

6.5.3. Outfalls 003A and 003B. In previous permits two internal outfalls were established. Internal outfalls are used to monitor a specified wastewater stream before it mixes with another wastewater stream. Diluting one wastewater stream with another wastewater in order to meet discharge limitations is not considered an acceptable treatment technology. Outfall 003A was established to monitor the limits associated with the Slag Settling Pond effluent discharge. Outfall 003B was established to monitor the effluent limits associated with metal cleaning operations. As applied to the existing permit, both Outfall 003A and Outfall 003B are situated at the same location; the broad-crested weir which begins the discharge of the Slag Settling Pond (Waste Treatment Plant No. 4) to Cooling Discharge Canal (Waste Treatment Plant No. 2). After effluent enters the Cooling Discharge Canal, it ultimately discharges to the Merrimack River through Outfall 003. During routine operating periods at Merrimack Station, the effluent limitations for the discharge of the Slag Settling Pond are associated with Outfall 003A. When metal cleaning operations occur, the effluent limitations associated with Outfall 003B are applied to the discharge of the Slag Settling Pond.

All NPDES permit metal limitations are expressed in terms of "total recoverable metal" in accordance with 40 C.F.R. § 122.45(c). Two metals associated with Outfalls 003A and 003B are limited at Merrimack Station; Total Recoverable Copper (TRC) and Total Recoverable Iron. These metals are limited based on either the Steam Electric Power Generating effluent limit guidelines (ELGs) found at 40 CFR Part 423, or New Hampshire's Surface Water Quality Criteria for Toxic Substances contained in Env-WQ 1703.21. The water quality limits prevail during most periods of the Station's operation. The Steam Electric Power Generating ELG's are applied only every several years when metal cleaning operations occur at Merrimack Station.

6.5.3.1 Outfall 003A Slag Settling Pond Discharge and Low Volume Waster Streams Effluent Limits. The discharge to the Slag Settling Pond, also designated as WTP No. 4, consists of flows from both generating unit's slag tanks, those slag tanks' overflows and miscellaneous yard drains. Unit 1's roof drains and boiler blowdown are directed to the Slag Settling Pond. The intermediate discharge from WTP No. 1 s also directed to the Slag Settling Pond. The Slag Settling Pond discharges to WTP No. 2, the Cooling Water Discharge Canal, through Outfall 003A.

Adjacent to the Slag Settling Pond is wetlands, which drained into the Slag Settling Pond. During the present permit

development the NHDES recommended that the Permittee investigate isolating these wetlands from the Slag Settling Pond. The NHDES wanted to allow the Slag Settling Pond to continue to function as part of the wastewater treatment facility, separated from the waters of the State of New Hampshire. In 2003(?)**-check year** the permittee completed redirecting the wetland's runoff away from the Slag Settling Pond. The wetland's runoff now flows to Bow Bog Brook. Bow Bog brook runs through the northern portion of the Merrimack Station site before emptying into the Merrimack River.

After combusting in Merrimack Station two boilers, hot coal ash is dumped from the boiler into an ash hopper. The ash hopper contains quenching water. When the molten ash, i.e., slag, comes in contact with the quenching water, it fractures instantly, crystallizes, and forms pellets. The resulting boiler slag is a coarse, hard, black, angular, glassy material, which is transported by water from the boiler building to the slag sluice settling area for dewatering. After draining from the settling area the slag sluice water enters the Slag Settling Pond where entrained solids are further allowed to settle. Other than suspended solids settling, no other direct treatment is applied to the water in the Slag Settling Pond.

The present permit limits the Slag Settling Pond effluent for Total Suspended Solids (TSS) and Oil and Grease. These parameters are limited in accordance with the technology-based limits from 40 C.F.R. § 423.13(b)(4). There are also effluent limits for Total Recoverable Copper (TRC) and Recoverable Iron (TRI), and a pH reporting requirement.

