pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

April 14, 2020

VIA ELECTRONIC DELIVERY

Rich Walton.
Westmoreland Sanitary
111 Connor Lane
Belle Vernon, PA 15012-4519

Re: Leachate Management and QA/QC Plan Revision
Westmoreland Sanitary Landfill
Rostraver Township
Westmoreland County
I.D. No. 100277
APS No. 3107
Authorization No. 1281909

Dear Mr. Walton:

The Department of Environmental Protection (the Department) has reviewed the request for minor modification of Permit No. 100277 for Leachate Management Plan revisions at the Sanitary Landfill located in Rostraver Township, Westmoreland County. Based on the contents of the application that the Department determined to be administratively complete on March 9, 2020, the Department has identified the following technical deficiencies:

Technical Deficiencies

1. Attachment 14-1: The proposed revisions to the Operation Plan appear to include provisions for relocation of the off-hour container storage area from the current location near the site entrance to locations north of the disposal area. No other information is provided regarding this revision. Please explain the reason for the selected location and how it is preferable to the currently approved location.

2. Attachment 25-3:

   A. Paragraph 7.a of the February 13, 2020 Consent Order and Agreement (CO&A) requires that the proposed Leachate Management Plan revisions provide that, in the event that Sanitary Landfill conveys any leachate to an approved Publicly Owned Treatment Works (POTW) via piping of un-treated or pre-treated leachate, Sanitary Landfill shall notify the Department at least five (5) business days prior to any conveyance of leachate to a POTW via piping with the following information: the point of interconnection to the sewer system, the name and operator of the POTW, proof of any necessary sewage planning approval, a copy of the signed service agreement with the POTW, documentation that the POTW is authorized by its governmental regulatory agency to accept landfill leachate and documentation that Sanitary Landfill provided such POTW with laboratory analytics representative of the type and characteristics of Sanitary Landfill's leachate prior to entering into any such service agreement, and the location of any existing combined or sanitary overflows from the system between the point of connection and the POTW. This provision does not appear to be included in the application. Please incorporate the required provision into Attachment 25-3.

   B. A statement appears on Page 25-3.1(5) in Exhibit 25-3.1 that the storage tanks and forcemain are designed so that in the event flows exceed the combined capacity of the leachate evaporator and the available trucks for offsite disposal, flow **may** be diverted into the onsite leachate storage tanks. This

statement appears to suggest that excess leachate will not be directed into the storage tanks when trucking is available for transport for offsite disposal, regardless of the availability of allowable capacity within the tanks. This would be contrary to the Westmoreland Sanitary's obligation in Paragraph 3 of the CO&A to operate and manage to the existing leachate equalization and storage tanks to maximize the benefits thereof and contradictory to representations appearing elsewhere in Attachments 25-8 and 25-10. Please modify the statement in Exhibit 25-3.1 to reflect this and to indicate that in the event flows exceed the capacity of the leachate evaporator, leachate will be directed into the storage tanks until the allowable level is reached, after which it may be diverted to the truck load-out area for transportation for offsite disposal.

C. The language added to Section 5.0 of the narrative in Exhibit 25-3.1 does not appear to satisfy the requirement of Paragraph 7.j of the CO&A that the revised Leachate Management Plan include a detailed plan and schedule for inspection, maintenance and cleaning of the leachate collection system. The amended narrative states only that leachate collection and detection cleanouts will be cleaned or inspected annually and that the site will maintain records of the cleaning/inspection events. Please further revise the narrative to describe the specific inspection procedures to be followed, the observed conditions that will trigger a cleaning event, the specific cleaning procedures to be employed and the timeframe for completion of those procedures.

   In addition, Westmoreland Sanitary previously represented to the Department that 'bridging' of collection pipe perforations has been a factor in concentrated releases of leachate from the disposal area. It is not apparent that the proposed annual inspection/cleaning frequency is sufficient to minimize or prevent such occurrences in the future. Please revise the plan to increase the frequency to quarterly.

