

#### SOUTHWEST REGIONAL OFFICE CLEAN WATER PROGRAM

Application Type	Renewal
Facility Type	Industrial
Major / Minor	Minor

# NPDES PERMIT FACT SHEET ADDENDUM

Application No.	PA0096172
APS ID	46917
Authorization ID	1212378

### Applicant and Facility Information

Applicant Name	Westmoreland County Municipal Authority	Facility Name	McKeesport Water System – WTP
Applicant Address	PO Box 730	Facility Address	1430 Railroad Street
	Greensburg, PA 15601		McKeesport, PA 15132-4136
Applicant Contact	Max Curtis Fontaine	Facility Contact	Same as Applicant
Applicant Phone	724-755-5950	Facility Phone	Same as Applicant
Client ID	64197	Site ID	242372
SIC Code	4952	Municipality	McKeesport City
SIC Description	Trans. & Utilities - Sewerage Systems	County	Allegheny
Date Published in PA	Bulletin March 21, 2020	EPA Waived?	Yes
Comment Period En	d Date April 20, 2020	If No, Reason	

#### Internal Review and Recommendations

The notice of the Draft Permit was published in the Pennsylvania Bulletin on March 21, 2020. The Department received four comments from the Municipal Authority of Westmoreland County. The comments and the Department's responses are summarized below.

### Municipal Authority of Westmoreland County's comment one:

MAWC requested that the PA DEP permit sample collection and analyses for Outfall 003 throughout the course of a complete calendar year and then use the resulting data to set discharge limits specific to Outfall 003.

The draft permit proposes the same monitoring limits for Outfall 003 as those set for Outfall 001. It is MAWC's position that monitoring limits should be site and/or process specific based upon historical data for each Outfall. The data used by the PA DEP to set the limits for Outfall 003 resulted from three (3) sample sets collected and analyzed during a single calendar quarter. MAWC proposes that such limited sampling and analyses does not account for all seasonal and operational variables that may affect the discharge quality at Outfall 003. For instance, seasonal changes in chlorine dosage and floc carryover will likely influence the suspended solids concentration for Outfall 003 in comparison to concentration discharged at Outfall 001. If PA DEP grants MAWC's request to conduct seasonal monitoring as proposed, we will be required time to install an appropriate flow-monitoring device prior to initiating sampling activities. Furthermore, the availability of the additional data will assist MAWC to determine any additional best management practices (BMPs) necessary to attain and maintain compliance.

Approve	Return	Deny	Signatures	Date		
x			ah On			
			Adam Olesnanik / Environmental Engineering Specialist	7/21/2020		
x			Miden F. Fifet			
			Michael E. Fifth, P.E. / Environmental Engineer Manager	7/21/2020		

# **Internal Review and Recommendations**

# The Department's response to Municipal Authority of Westmoreland County's comment one:

Outfall 003 discharges overflow from the settler plate/flocculator tanks only if a process shutdown causes the settler plate or flocculator basin to overflow or if more flow enters these basins than can be handled. The quality of this discharge will be similar to that of the wastewater sedimentation basin discharge. The limitations proposed at Outfall 003 were based on the similarity to the discharge from Outfall 001 and were based on discharges of wastewater from water treatment plants. The limitations are based on DEPs Technology-Based Control Requirements for Water Treatment Plant Wastes Guidance Document and reflect the minimum technology-based effluent limitations that all discharges of water treatment plant wastewaters should be able to achieve. The limitations are not based on quality of the discharge or water-quality criteria. Accordingly, the limitations will remain in the Final Permit, no changes were made to the Draft Permit due to this comment.

# Municipal Authority of Westmoreland County's comment two:

MAWC requests that the PA DEP postpone setting and/or enforcing discharge limits for Outfall 004 until we construct a second intake on the Youghiogheny River to supply raw water to our McKeesport WTP.

MAWC uses potable water to clean the traveling screen at our existing raw water intake structure. MAWC will initiate construction for a second intake structure in approximately one year. Our plans for the new intake include that addition of flow monitoring and dechlorination for the potable water used to wash the traveling screen. In addition, during construction, MAWC will retrofit the potable wash water line for the existing traveling screen to provide flow monitoring and dechlorination. We anticipate that the second intake structure will take approximately six months to complete. Accordingly. It will be approximately 18 months from the date of this submittal until flow monitoring and dechlorination will be online and operational for our traveling screens.