Total Recoverable Copper

The existing permit limits copper to 0.20 mg/l at internal outfall 003A, the Slag Settling Pond Discharge, during routine, i.e., non-metal cleaning, plant operation. The existing permit's Fact Sheet reasoned that since copper is discharged into the Slag Settling Pond during chemical cleaning operations, the possibility exists that any copper, which has been retained in the pond from metal cleaning operations, could be released at times other than cleaning periods. This would occur by re-suspension of copper from the sediment or through conditions of low pH where copper in the sediment has the potential to go back into solution. Therefore, EPA and NHDES developed a water quality copper limit that was to be applied during routine operations, with a monthly monitoring requirement.

EPA has conducted a reasonable potential analysis to determine the probability the copper concentrations contained in Outfall 003A's effluent would exceed the present permit's 0.20 mg/l water quality limit. DMR data that reported copper concentrations for Outfall 003A were analyzed for the period March 2003 to June 2008. See Appendix **(Letter)**. A mean and standard deviation was calculated for this data set. The average copper concentration for the DMR data is 0.010 mg/l and the variance is 0.0002. The highest copper concentration sampled during this five year period was 0.05 mg/l. Since copper concentration, on average, are 0.19 mg/l below the effluent limit and the data demonstrates extremely low variability, EPA is inclined to eliminate the total recoverable copper limit for Outfall 003A.

Review of the existing permit's Fact Sheet, however, does not provide any indication how this 0.2 mg/l copper limit was calculated or derived. The permit preceding the present permit also had an acute copper limit for Outfall 003A of 0.2 mg/l. It is surmised the 0.2 mg/l was retained based on anti-backsliding criteria. Anti-backsliding requires a reissued permit to be as stringent as the previous permit. See 40 C.F.R. § 122.44(l).

EPA and NHDES for this draft permit development have recalculated Outfall 003A's acute copper water quality limit based on a revised 7Q10.

Recalculated Dilution Factor

$$\text{Dilution Factor (DF)} = \left(\frac{\text{Merrimack River 7Q10 Flow}}{\text{Outfall 003A Discharge Flow}} \right) \times 0.9$$

Where: 7Q10 Flow - 587.75 cfs
 Outfall 003A Flow - 13.3 cfs
 State 10% reserve - 0.9

NOTE: Merrimack Station's reapplication stated that the maximum thirty day flow discharged from Outfall 003A was 9.0 MGD or 13.92 cfs. A statistical analysis of Outfall 003A flow data since January 2003 results in a maximum thirty day flow of 8.6 MGD or 13.3 cfs.

$$DF = \left(\frac{587.75 \text{ cfs}}{13.3 \text{ cfs}} \right) \times 0.9$$

DF = 39.76

Calculated Acute Limit

Acute Limit = Acute Water Quality Criteria X DF

Where: Acute Water Quality Criteria - 0.0036 mg/l

DF - 39.76

Factor to Convert Copper Acute Water Quality Criteria

from Dissolved Metals Limit to Total Recoverable Metals -

0.960

$$\text{Acute Limit} = \left(\frac{0.0036}{0.960} \right) \times 39.76$$

Acute Limit = 0.149 mg/l

Comparing Outfall 003A's average copper concentration of 0.010 mg/l calculated from DMR data to the recalculated acute copper limit of 0.149 mg/l, the expected average copper concentrations in the discharge is 0.139 mg/l below the acute copper limit. Since March 2003 the highest copper concentration sampled was 0.05 mg/l. Again, over the past five years the DMR data for copper has demonstrated extremely low variability. Based on a lack of reasonable potential to even approach, far less exceed, a copper water quality limits EPA has eliminated the total recoverable copper limit for Outfall 003A during normal, i.e., non-metal cleaning, plants operation.

Anti-backsliding regulations allow the establishment of less stringent limits if new information is available that was not available at the permit's issuance which would have justified a less stringent effluent limitation. See 40 C.F.R. § 122.44(1). In this situation, review of Outfall 003A's flow data for the past five years shows that the maximum flow rate is actually lower than the flow submitted in the Permittee's 1997 reapplication. Further statistical analysis of the reported copper concentrations contained in Outfall 003's DMR data demonstrated there was no potential to exceed a copper water quality based limit for Outfall 003. Use of this new information, allowed by anti-backsliding regulations, allowed for the elimination of Outfall 003A's acute copper limit.