3. Exhibit 25-5.3:

   A. The pump station design calculations presented in Exhibit 25-5.3 of the application determines the operating point for a single pump. The narrative in Attachment 25-8 indicates that the proposed pump station will contain a duplex pump system where pumps may operate individually or simultaneously at higher influent flow rates. Please revise Exhibit 25-5.3 to account for simultaneous operation of both pumps.

   B. The pump station design calculations determine the operating point for the proposed pumps based on the static head and frictional losses of the piping system between the pump station and Process Tank inlet. The Minor Loss Calculation table shown in the exhibit does not appear to account for all of the valves and fittings that the piping system will entail. Losses due to check valves on the pump discharge lines and the control valves to be installed in the manhole shown in Detail B of Drawing (2019-108)-45B are not represented in the table. As described in the operational narrative, leachate will pass through the HRT system before entering the Process Tank. The calculation does not appear to account for any head loss through the HRT system. Please re-evaluate the design of the pump station to account for all head losses.

   C. The Plan View depiction of the proposed pipelines connecting the Leachate Processing Area with the existing leachate conveyance pipe on application Drawing No. (2018-157)-45 shows that the pump station forcemain and gravity return line will pass under the main haul road to the disposal area and the access road leading to the Gas Plant. Please include in Exhibit 25-5.3 analyses demonstrating the capability of the proposed pipes to withstand the loads generated by the movement of waste transportation vehicles and operational equipment on those roadways.

4. Attachment 25-8:

   A. Clarification is requested with respect to the narrative description the proposed leachate evaporation system presented in Attachment 25-8 of the application. As described, leachate will be conveyed by gravity to either the leachate evaporator or to the existing onsite storage tanks via the existing gravity

leachate conveyance line located along the eastern side of the main haul road. Please describe the circumstances under which it will be necessary to return leachate to the conveyance in lieu of evaporation.

B. The narrative in Attachment 25-8 states that leachate in the existing storage tanks may flow via gravity back to the proposed pump station. The piping system layout on application Drawing (2019-108)-45 appears to show that the only pipeline connecting the existing storage tanks to the proposed pump station will be existing leachate conveyance line located along the eastern side of the main haul road. Please explain how leachate redirected from the proposed leachate processing facilities to the tanks via gravity will be able to return from tanks to the pump station by gravity through the same pipeline.

C. Attachment 25-8 does not propose any measures for the initial characterization and periodic monitoring of the concentrated residues generated by the evaporation unit. Please revise the application to specify monitoring procedures providing for, at a minimum, analysis via Form U of each load of leachate concentrate prior to disposal for pH, flashpoint, reactive cyanide, reactive sulfide, PCBs, TCLP metals, TCLP volatiles, TCLP semi-volatiles, radium-226, radium-228, potassium-40, and μR/hr meter readings. A reduction in frequency may be proposed after a sufficient number of sampling events are completed to establish the quality and consistency of the concentrate's composition.

D. The narrative in Attachment 25-8 provides that containers of concentrated residues generated by the evaporation unit will be scanned for the presence of radioactive material prior to disposal. Please augment that provision to indicate that, in the event that radiation is detected at levels exceeding 10 μR/hr above background, the appropriate response procedures set forth in the site's approved Form X will be implemented. Please also propose a contingency plan for alternative storage and disposal should the facility be unable to disposal on-site due to exceedance of the monthly source term allocation.

E. Documentation necessary to demonstrate conformance of the proposed Process Tank with the requirements for aboveground storage tanks in 25 Pa. Code Section 299.122(b) is not provided in Attachment 25-8 of the application. Please revise the information presented in this regard to address the following:

i. 25 Pa. Code Section 299.122(b)(2) requires that tanks be constructed upon a stable foundation capable of supporting the total weight of the tank when full of waste without movement, rolling or unacceptable settling. Information regarding this requirement consists only of a statement in Attachment 25-8 that the foundation design, foundation construction and tank construction details will be provided by the manufacturer. Please incorporate the manufacturer's foundation design and construction details into the application along the supporting geotechnical analyses and settlement calculations demonstrating that site conditions conform to the criteria on which the manufacturer's design and construction details are based.

