pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST REGIONAL OFFICE
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET ADDENDUM

Application Type	**Renewal**	Application No.	**PA0026921**
Facility Type	**Sewage**	APS ID	**737436**
Major / Minor	**Major**	Authorization ID	**941877**

Applicant and Facility Information

Applicant Name	**Greater Hazleton Joint Sewer Authority**	Facility Name	**GHJSA WWTP**
Applicant Address	P.O. Box 651	Facility Address	500 Oscar Thomas Drive
	Hazleton, PA 18201-0651		Hazleton, PA 18201
Applicant Contact	Christopher Carsia	Facility Contact	Christopher Carsia
Applicant Phone	(570) 454-0851 ext 310	Facility Phone	(570) 454-0851 ext 310
Client ID	85678	Site ID	242069
SIC Code	4952	Municipality	West Hazleton Borough
SIC Description	Trans. & Utilities - Sewerage Systems	County	Luzerne
Date Published in PA Bulletin	April 10, 2021	EPA Waived?	No
Comment Period End Date	May 10, 2021	If No, Reason	Major Facility, Pretreatment, Significant CB discharge
Purpose of Application	Renewal of an NPDES permit for discharge of treated sewage.		

Internal Review and Recommendations

Public notice of the draft permit was published in the PA Bulletin on April 10, 2021. Comments were received from the US EPA and GHJSA. The comments and DEP's responses are below. Another draft permit will be issued for public comment due to the changes made to the permit. Note that 1/month E.Coli monitoring/reporting is included in this draft permit as per latest DEP guidance.

EPA Comment 1:

The Fact Sheet states per the existing LTCP: "Due to the mining activities in the study area over the years and other factors, there is no knowledge of any sensitive areas in the Authority's drainage basins." The LTCP, June 2001, is a document explaining what elements are in an LTCP. It is not a study but a how to conduct a LTCP. Currently the permit has CSO Outfalls 002 to 015 listed. It is not clear if a study conducted in 2019 by Timothy Daley addressed these 14 CSO Outfalls with respect to sensitive areas. The fact sheet could provide discussion of potential impacts of sensitive areas.

DEP Response:

Page 9 of the draft permit fact sheet (issued March 24, 2021) includes the following wording that references language in GHJSA's current LTCP and DEP's comments on the language: *(GHJSA) "As per the LTCP: "Due to the mining activities in the study area over the years and other factors, there is no knowledge of any sensitive areas in the Authority's drainage basins."*

(DEP Response) A brief eMapPA search found several environmental points of interest in the GHJSA collection system area, including: private drinking water wells, public water supply infrastructure and environmental justice areas. Those areas should be addressed in the LTCP update."

Approve	Return	Deny	Signatures	Date
X			Brian Burden Brian Burden, E.I.T. / Project Manager	November 18, 2021
X			Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	11-18-21

Internal Review and Recommendations

Private drinking water wells and public drinking water supply infrastructure can be contaminated with raw sewage from CSOs due to deteriorating or non-functioning CSO conveyance infrastructure, by CSO outfall discharges entering the groundwater or surface water after a discharge, and by other means. As per the draft permit fact sheet, the nearest downstream public water supply intake location is approximately 46 miles downstream at the Danville Municipal Water Authority treatment facility.

Environmental justice areas may be impacted via all the reasons stated above as well as by the resulting odors and raw sewage debris, which are concerns for human health and overall community aesthetics, and by other means.

Another environmentally sensitive area GHJSA should consider in their LTCP revision is the Chesapeake Bay watershed and the effects of nutrient pollution in the watershed. The poor water quality has negatively impacted several species, including: fish, blue crab, oysters and submerged grasses.

Many other impacts on sensitive areas may exist, such as but not limited to: wetlands, biological resources, habitats, parks, historic/archaeological sites, natural heritage areas, tribal lands and wildlife areas.

Mr. Daley's point of first use (POFU) determination report did not include studies on the 14 CSO outfalls (see attached). The purpose of the report was to determine the point on the receiving stream to model the WWTP discharge.