Every three to five years, metal cleaning waste liquid from Unit 1 or 2's boiler is routed to the Waste Treatment Plant, WTP No.1, for treatment by the caustic metal hydroxide precipitation process. WTP No. 1 treated effluent is discharged to WTP No. 4,

the Slag Settling Pond. As will be explained in Section 6.5.3.2, the outfall for WTP No. 1, Outfall 003B, has been relocated from a co-location with Outfall 003A to the actual discharge pipe of WTP No. 1. In the draft permit Outfall 003B will have a technology based copper limit of 1.0 mg/l based on technology based copper limits contained in 40 C.F.R. § 423.13(e).

EPA has investigated the potential that the copper discharge from WTP No. 1, even though not exceeding its 1.0 mg/l copper limit, still might exceed New Hampshire's water quality standards for the Merrimack River. A mass balanced water quality calculation was conducted to determine the whether the contribution of copper contained in the effluent discharged from Outfall 003A would adversely effect the water quality of the Merrimack River. That calculation follows:

$$Q_d C_d + Q_s C_s = Q_r C_r$$

Where:

- Q_d Outfall 003A Average 30-day Maximum Discharge; 13.3 cfs
- C_d Outfall 003A Assumed Maximum Copper Concentration; 1.0 mg/l
- Q_s Merrimack River 7Q10; 587.75 cfs
- C_s Merrimack River Average Copper Concentration; 0.0 mg/l
- Q_r Resultant Flow; 601.05 cfs
- C_r Resultant In-Stream Copper Concentration; mg/l

Solving for resultant river copper concentration C_r :

$$C_r = \frac{Q_d C_d + Q_s C_s}{Q_d + Q_s}$$

$$C_r = \frac{(13.3)(1.0) + (587.85)(0.0)}{587.85 + 13.3}$$

$$C_r = 0.022 \text{ mg/l}$$

This analysis demonstrates the discharge of Outfall 003A, using assume maximum copper concentration of 1.0 mg/l, adds only 0.022 mg/l to the copper concentration levels of the Merrimack River. EPA will not require a water quality limit for total recoverable copper for effluent discharged from Outfall 003A during metal

cleaning operations.

Total Recoverable Iron

The existing permit has an acute limit for iron of 1.0 mg/l at internal Outfall 003A, the Slag Settling Pond Discharge, during routine, i.e., non-metal cleaning, plants operation. The present permit's Fact Sheet explains this limit is based on hydrogen-precipitation technology, which is the standard metals removal technology that forms the basis for virtually all of EPA's Best Available Technology Economically Achievable (BAT) for metal cleaning waste streams. The Fact Sheet further explains that the Slag Settling Pond discharge can be treated by this technology to meet the permitted limit of 1.0 mg/l.

The Effluent Limit Guidelines (ELG) for discharges related to the 40 Part 423 Steam Electric Power Generating Point Source Category does not place any iron limits on a fly ash transport water discharge, which is what Outfall 003A discharges. It is surmised the 1.0 mg/l iron limit for Outfall 003A is to limit any iron discharged from WWTP No. 1 to the Slag Settling Pond when treating metal cleaning wastes. Normally, Merrimack Station employs WWTP No. 1 every three to five years for several days to treat waste from boiler cleaning.

As previously described, Outfall 003A's discharge consists of flows from the two generating unit's slag tanks, those slag tanks' overflows and miscellaneous yard drains, and Unit 1's roof drains and boiler blowdown. In accordance with 40 Part 423 Steam Electric Power Generating Point Source Category neither of these effluent sources have iron limits. Most effluent discharged from Outfall 003's comes from the generating unit's slag tanks, i.e., the fly ash transport water. Referring to Appendix **(Letter)**, Merrimack Station Schematic of Water Flow, ninety-five percent of Outfall 003A's discharge is fly ash transport water. The source of that transport water is the Merrimack River.

Based on DMR data since January 2003, the average iron concentration of Outfall 003A's discharge is 0.65 mg/l with a variance of 0.023 mg/l. The highest concentration sampled was 1.0 mg/l and the next highest was 0.85 mg/l. Over the past five years the DMR data for iron has demonstrated extremely low variability and an average that is 0.35 mg/l below the effluent's iron limit of 1.0 mg/l.