ii. The application does not appear to address the requirement of 25 Pa. Code Section 299.122(b)(3) that tanks be tested for tightness in accordance with current codes of practice developed by Nationally recognized associations and manufacturer's specifications. Please incorporate into the application the procedures by which the Process Tank will be tested for tightness prior to being placed into service.

iii. 25 Pa. Code Section 299.122(b)(4) requires that tank connections through which waste can flow shall be equipped with an operating valve adjacent to the tank to control the flow of waste. Please incorporate into the detail requested in Item 8.A below the presence and location of the required flow control valves.

iv. 25 Pa. Code Sections 299.122(b)(6) and (7) requires that tank be installed with mechanisms to prevent overfilling, including a monitoring device indicating the level or volume in the tank that is visible to the individual responsible for the transfer of waste and either a high-level alarm and an automatic

high-level cut-off device or a high-level alarm and a manned operator shutdown procedure. Please provide documentation demonstrating that the Process Tank will be installed with these features.

v. 25 Pa. Code Sections 299.122(b)(10) and (16) requires that tanks be constructed with secondary containment under the tank bottom designed to direct any release to a monitoring point and that tank bottom shall be monitored at least monthly for leakage by visual, mechanical or electronic leak detection methods. Please specify the manner by which leakage from the proposed Process Tanks will be monitored in accordance with these requirements.

vi. The application does not appear to address the requirement of 25 Pa. Code Section 299.122(b)(11) that the permeability of the secondary containment be less than 1×10^{-7} cm/sec at anticipated hydrostatic head. Please clarify that the concrete floor serving as the secondary containment system will employ a low-permeability admixture and adhere to ACI 350.4-Design Considerations for Environmental Engineering Concrete Structures or be otherwise coated with an impermeable material.

F. The narrative in Attachment 25-8 includes provisions allowing for installation of an alternative evaporation unit and or Process Tank other than that which is specifically identified in the attachment. As similar provision appears in Attachment 25-9 with respect to the HRT system. Please be advised that the Department's permit actions are based on the specific documentation contained in the corresponding application with respect to the specific design features, equipment and operational procedures described therein. Installation and operation of functionally equivalent alternative units requires the Department's prior written approval based on supporting documentation demonstrating the alternative system's equivalent performance capability. Please revise all references in the use of alternative equipment or configurations to clarify the requirement for the Department's prior written approval.

5. Attachment 25-9:

A. The narrative in Attachment 25-9 regarding the HRT system states only that the system will serve to remove hydrocarbons/oil from the leachate and does not describe the specific components of the system. The July 2, 2019 Pentair proposal appears to indicate that the system will be composed of four elements: duplex Basket Strainers, duplex Vmax Separators, a Processor unit and an HRT-Organic Separator unit. Please revise the narrative to provide a description of each element, how each element functions and the composition of the residue(s) that each element generates.

B. The component Data Sheets contained in the June 28 and July 2, 2019 Pentair proposals appended to Attachment 25-9 specify a 70 gpm design feed rate for the system. The pump station design calculations in Exhibit 25-5.3 show that leachate will be pumped to the HRT system at a rate in excess of 85 gpm when one pump is operational. On that basis, it appears that the proposed HRT system may be incapable of performing its intended function. Please modify the application to provide for an adequately sized pretreatment system capable of operating effectively when both pumps are operating.

C. The narrative in Attachment 25-9 indicates that recovered hydrocarbons/oil will be initially stored within the containment area in an HDPE container with provisions to install a dual-walled carbon steel storage tank for that purpose in the future. Please specify the size and number of storage containers and maximum volume of recovered hydrocarbons to be present in the containment area. Be advised that installation and operation of an additional storage tank requires the prior issuance of a permit modification based on documentation of that tank's conformance with the requirements of 25 Pa. Code Section 299.122.