EPA Comment 2:

It is not clear if modeling of the system has been conducted to include the 14 CSO Outfalls. This modeling will be necessary for the authority to make an informed decision on the capacity of the system to meet 85% capture which will determine the choice of demonstrative or presumptive approach. This study is mandated for completion within 4 years of the permit effective date while the determination of approach is mandated within 6 months of the permit effective date. Modeling should be conducted prior to determination of approach. The fact sheet could provide information on why 4 years is necessary to conduct modeling if analysis of the system has been routinely conducted.

DEP Response:

Page 5 of the draft permit fact sheet states: "*The Authority continues to utilize the monthly CSO flow estimating spreadsheets, as developed in 2000, and there have been no changes to the flow estimating procedures in these spreadsheets. Initial comparison of these spreadsheet flow estimates with actual flow metering data collected as part of Gannett Fleming's October 2008 CSO Characterization Report indicated that further investigation into the flow estimating procedures may be warranted. The permittee's consultant stated that these flows represent an approximation of CSO discharges, and the accuracy of these estimated flows is unknown. The consultant suggests these flow estimates should not be used for regulatory monitoring or enforcement, planning, or design purposes. As per an email from the applicant's consultant, dated September 10, 2017: "the monthly CSO flow estimating spreadsheets were developed back in the 1990's as part of the Nine Minimum Controls and as an NPDES permit requirement. The Authority has continued to compile these monthly spreadsheets over the years, but they are not used for any specific purpose. Initial comparison of these spreadsheet flow estimates with actual flow metering data collected as part of Gannett Fleming's October 2008 CSO Characterization Report indicated that further investigation into the flow estimating procedures may be warranted. Because of the uncertainty in the spreadsheet results, they are simply maintained as directed by DEP.""*

The 4-year goal was established as a result to give the permittee time to develop an effective model. It's agreed 2 years will provide sufficient time to develop a model and that modeling should be performed *before* submittal of a revised LTCP. The timeline for modeling has been updated to a 2-year goal. Note that the due date for submittal of a revised LTCP has been updated to 4 years after the permit effective date.

Also, the completion date for the "Select CSO control alternative and notify DEP of the alternative chosen" milestone in Part C.III.C.4 of the permit has been deleted from the permit. In an email, dated October 29, 2021, the applicant's consultant indicated GHJSA will be using the presumptive approach to the LTCP.

EPA Comment 3:

The fact sheet goes into detail of construction activities on 3 items: Diversion Chamber No 7 (completed), Treatment Plant Diversion Chamber Characterization (completed), and Diversion Chamber No 12 with scheduled completion in 3 years.

Internal Review and Recommendations

These efforts indicate analysis has been performed on the system. These items could be added to the future PCCM Plan of the future LTCP.

DEP Response:

DEP acknowledges the comment.

EPA Comment 4:

The Fact Sheet could provide information on Population Served and the Level of Financial Burden. These items could provide insight on grant assistance and feasibility as this LTCP has not progressed since proposed in 2001.

DEP Response:

DEP agrees information on population served and the level of financial burden can provide insight on grant assistance and feasibility and recommends GHJSA include that information in their revised LTCP.

The permit application submitted in 2012 does not include information on the population numbers or levels of financial burden. The total population served was not found on GHJSA's website. GHJSA's website includes an independent auditor's report for 2019/2020 that states the following:

"At July 31, 2020 the Authority's total assets increased by $6,839,637 from July 31, 2019. This net increase was the result of several changes, including an increase in cash and cash equivalents of $2,386,663, increase in capital assets (net of accumulated depreciation) of $4,385,078, which were offset by a decrease in restricted cash and cash equivalents of $71,871.

Total liabilities decreased $523,687, which was primarily caused by an decrease in current portion of long term debt and long-term debt, net of current portion of $197,771, an increase in restricted accounts payable capital assets of $326,170, a decrease of net pension liability of $4,704, and a decrease of $63,622 in OPEB liability.