A mass balanced water quality calculation was conducted to

determine the whether the contribution of iron contained in the effluent discharged from Outfall 003A would adversely effect the water quality of the Merrimack River. That calculation follows:

$$Q_d C_d + Q_s C_s = Q_r C_r$$

Were:

Q_d Outfall 003A Average 30-day Maximum Discharge; 13.3 cfs

C_d Outfall 003A Maximum Iron Concentration; 1.0 mg/l

Q_s Merrimack River 7Q10; 587.75 cfs

C_s Merrimack River Average Iron Concentration; 0.36 mg/l

Q_r Resultant Flow; 601.05 cfs

C_r Resultant In-Stream Iron Concentration; mg/l

Solving for resultant river iron concentration C_r :

$$C_r = \frac{Q_d C_d + Q_s C_s}{Q_d + Q_s}$$

$$C_r = \frac{(13.3)(1.0) + (587.85)(0.36)}{587.85 + 13.3}$$

$$C_r = 0.374 \text{ mg/l}$$

This analysis demonstrates the discharge of Outfall 003A, even when using the maximum iron concentration recorded in the last five years, adds only 0.013 mg/l to the iron concentration levels of the Merrimack River. This fact, coupled with the lack of reasonable potential to even approach, far less exceed, the existing permit's iron limit for Outfall 003A, EPA has eliminated the total recoverable iron limit for Outfall 003A during normal, i.e., non-metal cleaning, plants operation.

Flow

The flow limits for average monthly, 9 MGD, and maximum daily, 19.1 MGD, are carried over from the existing permit.

Total Suspended Solids (TSS)

The chronic and acute concentration limits for Total Suspended

Solids (TSS) for Outfall 003A are carried over to the draft permit from the present permit. These parameters are limited in accordance with the technology-based limits for low volume waste streams and bottom ash transport water from 40 C.F.R. § 423.12(b)(3),(4).

Oil and Grease

The chronic and acute concentration limits for Oil for Outfall 003A and Grease are carried over to the draft permit from the present permit. These parameters are limited in accordance with the technology-based limits for low volume waste streams and bottom ash transport water from 40 C.F.R. § 423.12(b)(3),(4).

pH

The current permit has a requirement to "Report" the minimum and maximum monthly reading for pH. This report only requirement is inconsistent with the requirement of 40 C.F.R. § 423.12(b)(1) which states, " The pH of all discharges, except for once through cooling water, shall be within the range of 6.0-9.0."

Accordingly, a pH range limit has been added to the draft permit. However, the pH range limit will be 6.5-9.0. In accordance with New Hampshire Env-Wq 1703.18 the pH limit for Class B waters (which is the Merrimack River's classification) shall be 6.5-9.0, unless due to natural causes. In accordance with 40 C.F.R. § 124.53 a State may certify a draft permit with more stringent limitations if the State considers that the more stringent limits are required to protect the State's surface water quality. Anticipating that New Hampshire will require the more stringent pH range limit in order to certify the draft permit, EPA has included the 6.5-9.0 pH range limit in the Merrimack Station's draft permit.

Outfall 003A Effluent Monitoring

As seen in Appendix (**LETTER**) the DMR data statistics for TSS and Oil and Grease do not demonstrate a reasonable to exceed their draft permit limits. EPA and NHDES, therefore, have carried over the monthly sampling requirement for these two parameters. pH monitoring has been set at once per week. pH monitoring is a recognized indicator of developing water treatment problem. EPA considers the settling of entrained solids in the Slag Settling Pond as an industrial process with little or no variability which will be sufficiently monitored with one pH sample per week.

6.5.3.2 Outfall 003B Metal Cleaning Waste Stream

Effluent Limits. Merrimack Station chemically cleans the water side of the facility's boilers and condensers about every three to five years for both generating units. Metal cleaning of the steam side, or gas side, of the facility's boilers and condensers using water as the cleaning agent is accomplished about four times a year for both generating units.