D. The narrative in Attachment 25-9 indicates that the recovered hydrocarbons/oil will be evaluated for potential resale or reuse as a feedstock for a manufacturing process. Be advised that the resale or reuse of recovered hydrocarbons/oil requires the prior issuance of either a General Permit pursuant to Subchapter H of 25 Pa. Code Chapter 287 or modification to Sanitary Landfill permit rendering a

dewasting determination in accordance with 25 Pa. Code Section 287.7. Please revise the resale/reuse provision in Attachment 25-9 to acknowledge this requirement.

E. Paragraph 7.g of the CO&A requires that the pending application include a plan for monthly testing of the influent to and effluent from the HRT system to allow for assessment of water quality to facilitate indirect discharge of the site's leachate to a POTW. The Pretreatment Testing Plan proposed in Attachment 25-9 does not appears to be adequate for that purpose. POTWs proposing to accept landfill leachate are required to assess the potential impact of doing so on plant performance and effluent quality with respect to the seven pollutant groups set forth in the application procedures for NPDES permitting. Please revise the Pretreatment Testing Plan propose monthly HRT system sampling and analysis for the analytes listed in the attachment to this letter.

6. Attachment 25-10:

A. The Leachate Trucking Plan presented in Attachment 25-10 pursuant to Paragraph 7.h of the CO&A proposes to initiate vehicular transportation for offsite disposal when the level of leachate within the existing onsite storage tanks reaches 25% of total tank capacity. Given the leachate generation data presented in Attachment 25-2 of the application and limitation in 25 Pa. Code Section 273.275(b) on accumulations of leachate in storage systems to not more that 25% of the total storage capacity on a regular basis, the plan's proposal to only initiate trucking when levels reach 25% of total capacity will likely effectuate exceeding that level on a regular basis. Further, the plan does not indicate the rate at which leachate will be trucked off-site once trucking is initiated. Please revise the Leachate Trucking Plan to initiate trucking prior to reaching the regulatory level and to specify trucking rates that will expeditiously reduce the accumulations to the regulatory level.

B. The narrative in Attachment 25-10 alludes to evaluation of methods for leachate reduction to decrease generation rates below the capacity of the proposed evaporator. Please augment the narrative to indicate the potential measures being evaluated, the anticipated levels of reduction likely to be attained and a commitment to implement the measures that will result in elimination of a need to transport leachate for off-site disposal.

7. Attachment 28-2:

A. Paragraph 7.i of the CO&A requires that an updated set of Bonding Worksheets be included in the application with separate cost estimates for vehicular transportation of leachate to an off-site treatment facility for disposal and those for operation of the on-site treatment system(s). This requirement relates to the provision in 25 Pa. Code Section 273.162(b)(3) that facility's proposing interim vehicular transportation of leachate provide additional bond to the Department in an amount sufficient to pay for the cost of vehicular transportation and offsite leachate treatment until final closure. As such, Paragraph 7.i requires that the application include two sets of Bonding Worksheets: one estimating the costs required to manage all leachate generation during the postclosure period utilizing the proposed evaporator/HRT system and one estimating the costs required to manage all leachate generation during the postclosure period utilizing vehicular transportation and off-site leachate treatment. The required bond amount for the facility will initially correspond to the higher vehicular transportation estimate. Upon demonstration of the capability of the proposed evaporator/HRT system to adequately manage all leachate generation during the postclosure period, an amount equal to the difference between the two estimates may be released.

The Bonding Worksheets contained in Attachment 28-2 d not fulfill the requirement of Paragraph 7.i. The Worksheet I accounting for leachate trucking costs assumes that trucking will only occur for 6-months at the start of the postclosure period. Please modify that Worksheet I to remove costs related to operation of evaporator/HRT system and calculate a total leachate management costs based on leachate trucking for 31 years.

B. The explanatory attachments to Worksheets A and I indicate that documentation supporting the unit price and labor wage rate data used in the cost estimate are presented in Exhibit B to Attachment 28-2. The Department observes that the pending application does not include an Exhibit B and that the data used appears to be the same as that used in a previous cost estimate performed in 2018. Please provided RS Means CostWorks data and Department of Labor and Industry prevailing wage documentation for Westmoreland County confirming the current validity of data used.