Total net position of $50,890,229 was $7,156,721 higher than the prior year, reflecting the net effect of the Authority's profitable operations needed to fund ongoing capital projects. Net investment in capital assets increased by $4,600,902, due to the Authority's acquisition and construction of capital assets and payment of the related debt. Consistent with the Authority's issuance of its Series 2020 Sewer Revenue Bonds, a portion of the Authority's total net position at July 31, 2020, $1,727,930, was restricted for bond covenants. Unrestricted net position increased by $2,616,538, the net effect of all of the changes as previously noted.

The Authority's total operating revenues decreased $762,657 from the previous year, primarily due to a decrease in hauled waste revenue and a decrease in penalties as the sewer authority suspended water shutoffs and did not penalize customers due to COVID-19 as recommended by PMAA and state guidance.

Total operating expenses of $9,867,930 increased by $256,247 from the prior year. The most significant increase was in depreciation expense.

Interest income decreased by $21,831, as a result of lower rates of return. The Authority had realized gains on the sale of investments of $0 for 2020 as compared to $8,981 of realized gains on the sale of investments for 2019. Interest expense decreased by $118,098. It should be noted that interest expense on the Authority's Sewer Revenue Bonds and a PennVest loan are being capitalized during construction of the related capital assets financed with the debt proceeds. These overall changes resulted in a net nonoperating revenues (expenses) of ($839,030) for 2020 as compared to ($577,273) for 2019.

The Authority also received $1,824,828 in the form of a capital contribution for 2020 compared to $2,942,867 for 2019.

Overall, the Authority experienced an increase in net position of $7,156,721 for the fiscal year ended July 31, 2020 as compared to a net increase of $6,681,835 in the prior year."

Internal Review and Recommendations

EPA Comment 5:

If an older/original LTCP did include a performance standard that may change in an updated plan, the original performance standard should still be used in the permit until a new standard has been approved by DEP and placed in a subsequent permit. It was noted in a PADEP CSO Spreadsheet on file with the EPA that the Permittee had chosen the presumptive approach in a 2003 Permit. However, this has not been verified. Below is language agreed upon from 4-19-2021 from EPA Dana Hall and PADEP Sean Furjanic. This proposed language is a small addition/refinement from what is presently in the *CSO Water Quality-Based Effluent Limit* section.

CSO Water Quality-Based Effluent Limit
The permittee shall comply with a minimum of one of the following under design conditions:

1) *A planned control program that has been demonstrated to be adequate to meet the water quality-based requirements of the CWA ("demonstration approach"), or*
2) *A minimum level of treatment that is presumed to meet the water quality-based requirements of the CWA, unless data indicate otherwise ("presumption approach"):*
    a. *Eliminate or capture for treatment, or storage and subsequent treatment, at least 85% of the system-wide combined sewage volume collected in the combined sewer system during precipitation events under design conditions; or*
    b. *Discharge no more than an average of [4, 5, or 6] overflow events per year; or*
    c. *Eliminate or remove no less than the mass of the pollutants identified as causing water quality impairment, for the volumes that would be eliminated or captured for treatment under the 85% capture by volume approach.*

DEP Response:

The wording agreed upon after the March 24, 2021 draft permit issuance will be included in this draft permit.

Note: In an email, dated October 29, 2021, the applicant's consultant indicated GHJSA will be using the presumptive approach to the LTCP.

EPA Comment 6:

It is questionable if modeling should be a 4-year goal as this is an early activity in the analysis of determining approach (presumptive verses demonstrative).

DEP Response:

Please refer to DEP's response for EPA Comment 2 and EPA Comment 5. Modeling is now a 2-year goal.

GHJSA Comment 1:

New once per week "monitor-only" requirements for raw influent CBOD and TSS have been incorporated in the Effluent Limitations Table on page 2 of the revised draft Permit. Unusually, the draft Permit requires monitoring of CBOD, not BOD. All other similar requirements incorporated for other municipal WWTPs have required BOD instead of CBOD. Furthermore, the WWTP staff routinely monitor raw influent BOD for annual Chapter 94 reporting.

The Authority requests that the Department revise the raw influent analysis requirement from CBOD to BOD so that the results can be utilized for Chapter 94 reporting purposes. *This revision will also align the new monitoring with the routine raw influent BOD analyses currently conducted by the Authority.*

Internal Review and Recommendations

DEP Response:

The raw influent analysis requirement is changed back to BOD_5 in the final permit.