## The Department's response to Municipal Authority of Westmoreland County's comment two:

As MAWC describes, the water that is used to wash the intake screens is potable water which contains residual chlorine. Per 25 PA Code Chapter 92.a.48(b), facilities using chlorination are not subject to Federal Effluent Limitation Guidelines however, the Department has developed facility-specific Best Practicable Control Technology Currently Achievable (BPT) effluent control requirements for these discharges. These facilities are subject to a TRC effluent limitation of 0.5 milligrams per liter as a 30-day average. However, because MAWC doesn't have the necessary processes in place to achieve the limitations for TRC upon permit issuance, the Department will grant a compliance schedule to allow MAWC time to achieve these final limitations. The final effluent limitations will become effective 6 months after the permit effective date. Outfall 004 will have a monitor and report requirement for TRC during the interim period. If a new treatment process is being proposed, MAWC will need to submit a Water Quality Management Permit to the Department 30 days from the Permit Effective Date.

Additionally, per 25 PA Code Chapter 92a.61(d)(1) all discharges authorized by an NPDES permit that contain toxic pollutants for which an effluent standard has been established must monitor for flow.

Furthermore, per 25 PA Code Chapter 95.2(1), all industrial waste must have a pH of not less than 6.0 nor greater than 9.0 standard units. These are state regulatory standards that must be achieved at Outfall 004. These limitations and monitoring requirements will remain in the Draft Permit.

It should be noted that MAWC should notify the Department in the future if any changes are made to the existing system when the new intake structures are installed, so that the Department can evaluate the system to see if the changes will result in changes to the existing effluent limitations. The Department will evaluate the addition of a new intake structure to determine if it results in any changes to the existing discharge flow, volume, quality, discharge frequency, etc., because these changes could affect the quality of the discharge requiring modifications to the existing effluent limitations.

# Municipal Authority of Westmoreland County's comment three:

MAWC respectfully requests that the PADEP remove Outfall 005 from our NPDES permit and assign it to the appropriate municipal and/or state agency responsible for the operation and maintenance of the 15<sup>th</sup> street bridge.

### **Internal Review and Recommendations**

It is MAWC's belief that all stormwater discharged at Outfall 005 originates from the 15<sup>th</sup> street bridge. Accordingly, MAWC should bear no responsibility to monitor the quantity and quality for stormwater discharge at Outfall 005

#### The Department's response to Municipal Authority of Westmoreland County's comment three:

The Department understands MAWC's concern with the comingling of the stormwater from off site at Outfall 005. Based on the site location and location of the site's catch basins, stormwater from the 15<sup>th</sup> street bridge could comingle with the stormwater from the site prior to the discharge to the Youghiogheny River via Outfall 005. The Department will remove all sampling requirements from Outfall 005 but will still impose the semi-annual inspection of the outfall to verify that all BMPs are maintained and catch basins are clean of debris. The Part A monitoring requirements at Outfall 005 have been removed from the Draft permit.

### Municipal Authority of Westmoreland County's comment four:

MAWC respectfully requests that the PADEP remove Outfall 006 from our NPDES Permit.

If the PADEP grants our request, MAWC will store WTP residuals in lined dumpsters to prevent leakage. In addition, MAWC will keep the dumpster covered at all times to preclude precipitation contact and collection.

### The Department's response to Municipal Authority of Westmoreland County's comment four:

The Department's concern with Outfall 006 is the WTP residual storage. Currently the wastewater solids are stored in the grassy area west of the water treatment plant building. The area is not covered and is exposed to precipitation. The area does have filter/containment socks around the portion of the area where the stormwater flows off site and discharges via Outfall 006 to the Youghiogheny River. If the site residual storage remains as is, the effluent of Outfall 006 will need to be monitored to ensure that the filter/containment socks are properly maintained. However, if MAWC stores the WTP residuals in lined dumpsters, the wastewater solids are no longer exposed to precipitation, removing the concern of contaminating the stormwater. The Department is agreeable to remove the sampling requirements at Outfall 006 if the solids from the water treatment plant are stored in sealed and covered dumpsters. The Department will still impose the semi-annual inspection of the outfall to verify that all BMPs, the dumpsters, are maintained. The Part A monitoring requirements at Outfall 006 have been removed from the Draft Permit. A part C condition has been added to the Draft Permit under the Best Management Practices section requiring the wastewater solids generated from the water treatment process must be stored in covered, lined dumpster to prevent contamination of stormwater. Failure to maintain compliance with this condition will be considered a violation of the NPDES permit. Installation and use of the lined dumpsters is required upon final issuance of the NPDES permit.

