MAWC is not responsible for street cleaning or for cleaning storm sewers. This work is the responsibility of the municipality (Mt. Pleasant Borough).
- Please provide clarification on the specific requirements for implementation of a pollution prevention program.
- Please provide clarification on the specific requirements for public notification. Does posting signs at each CSO outfall satisfy this requirement?
- Please provide clarification on the specific requirements for monitoring CSO outfalls to characterize impacts and efficacy of controls. Do twice weekly and post-rain event inspections of the outfall pipe to visually check for debris and other visible stream impacts satisfy this requirement?

Pages 29 – 31

- The Pretreatment Program section is written for continued implementation of an existing program, rather than for development of a new program. Mt. Pleasant Borough STP is not currently covered by an EPA-approved Pretreatment Program.

Page 32

- MAWC does not believe that Benzo(k)Fluoranthene, Bis(2-Ethylhexyl)Phthalate, and Indeno(1,2,3-cd)Pyrene should be included in the WQBELs table and TRE requirement because all of the sample results for these parameters were non-detect during the 10 weeks of effluent resampling.

Pages 32 – 33

- The Final WQBEL Compliance Report schedule for Mt. Pleasant Borough STP is more stringent than the schedule that was included in the draft permit for Jeannette WWTP. Why would these timeframes not be consistent for all facilities that are subject to this requirement?

Page 39

- The stormwater outfalls listed in this table do not include the two roof drains shown on the “Mount Pleasant Borough Sewage Treatment Plant Proposed Outfall Locations for the Municipal Authority of Westmoreland County” map that was included as an attachment to the permit renewal application. Are roof drain outfall pipes not required to be counted as stormwater outfalls?

Questions/Comments Regarding the Fact Sheet

Pages 12 – 13

- The fact sheet states that “removing two outliers from the free cyanide resampling data dropped the total number of samples below 10 so TOXCONC could no longer be used to evaluate the resampling data. Therefore, for free cyanide, the maximum value of the resampling data (13 ug/L) was entered into TMS.” Why would one of the outliers that was supposed to be dropped be used as the value entered into TMS? Why wasn’t the median used per the SOP?

Attachment E

- The CBOD5 output lists 17.85 mg/L, but the draft permit lists 17.0 mg/L.

Attachment F

- Why is the “Chlorine Demand of Discharge” input 0?
- Why is the “Decay Coefficient (K)” left blank?

Attachment J

- For Total Copper, Dichlorobromomethane, Benzo(k)Fluoranthene, Bis(2-Ethylhexyl)Phthalate, and Indeno(1,2,3-cd)Pyrene, there is an extra sample result labeled 05/27/22 that was not part of the resampling.
- For Dichlorobromomethane, there is a missing sample result of 0.620 ug/L from 8/31/22.
- For Benzo(k)Fluoranthene, Bis(2-Ethylhexyl)Phthalate, and Indeno(1,2,3-cd)Pyrene, the less than symbol was not included to show that these were all non-detect results.

If you have any questions or would like to discuss these comments, please contact me at [kwarheit@mawc.org](mailto:kwarheit@mawc.org) or 724-454-0233.

Sincerely,



Katelyn Warheit  
Environmental Compliance Superintendent  
Municipal Authority of Westmoreland County

cc: Dom Garofola, Gibson-Thomas Engineering