GHJSA Comment 2:

New Ammonia Nitrogen (NH_3-N) seasonal discharge limits are proposed in the Effluent Limits Table on page 10 of the revised draft Permit. This includes a summertime monthly average limit of 2.75 mg/L (with a maximum day limit of 5.5 mg/L) and wintertime monthly average limit of 8.25 mg/L (with a maximum day limit of 16.5 mg/L). These limits will be effective beginning three (3) years after NPDES Permit effective date. During the first 3 years of the Permit cycle, a monitor-only requirement is included. The monitoring frequency is once per day to match the CBOD and TSS limits.

The Authority plans to initiate the process of becoming accredited by PADEP under the Pennsylvania Code Title 25 Chapter 252 Laboratory Accreditation regulations for the ammonia nitrogen analysis so that routine in-house monitoring of ammonia nitrogen can be conducted and reported to the Department. ***Therefore, the Authority requests that the Department delay issuance of the final Permit to allow the Authority time to obtain accreditation.***

DEP Response:

DEP cannot grant the request to delay permit issuance based on the reasoning provided, but the monitoring frequency will return to 1/week until the limitations come into effect. There are many other time-sensitive permit requirements and milestones that should be initiated as soon as possible. It's also important to have the latest revised Parts A, B & C requirements in effect as soon as possible.

Internal Review and Recommendations

GHJSA Comment 3:

Monitor only requirements have been incorporated into the Effluent Limits Table on pages 2 and of the revised draft NPDES Permit for Total Aluminum, Total Iron, and Total Manganese. The accompanying "NPDES Permit Fact Sheet" states that these requirements are a result of a Total Maximum Daily Load (TMDL) for the Black Creek, which was finalized in May 2005. The TMDL addresses the three (3) primary metals associated with acid mine drainage (Aluminum, Iron, and Manganese), as well as pH. The NPDES Permit Fact Sheet acknowledges that treated sewage is not considered a major contributor of these metals but monitoring and reporting requirements are incorporated regardless. The monitoring frequency throughout the entire Permit cycle is once per month for these parameters.

The Authority requests that the monitoring frequency for these parameters be adjusted in the final NPDES Permit from once per month to once per quarter. *This revision will align the new monitoring with the routine quarterly local limit analyses under the Authority's Industrial Pretreatment Program, which includes other metals and organics.*

DEP Response:

Quarterly sampling of the TMDL metals will provide enough data to determine if there are any major contributions of metals to Black Creek through the discharge. The monitoring frequencies for Total Aluminum, Total Iron and Total Manganese is updated to 1/quarter in the final permit.

GHJSA Comment 4:

The Effluent Limits Table on page 5 of the draft NPDES includes new Hexachlorobutadiene and Free Cyanide discharge limits. These limits will be effective beginning three (3) years after NPDES Permit effective date. During the first 3 years of the Permit cycle, a monitor-only requirement is included. The monitoring frequency throughout the entire Permit cycle is once per week for these parameters.

Internal Review and Recommendations

- The proposed ***Free Cyanide*** discharge limit is based on the ten (10) supplemental sampling results collected between August 2018 and October 2018. Of these results, three (3) were detectable results above the Quantification Level of 5 µg/L. Because these results are greater than 50% of the Water Quality Based Effluent Limits (WQBEL) of 8.1 µg/L, discharge limits are imposed. These supplemental sampling results, however, are almost three (3) years old and may no longer be representative of the current discharge due to changes in the characteristics of the hauled wastes received at the WWTP. For example, the WWTP is not accepting as much landfill leachate now, which may have been contributing to the Free Cyanide loadings to the WWTP.

  Authority staff wish to conduct a minimum of three (3) additional Free Cyanide analyses of final effluent composite samples at a QL of 5 µg/L. ***The Authority requests that the Department allow time to collect these additional sampling and that the Department consider these additional analytical results in place of the 2018 sample results when evaluating the need for a Free Cyanide limit in the final NPDES Permit.***

- PADEP is allowing the Authority to conduct additional sampling and analysis for ***Hexachlorobutadiene*** at a Quantification Level (QL) of 0.5 µg/L during the draft Permit review period and these additional results will be considered when finalizing the final Permit.