### Department Initiated Changes:

After discussing the discharge process of Outfall 004 with MAWC, the Department is proposing to impose additional limitations at Outfall 004. The Department is proposing to impose the Water Treatment Plant Technology based effluent limitations that are based on the Department's Technology-Based Control Requirements for Water Treatment Plant Wastes Guidance Document to ensure that the intake screens are cleaned properly. It should be noted that any discharges containing debris from the intake screen would violate narrative water quality criteria and corresponding prohibitions under 25 Pa. Code §§ 93.6 and 92a.41(c), respectively, which state:

# § 93.6. General water quality criteria

- (a) Water may not contain substances attributable to point or nonpoint source discharges in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life.
- (b) In addition to other substances listed within or addressed by this chapter, specific substances to be controlled include, but are not limited to, floating materials, oil, grease, scum and substances that produce color, tastes, odors, turbidity or settle to form deposits.

### **Internal Review and Recommendations**

§ 92a.41. Conditions applicable to all permits.

The discharger may not discharge floating materials, scum, sheen, or substances that result in deposits in the receiving water. Except as provided for in the permit, the discharger may not discharge foam, oil, grease, or substances that produce an observable change in the color, taste, odor or turbidity of the receiving water.

The proposed limitations at Outfall 004 are displayed below in Table 1 and Table 2. Table 1 contains the interim limitations and Table 2 contains the Final Limitations. The Final Limitations will become effective 6 Months after the Permit Effective Date.

### Table 1: Proposed Interim Effluent Limitation for Outfall 004

Parameters	Mass (Ib/day)		Concentration (mg/L)				Monitoring Requirements	
Farameters	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/Month	Measure
Total Suspended Solids	XXX	XXX	XXX	30.0	60.0	XXX	2/Month	Grab
Total Residual Chlorine	XXX	XXX	XXX	Report	Report	XXX	2/Month	Grab
Total Aluminum	XXX	XXX	XXX	4.0	8.0	XXX	2/Month	Grab
Total Iron	XXX	XXX	XXX	2.0	4.0	XXX	2/Month	Grab
Total Manganese	XXX	XXX	XXX	1.0	2.0	XXX	2/Month	Grab
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	2/Month	Grab

### Table 2: Final Interim Effluent Limitation for Outfall 004

Parameters	Mass (Ib/day)		Concentration (mg/L)				Monitoring Requirements	
Farameters	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	2/Month	Measure
Total Suspended Solids	XXX	XXX	XXX	30.0	60.0	XXX	2/Month	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.5	1.0	XXX	2/Month	Grab
Total Aluminum	XXX	XXX	XXX	4.0	8.0	XXX	2/Month	Grab
Total Iron	XXX	XXX	XXX	2.0	4.0	XXX	2/Month	Grab
Total Manganese	XXX	XXX	XXX	1.0	2.0	XXX	2/Month	Grab
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	2/Month	Grab

### Summary and Recommendations:

The monitoring requirements for Outfalls 005 and 006 have been removed from Part A of the Draft Permit. The Part C condition for Stormwater Monitoring requirements has been removed because there is no longer any stormwater sampling requirements in the permit. A Part C condition was added to the Pollution Prevention and Exposure Minimization subpart of the Best Management Practices requirements under the Requirements Applicable to Stormwater Outfalls section requiring the Permittee to store all residuals produced during the water treatment process, such as wastewater sludge solids, in covered, lined dumpsters to prevent contamination of stormwater runoff. New limitations have been added to Outfall 004 in Part A of the Draft Permit. Along with the new limitations, a compliance schedule has been added to the draft permit to allow MAWC time to achieve the new limitations for TRC at Outfall 004. No other changes were made from the Draft Permit. It is recommended that the Permit be redrafted due to the changes made to the first draft of the permit.