C. Worksheet A: The explanatory attachment to Worksheet A describing the derivation of decontaminations costs represents that the volume of waste to be disposed during closure shown on Line 1 excludes approved wastes stockpiled on-site prior to the start of closure construction since such wastes can be incorporated into the landfill prior to capping. That exclusion appears to include evaporator and HRT system by-products. Form 25 of the application proposes that indicating up to 3 days (13,500 gallons) of residues produced in the evaporator and unspecified amounts of recovered hydrocarbons/oils and spent filter cartridges/media from the HRT system be staged within the containment structure at the proposed leachate processing area. The acceptability of those wastes for on-site disposal have yet to be demonstrated and may not be possible. Please revise Line 1 to include the wastes generated at the leachate processing area.

D. Worksheet I:

i. Clarification is requested regarding the estimated postclosure leachate generation rate of 2,065,900 gallons as determined in the analysis in the Exhibit 8 appended to Attachment 28-2 of the application. The analysis assumes the leachate generation rate in the active area at the time of closure to be 100 gal/ac/day on the basis that: "current leachate generation at the facility included in Attachment 25-2, even with a 44.6-ac constructed footprint of which 38.0-ac is open landfill area, the facility has experienced daily leachate generation days less than 20,000 gal/day and even less than 10,000 gal/day or 448.4-gal/ac/day and 224.2-gal/ac/day". It is not apparent how that statement supports the 100 gal/ac/day rate used for the estimate. The Department notes that the data in Attachment 25-2 indicates that leachate generation at the site subsequent to the recent completion of liner repairs have averaged approximately 49,000 gal/day. Please provide a more detailed explanation for the assumed active area postclosure leachate generation rate.

ii. Please address the following concerns regarding the unit cost estimate for leachate treatment presented in the Exhibit 15 appended Attachment 28-2:

a. The estimate of equipment maintenance costs include a $100 per month charge for HRT system filer/media change-out. It is not apparent from information provided that the cost of the new filters/media are included in that amount. Page 3 of Pentair's July 2, 2019 proposal lists unit prices for replacement elements to be $85 for the Vmax units, $85 for the ProcessOR and $395 for the HRT-OS. Please provided documentation describing the number of each element to be replaced during each change-out event and the estimated time required to complete the change-out process.

b. Utility costs associated with operation of the evaporator and HRT system are based on unit prices of $0.06 per kilowatt hour for electricity and $2.25 per MCF for natural gas. Please provide documentation from the site's utility providers regarding those prices.

c. The estimated cost for disposal of evaporator residues assumes a generation rate of 5% of the leachate feed rate. Information presented in Attachment 25-8 indicates that the generation rate may be as much as 10% of the feed rate. Please revise the disposal cost estimate to be consistent with the Leachate Management Plan.

d. Information concerning costs for management of byproducts and wastes related to operation of the HRT system during the postclosure period are not included in the final computation. Please amend Exhibit 15 to account for costs to solidify, analyze and dispose of the recovered hydrocarbons/oils and filer/media.

8. Drawings:

A. The Plan View of the proposed Leachate Processing Area on Drawing No. (2018-157)-45 appears on a scale insufficient to show the specific details of the proposed leachate management systems described in the pending application. Please include in the application drawing set an enlarged Plan View of the Leachate Processing Area depicting the specific features of the evaporator, HRT system and Process Tank components, layout of the piping system connecting the components including all valves and fittings, dimensions of the containment area, designated waste and byproduct storage locations within the containment area and any other detail necessary to accurately represent the proposed leachate management systems.