  Authority staff are conducting a minimum of three (3) additional Hexachlorobutadiene analyses of final effluent composite samples at a QL of 5 µg/L to be submitted to PADEP for consideration prior to issuance of the final Permit. ***The Authority requests that the Department allow time to collect these additional sampling and that the Department consider these additional analytical results when evaluating the need for a Hexachlorobutadiene limit in the final NPDES Permit.***

These new proposed limits also initiate the requirement to conduct a Toxics Reduction Evaluation (TRE) under the Part C.VI on page 37 of the revised draft Permit. The intent of the TRE is to characterize the parameters in the raw influent and final effluent of the WWTP and identify any management, treatment technologies, or other control techniques necessary for compliance.

The TRE special conditions, however, require numerous site-specific studies (including coefficients of variability, total hardness testing, in-stream sampling, chemical translators, stream parameters including slope, width, and velocity, partial mix factors, and volatilization rates). These site-specific studies have historically been optional requirements in TREs of past NPDES Permits. The Authority may not wish, or need, to conduct some or all of these site-specific studies.

The Authority requests that Part C.VI.B be optional or voluntary rather than a requirement.

DEP Response:

Hexachlorobutadiene was not detected in the discharge, but the Quantitation Limits used to analyze the pollutant were not sensitive enough to determine if the discharge would violate water quality standards for Black Creek. Based on the sampling results provided by GHJSA in an email dated July 23, 2021, Hexachlorobutadiene is no longer considered a pollutant of concern and monitoring requirements are removed from the permit.

Internal Review and Recommendations

The levels of Free Available Cyanide in the discharge sampling results show there is reasonable potential for the discharge to violate the water quality standards found in PA Code Chapter 93. In accordance with PA Chapter 92a, limitations are included to help ensure water quality standards are met.

The Part C.VI template condition is removed from the permit since it's based on an assumption that the permittee cannot meet the future limitations. The condition applied to both Free Available Cyanide and Hexachlorobutadiene in the March 24, 2021 draft permit. The sampling results submitted to DEP for both parameters after draft permit indicate the Free Available Cyanide limitations can be met and that there's no need for Hexachlorobutadiene limitations (based on lower QL sampling results).

GHJSA Comment 5:

The highest value reported in the sampling results submitted to the Department with the renewal application for several parameters was greater than 10% of the calculated Water Quality Based Effluent Limit (WQBEL). The WQBEL is the potential discharge limit that could be implemented based on the Department's water quality modelling. While numerical discharge limits are not necessary for these parameters because the historical reported final effluent values are only a fraction of the potential respective discharge limit, PADEP's guidance requires that monitor only requirements be incorporated into the revised draft Permit. For this reason, once per month monitor only requirements are incorporated in the revised draft Permit for Total Cobalt, Total Copper, Dissolved Iron, Total Manganese, Total Silver, and Total Zinc.

- The proposed ***Total Cobalt*** monitor only requirement is based on the ten (10) supplemental sampling results collected between August 2018 and October 2018. Of these results, three (3) were detectable results above the Quantification Level of 5 µg/L. The monitor only requirement is imposed because numerous Total Cobalt results are greater than 10% of the proposed WQBEL of 29.7 µg/L.

  Authority staff wishes to conduct a minimum of three (3) additional Total Cobalt analyses of final effluent composite samples at a QL of 5 µg/L. *Furthermore,* ***the Authority requests that analytical results of these additional samples be utilized in place of the 2018 sample results for establishment of a Total Cobalt WQBEL.***

- The proposed ***Total Manganese*** monitor only requirement is based on the three (3) supplemental sampling results collected in June and July 2012. These results were 163, 70, and 93 µg/L, respectively. The monitor only requirement is imposed because one of the Total Manganese results was greater than 10% of the proposed WQBEL of 1,561 µg/L.

  Due to the age of these supplemental sampling results, the Authority wishes to conduct a minimum of three (3) additional analyses of effluent composite samples for Total Manganese during the draft Permit review period and requests that the Department consider these additional results when finalizing the final Permit.

- The Authority monitors ***Total Copper*** in the final effluent quarterly as part of its Industrial Pretreatment Program and the results have consistently $\leq$ 4 µg/L over the last three (3) years. The Authority believes that this historical data should be sufficient to eliminate the Total Cooper monitoring requirement.

Internal Review and Recommendations

The Authority requests that the Department consider the following historical final effluent Total Copper data and requests that this monitoring requirement be eliminated in the final Permit.

Date	Final Effluent Total Copper, mg/L
03/14/2018	0.003
06/13/2018	0.004
09/20/2018	0.003
12/12/2018	0.004
03/14/2019	0.004
05/22/2019	0.003
09/11/2019	0.004
11/19/2019	0.003
03/18/2020	0.004
06/17/2020	0.004
09/23/2020	0.002
11/1/2020	< 0.002

The Authority also monitors ***Total Silver*** in the final effluent quarterly as part of its Industrial Pretreatment Program and these results over the last three (3) years have all been reported as non-detect at a QL of 1 µg/L. The Authority believes that this historical data should be sufficient to eliminate the Total Silver monitoring requirement.

The Authority requests that the Department consider the following historical final effluent Total Silver data and requests that this monitoring requirement be eliminated in the final Permit.

Date	Final Effluent Total Silver, mg/L
03/14/2018	< 0.001
06/13/2018	< 0.001
09/20/2018	< 0.001
12/12/2018	< 0.001
03/14/2019	< 0.001
05/22/2019	< 0.001
09/11/2019	< 0.001
11/19/2019	< 0.001
03/18/2020	< 0.001
06/17/2020	< 0.001
09/23/2020	< 0.001
11/1/2020	< 0.001

Internal Review and Recommendations

- Furthermore, PADEP allowing the Authority to conduct additional sampling and analysis for ***Dissolved Iron*** (and Total Silver) at lower Quantification Levels (QLs) during the draft Permit review period and these additional results will be considered when finalizing the final Permit.

  Authority staff wishes to conduct a minimum of three (3) additional Dissolved Iron (and Total Silver) analyses of final effluent composite samples and requests that the Department consider these additional results when finalizing the final Permit.

DEP Response:

Total Cobalt: Quarterly sampling of Total Cobalt will provide enough data to determine if there are any major contributions of metals to Black Creek through the discharge. The highest value reported for Total Cobalt was 6 µg/L and the most stringent WQBEL is 29.7 µg/L. The monitoring frequencies for Total Cobalt, Total Iron and Total Manganese is updated to 1/quarter in the final permit.

Dissolved Iron: After modeling the discharge with the additional sampling results provided, Dissolved Iron is still considered a parameter of concern. The highest value reported for Dissolved Iron was 51 µg/L and the most stringent WQBEL is 468 µg/L. The monitoring frequency will be updated to quarterly.

Total Copper: After modeling the discharge with the additional sampling results provided, Total Copper is still considered a parameter of concern. The highest value reported for Total Copper was 4 µg/L and the most stringent WQBEL is 14.6 µg/L. The monitoring frequency will be updated to quarterly.

Total Silver: After modeling the discharge with the additional sampling results provided, Total Silver is no longer considered a parameter of concern. Monitoring requirements for Total Silver are removed from the permit.

Total Manganese: Please refer to the response for GHJSA Comment 3. The monitoring frequency will be updated to 1/quarter.

Total Zinc: Total Zinc is still considered a parameter of concern. The highest value reported for Total Zinc was 36 µg/L and the most stringent WQBEL is 124 µg/L. The monitoring frequency will be updated to quarterly.

GHJSA Comment 6:

The Effluent Monitoring Tables on pages 6, 7, and 8 of the revised draft Permit provide monitoring of the WWTP's Stormwater Outfall Nos. 101, 102, and 103, respectively. The monitoring frequency in these Tables has been increased from 1 time per year to 1 time every 6 months. Additionally, there are changes in the monitored parameters; In addition to pH, TSS, O&G, TKN, now Total Iron is required. COD and TP, however, have been removed from monitoring. The Authority has not historically conducted sampling and analysis of its stormwater outfalls because the current NPDES Permit allows annual inspection in lieu of this monitoring. The Authority will need to ensure compliance with this increased monitoring and revised parameter list.