B. The features of the proposed pump station and manhole represented in Details A and B on Drawing No. (2018-157)-45B do not appear to reflect the description of those features described elsewhere in the application. The Department observes the following in this regard:

i. Detail A on Drawing (2019-108)-45B does not indicate the elevations of the manhole invert, floats and overflow pipe corresponding with the operational parameters indicated in Exhibit 25-5.3.

ii. The Plan View of the components of the proposed leachate management revisions depicted on Drawing (2019-108)-45 show that a high-level gravity discharge line will be installed between the pump station and the existing 6"/10" conveyance pipe along the east side of the main haul road. The pump station Detail A on Drawing (2019-108)-45B does not show there to be a high-level discharge connection from the pump station.

iii. The narrative in Attachment 25-8 indicates that the proposed pump station will contain a duplex pump system where pumps shall operate individually or simultaneously at higher influent flow rates. Detail A on Drawing (2019-108)-45B depicts single float to initiate pumping. The mechanism that will control initiation of the second pump is not apparent.

iv. Details A and B on Drawing (2019-108)-45B represent inconsistent depictions of the piping system connecting the proposed pump station to the adjacent valve manhole. The former shows separate forcemains from each pump penetrating the sidewall of pump station, but the latter depict a single forccemain entering the valve manhole from the pump station.

Please revise Drawing No. (2018-157)-45B to correct these inconsistencies.

Your response should be in the form of revisions to affected pages, forms or drawings in the application. Each revision or addition should bear the revision date and show what items have been revised or added. The Department suggests you use colored paper for page revisions to the application with additions highlighted and deletions lined out so changes are easily identified. All revised forms must have the title sheet marked with the latest revision date. A revised Page 2 of Form A – Application for Municipal or Residual Waste Permits must be re-signed by the applicant, notarized and marked with the revision date. The requested information should be submitted within sixty (60) days of receipt of this letter.

If you have any questions regarding this letter, please contact Denis Strittmatter at 412.442.5800 or dstrittmat@pa.gov.

Sincerely,

Denis O Strittmatter

Denis O. Strittmatter
Permit Reviewer
Bureau of Waste Management

Gregory W. Holesh

Gregory W. Holesh, PE
Environmental Engineering Manager
Bureau of Waste Management

Attachment

cc: Westmoreland County Department of Planning and Development
Rostraver Township
Civil Design Solutions
Regional
Chron