The Authority requests that footnote under the Effluent Limitation Tables for the stormwater Outfalls 101, 102, and 103 in the current NPDES Permit be added back to in the tables in the new Permit. *This footnote read "Permitee has the option to perform bi-annual inspection of facilities in lieu of bi-annual monitoring". Incorporating this footnote back into the Permit will allow the Authority to continue stormwater facility inspections instead of sampling and analysis of stormwater discharges.*

DEP Response:

Internal Review and Recommendations

Newer NPDES permits for treatment plants with design flows greater than 1 MGD have mandatory stormwater monitoring requirements if stormwater outfalls are identified in the application in order to assess water quality. The option to perform bi-annual inspections of facilities in lieu of monitoring is no longer available. DEP will adjust the monitoring frequency for stormwater outfalls from semiannual to annual in this permit.

DEP utilizes the monitoring requirements from Appendix J of the latest PAG-03 permit to determine the parameters of concern for large WWTPs. Appendix J of the latest PAG-03 permit requires monitoring/reporting for Total Suspended Solids and Oil & Grease. Those parameters will replace the parameters in the previous draft permit.

GHJSA Comment 7:

Total Nitrogen (TN) and Total Phosphorus (TP) offsets of 29,200 lbs/year and 408 lbs/year, respectively, have been established under Footnote 3 on Page 11 of the revised draft Permit.

The Authority requests that the TN offsets generated by the connection of seven (7) on-lot disposal systems (OLDS) in Hazle Township, as reported in the 2020 Chapter 94 Report, be, be incorporated into the final Permit.

DEP Response:

The 7 on-lot disposal system connection offsets are approved and included in Part A of the permit in addition to the previously approved offsets. GHJSA also requested 26 additional offsets for on-lot disposal system connections in an email dated November 5, 2021. Those additional offsets are also approved. Total Nitrogen offsets are now 30,025 lbs/yr [29,200 lbs/yr + 7(25 lbs/yr) + 26(25 lbs/yr)].

GHJSA Comment 8:

Bypass Provision under Part A "Additional Requirements" requires that a final effluent composite sample must be collected and analyzed for all parameters identified in the Discharge Limitations Table every day that a bypass event occurs. A bypass is defined under A.II as "the intentional diversion of waste streams from any portion of a treatment facility". A bypass includes a diversion around the secondary treatment units (i.e. trickling filter biotowers, activated sludge bioreactors, and biological aerated filters), but not discharge from CSO No. 002. Furthermore, the secondary treatment process of the WWTP is actually accomplished through three (3) different treatment units (trickling filter biotowers, activated sludge bioreactors, and biological aerated filters). Therefore, bypassing any one of these treatment units should not be considered bypassing of the secondary treatment process.

The Authority wishes to confirm with the Department that bypassing one of the three (3) different secondary treatment units (trickling filer biotowers, activated sludge bioreactors, and biological aerated filters) is not considered bypassing of the secondary treatment process and does not fall under this bypassing provision. Additionally, the Authority wishes to confirm that hauled waste introduction at locations besides the WWTP headworks is not considered a bypass.

DEP Response:

The scenario described in the first paragraph of the comment is considered a bypass (unless these specific provisions are included in the Design Engineer's Report on file under the current WQM permit). For the scenario to not be considered a bypass, GHJSA shall submit a Water Quality Management (WQM) permit amendment application to DEP describing the proposed diversion of wastewater with supporting calculations demonstrating that secondary treatment standards will be met. Upon approval of the WQM permit amendment, the scenario would not be considered a bypass.

Internal Review and Recommendations

Regarding the introduction of hauled waste at locations besides the WWTP headworks: If the Design Engineer's Report on file under permittee's current WQM permit does not identify the alternate locations of hauled waste introduction, the permittee shall submit a Planned Changes to Waste Stream supplemental report to DEP as described in Part A.III.C.2. of the permit.

GHJSA Comment 9:

Part C.III, beginning on page 29 of the revised draft Permit, outlines the regulatory obligations pertaining to the Authority's combined sewer overflows (CSOs). These include the following:

- Part C.III.C.2 requires the submittal of an updated Combined Sewer Overflow (CSO) Long Term Control Plan (LTCP) within two (2) years of the permit effective date.
- Part C.III.C.3 requires notification to Department of the CSO control alternative basis of the LTCP (either the Presumptive approach or the Demonstrative approach) within six (6) months of the Permit effective date.
- Part C.III.C.4 outlines a LTCP Implementation Schedule

While most of the milestones listed under the LTCP Implementation Schedule are reasonable and can be readily attained by the Authority, development and submission of the revised LTCP will require substantial effort and costs. Such revisions will need to be carefully developed in conjunction with the findings of the regional Act 537 Planning effort. Because some components of the sewage facilities planning (such as collection system mapping, design year flow projections, and collection system modeling) will need to be completed for use in the decision making process of the LTCP, it will most likely require more than two (2) years to complete the LTCP revisions. Therefore, ***the Authority requests a revision to the completion date for submittal of the revised LTCP to 48 months, rather than 24 months.***

DEP Response:

As described in the response to EPA Comment 2, this request is approved and a 48-month (4-year) timeline for submittal of the revised LTCP is now included in the permit.

GHJSA Comment 10:

Part C.VII beginning on page 39 of the revised draft Permit includes new, comprehensive Whole Effluent Toxicity (WET) Testing language, including a requirement to conduct one (1) WET Test annually. The Authority understands that this is standard language for all municipal WWTPs with annual average design flows greater than 1.0 mgd. Part C.VII.B.1, however, requires that WET Testing be conducted quarterly (4x/year) for the first year of the Permit cycle.

The Authority requests that the initial year requirement for quarterly WET Testing be eliminated from the final Permit and instead the annual WET Test requirement commence with issuance of the new Permit.

DEP Response:

This requirement was added to the draft permit issued on March 24, 2021 in response to the January 3, 2018 EPA comments on the first draft permit that was issued on December 4, 2017. EPA's comment was as follows:

Internal Review and Recommendations
"The fact sheet indicates that the previous permit did not require WET testing, so no WET testing was evaluated for the draft permit renewal. Permit applications for existing POTWs are required to include the results from a minimum of four quarterly tests for a year (from the year preceding the permit application), or results from four tests performed at least annually in the four and one half year period prior to the application (40 CFR 122.21(j)(5)(ii)(A)). Since this federal requirement was not met, and no subsequent RP analysis was conducted, we would recommend that the permit include accelerated quarterly WET testing in the first year of the permit. It is EPA's expectation that the results of the quarterly tests would be evaluated by PADEP in order to address the RP assessment that was not conducted during this draft permit development process. The intent of the RP assessment would be to determine the need for WET limits in the permit, if appropriate, through a permit amendment." As stated in the fact sheet of the draft permit issued March 24, 2021: "The permit application submitted by GHJSA in 2012 (3800-PM-WSFR0009b, Rev. 4/2011) did not require WET testing results to be submitted with the application. It appears that specific version of the permit renewal application was the correct version for the permittee to use considering the revision date, the application due date and the typical time it takes to thoroughly complete a major sewage permit application. Since the date 40 CFR 122.21(j)(5)(ii)(A) was promulgated (requirement for WET tests to be submitted with the permit application) is not known by the permit reviewer and WET testing requirements likely didn't appear in the permit renewal application used by GHJSA in a timely manner, Part C.VII.B.1 is added to the permit requiring the permittee to submit quarterly WET tests for the first year of renewed permit coverage." After considering all factors (including the requests for and against accelerated tests, the previous permit and permit application requirements, the time since the last permit renewal, the years-old standard for facilities of similar size to perform annual WET testing, the current language in the latest revised permit requiring accelerated tests if there is an endpoint failure, etc.), semi-annual WET testing will be required for the first year of permit coverage with the first test to be sampled for within 30 days of permit issuance.