Attachment

HRT INFLUENT AND EFFLUENT ANALYSIS POLLUTANT GROUPS

Parameter	QL Value	Units	Parameter	QL Value	Units
Group 1 Pollutants					
Flow (MGD)			Total Kjeldahl Nitrogen (TKN) (mg/L)	1.0	mg/L
BOD5 or CBOD5 (mg/L)	3.0	mg/L	Nitrite as N (mg/L)	0.01	mg/L
Fecal Coliform (No./100 mL)			Nitrate as N (mg/L)	0.04	mg/L
Total Suspended Solids (TSS) (mg/L)	2.0	mg/L	Total Dissolved Solids (TDS) (mg/L)	2.0	mg/L
Total Residual Chlorine (TRC) (mg/L)	0.02	mg/L	Chloride (mg/l)	0.5	mg/L
pH (S.U.)			Bromide (mg/l)	0.2	mg/L
Temperature (°F)			Sulfate (mg/l)	1.0	mg/L
Dissolved Oxygen (mg/L)			Oil and Grease (mg/L)	5.0	mg/L
Total Phosphorus (mg/L)	0.01	mg/L	Total Hardness (CaCO3) (mg/L)	0.11	mg/L
Ammonia-Nitrogen (mg/L)	0.02	mg/L			
Group 2 Pollutants					
Aluminum, Total (µg/L)	10	µg/L	Iron, Total (µg/L)	20	µg/L
Antimony, Total (µg/L)	2.0	µg/L	Iron, Dissolved (µg/L)	20	µg/L
Arsenic, Total (µg/L)	3.0	µg/L	Lead, Total (µg/L)	1.0	µg/L
Barium, Total (µg/L)	2.0	µg/L	Manganese, Total (µg/L)	2.0	µg/L
Beryllium, Total (µg/L)	1.0	µg/L	Mercury, Total (µg/L)	0.2	µg/L
Boron, Total (µg/L)	200	µg/L	Nickel, Total (µg/L)	4.0	µg/L
Cadmium, Total (µg/L)	0.2	µg/L	Phenols, Total (µg/L)	5.0	µg/L
Chromium, Total (µg/L)	4.0	µg/L	Selenium, Total (µg/L)	5.0	µg/L
Chromium, Hexavalent (µg/L)	1.0	µg/L	Silver, Total (µg/L)	0.4	µg/L
Cobalt, Total (µg/L)	1.0	µg/L	Thallium, Total (µg/L)	2.0	µg/L
Copper, Total (µg/L)	4.0	µg/L	Zinc, Total (µg/L)	5.0	µg/L
Cyanide, Free (µg/L)	1.0	µg/L	Molybdenum, Total (µg/L)	4.0	µg/L
Cyanide, Total (µg/L)	10	µg/L			
Group 3 Pollutants					
Acrolein (µg/L)	2.0	µg/L	1,3-Dichloropropylene (µg/L)	0.5	µg/L
Acrylonitrile (µg/L)	5.0	µg/L	1,4-Dioxane (µg/L)	10.0	µg/L
Benzene (µg/L)	0.5	µg/L	Ethylbenzene (µg/L)	0.5	µg/L
Bromoform (µg/L)	0.5	µg/L	Methyl Bromide (µg/L)	0.5	µg/L
Carbon Tetrachloride (µg/L)	0.5	µg/L	Methyl Chloride (µg/L)	0.5	µg/L
Chlorobenzene (µg/L)	0.5	µg/L	Methylene Chloride (µg/L)	0.5	µg/L
Chlorodibromomethane (µg/L)	0.5	µg/L	1,1,2,2-Tetrachloroethane (µg/L)	0.5	µg/L
Chloroethane (µg/L)	5.0	µg/L	Tetrachloroethylene (µg/L)	0.5	µg/L
2-Chloroethylvinyl Ether (µg/L)	0.5	µg/L	Toluene (µg/L)	0.5	µg/L
Chloroform (µg/L)	0.5	µg/L	1,2-Trans-Dichloroethylene (µg/L)	0.5	µg/L
Dichlorobromomethane (µg/L)	0.5	µg/L	1,1,1-Trichloroethane (µg/L)	0.5	µg/L
1,1-Dichloroethane (µg/L)	0.5	µg/L	1,1,2-Trichloroethane (µg/L)	0.5	µg/L
1,2-Dichloroethane (µg/L)	0.5	µg/L	Trichloroethylene (µg/L)	0.5	µg/L
1,1-Dichloroethylene (µg/L)	0.5	µg/L	Vinyl Chloride (µg/L)	0.5	µg/L
1,2 Dichloropropane (µg/L)	0.5	µg/L			
Group 4 Pollutants					
2-Chlorophenol (µg/L)	10	µg/L	4-Nitrophenol (µg/L)	10	µg/L
2,4-Dichlorophenol (µg/L)	10	µg/L	P-Chloro-m-Cresol (µg/L)	10	µg/L
2,4-Dimethylphenol (µg/L)	10	µg/L	Pentachlorophenol (µg/L)	10	µg/L
4,6-Dinitro-o-Cresol (µg/L)	10	µg/L	Phenol (µg/L)	10	µg/L
2,4-Dinitrophenol (µg/L)	10	µg/L	2,4,6-Trichlorophenol (µg/L)	10	µg/L

Attachment

HRT INFLUENT AND EFFLUENT ANALYSIS POLLUTANT GROUPS

Parameter	QL Value	Units	Parameter	QL Value	Units
Group 5 Pollutants					
Acenaphthene (µg/L)	2.5	µg/L	Dimethyl Phthalate (µg/L)	5.0	µg/L
Acenaphthylene (µg/L)	2.5	µg/L	Di-N-Butyl Phthalate (µg/L)	5.0	µg/L
Anthracene (µg/L)	2.5	µg/L	2,4-Dinitrotoluene (µg/L)	5.0	µg/L
Benzidine (µg/L)	50	µg/L	2,6-Dinitrotoluene (µg/L)	5.0	µg/L
Benzo(a)Anthracene (µg/L)	2.5	µg/L	Di-n-Octyl Phthalate (µg/L)	5.0	µg/L
Benzo(a)Pyrene (µg/L)	2.5	µg/L	1,2-Diphenylhydrazine (as Azobenzene)	5.0	µg/L
3,4-Benzofluoranthene (µg/L)	2.5	µg/L	(µg/L)		
Benzo(ghi)Perylene (µg/L)	2.5	µg/L	1,2-Diphenylhydrazine (as	10	µg/L
Benzo(k)Fluoranthene (µg/L)	2.5	µg/L	Fluoranthene (µg/L)	2.5	µg/L
Bis(2-Chloroethoxy) Methane (µg/L)	5.0	µg/L	Fluorene (µg/L)	2.5	µg/L
Bis(2-Chloroethyl) Ether (µg/L)	5.0	µg/L	Hexachlorobenzene (µg/L)	5.0	µg/L
Bis(2-Chloroisopropyl) Ether (µg/L)	5.0	µg/L	Hexechlorobutadiene (µg/L)	0.5	µg/L
Bis(2-Ethylhexyl)Phthalate (µg/L)	5.0	µg/L	Hexachlorocyclopentadiene (µg/L)	5.0	µg/L
4-Bromophenyl Phenyl Ether (µg/L)	5.0	µg/L	Hexachloroethane (µg/L)	5.0	µg/L
Butyl Benzyl Phthalate (µg/L)	5.0	µg/L	Indeno(1,2,3-cd) Pyrene (µg/L)	2.5	µg/L
2-Chloronaphthalene (µg/L)	5.0	µg/L	Isophorone (µg/L)	5.0	µg/L
4-Chlorophenyl Phenyl Ether (µg/L)	5.0	µg/L	Naphthalene (µg/L)	0.5	µg/L
Chrysene (µg/L)	2.5	µg/L	Nitrobenzene (µg/L)	5.0	µg/L
Dibenzo(a,h)Anthracene (µg/L)	2.5	µg/L	N-Nitroso-di-methylamine (µg/L)	5.0	µg/L
1,2-Dichlorobenzene (µg/L)	0.5	µg/L	N-Nitroso-di-n-propylamine (µg/L)	5.0	µg/L
1,3- Dichlorobenzene (µg/L)	0.5	µg/L	N-Nitroso-di-n-phenylamine (µg/L)	5.0	µg/L
1,4- Dichlorobenzene (µg/L)	0.5	µg/L	Phenanthrene (µg/L)	2.5	µg/L
3,3'-Dichlorobenzidine (µg/L)	5.0	µg/L	Pyrene (µg/L)	2.5	µg/L
Diethyl Phthalate (µg/L)	5.0	µg/L	1,2,4-Trichlorobenzene (µg/L)	0.5	µg/L
Group 6 Pollutants					
Aldrin (µg/L)	0.05	µg/L	Dieldrin (µg/L)	0.05	µg/L
Alpha BHC (µg/L)	0.05	µg/L	Alpha-Endosulfan (µg/L)	0.05	µg/L
Beta BHC (µg/L)	0.05	µg/L	Beta-Endosulfan (µg/L)	0.05	µg/L
Gamma BHC (µg/L)	0.05	µg/L	Endosulfan Sulfate (µg/L)	0.05	µg/L
Delta BHC (µg/L)	0.05	µg/L	Endrin (µg/L)	0.05	µg/L
Chlordane (µg/L)	1.0	µg/L	Endrin Aldehyde (µg/L)	0.05	µg/L
4,4'-DDT (µg/L)	0.05	µg/L	Heptachlor (µg/L)	0.05	µg/L
4,4'-DDE (µg/L)	0.05	µg/L	Heptachlor Epoxide (µg/L)	0.05	µg/L
4,4'-DDD (µg/L)	0.05	µg/L	Toxaphene (µg/L)	0.5	µg/L
Group 7 Pollutants					
Gross Alpha (pCi/L)	3	pCi/L			
Beta, Total (pCi/L)	4	pCi/L			
Radium 226/228, Total (pCi/L)	1	pCi/L			
Strontium, Total (µg/L)	10	µg/L			
Uranium, Total (µg/L)	2	µg/L			