The metal cleaning waste liquid stream from the water side of the boiler is collected in a rental fractionating tank and then routed to the Waste Treatment Plant, WTP No.1, for treatment by the caustic metal hydroxide precipitation process. Metal cleaning of the gas side of the boiler is also directed to WTP No. 1, as is both units' demineralize discharge. These flows to WTP No. 1 are intermittent, occurring only during metal cleaning. WTP No. 1 does receive continuous flows from various plant equipment, floor and chemical drains. These flows are classified as low volume waste. See Attachment **(LETTER) - Schematic of Water Flows Merrimack Station**

The present permit limits the Slag Settling Pond effluent for Total Suspended Solids (TSS), Total Recoverable Iron and Oil and Grease. These parameters are limited in accordance with the technology-based limits from 40 C.F.R. § 423.12(b)(5). There are also effluent limit for Total Recoverable Copper (TRC) based on New Hampshire water quality standards, and a pH reporting requirement.

Total Recoverable Copper

After treatment of metal cleaning wastes in WTP No.1, the treated effluent is intermittently discharged to the WTP No.4 - Slag Settling Pond. When this discharge occurs, the outfall designation for the Slag Settling Pond changes from 003A to 003B. Associated with this designation change is a more restrictive water quality derived limit for copper. Since one of the byproducts of chemical cleaning is copper, the copper water quality limit insures the metal cleaning waste stream entering WTP No. 1 has been sufficiently treated, i.e., the dilution afforded by the cooling canal is not employed as a treatment method to meet copper water quality limits.

Total Recoverable Copper technology based effluent limits for metal cleaning wastes are found in 40 C.F.R. § 423.13(b)(5). This regulation states that the Total Recoverable Copper maximum limit is 1.0 mg/l. This limit is interpreted as an

"instantaneous" maximum limit. Additionally, for any 30-day period the average Total Recoverable Copper limit is 1.0 mg/l.

As described previously, the existing permit designates the discharge from WTP No.4 - Slag Settling Pond, during metal cleaning operations, as internal Outfall 003B. The existing permit placed a Total Recoverable Copper limit of 0.077 mg/l at Outfall 003B. The existing permit's Fact Sheet explained that this is a water-quality derived limit (i.e., calculated based on the state's fresh water acute criteria, hardness of the receiving water, and the dilution provided by the receiving stream). Since a 0.077 mg/l limit would be more stringent than the effluent guideline limit of 1.0 mg/l, the 0.077 mg/l limit was placed in the permit.

Placing a maximum daily limit of 0.077 mg/l at Outfall 003B, however, can result in a greater maximum daily mass of copper to be discharged than otherwise would be allowed under the effluent guidelines. This is due to the differences between the flow rates of WTP No. 4 - Slag Settling Pond (Outfall 003A/B), and WTP No. 1's treated metal cleaning waste effluent discharge. This is explained mathematically:

- Calculated mass of copper discharged at Outfall 003A based on water quality derived limit of 0.077 mg/l and an average daily flow of 6.4 MGD from the Slag Settling Pond:

$$(0.077 \text{ mg/l}) \times 6.4 \text{ MGD} \times (8.34 \text{ (lbs/MG)/(mg/l)}) = 4.1 \text{ lbs/day}$$

- Calculated mass of copper discharged at WTP No. 1 treated effluent discharged based on the technology effluent limit of 1.0 mg/l and an average flow of 0.15 MGD from the WTP No. 1:

$$(1.0 \text{ mg/l}) \times 0.15 \text{ MGD} \times (8.34 \text{ (lbs/MG)/(mg/l)}) = 1.25 \text{ lbs/day}$$

As demonstrated above, the technology limit, if applied at the effluent discharge of WTP No. 1, is more stringent, allowing less copper loading to the Merrimack River than the existing permit's water-quality based limit. This calculation provides justification of relocating Outfall 003B from the broad-crested weir which begins the discharge of the Slag Settling Pond to the actual discharge pipe of WTP No. 1. Further, designating the discharge pipe of WTP No. 1 as Outfall 003B meets the requirement of 40 C.F.R. § 122.41(j)(1). This regulation requires that a sample be representative of the effluent being sampled. Taking a sample from the broad-crested weir, which is the discharge of the Slag Settling Pond, can not accurately demonstrate whether the

effluent discharge of WTP No.1 has been properly treated in accordance with the effluent limitations contained in 40 C.F.R. § 423.13(b)(5). Using the broad-crested weir as the sampling point for WTP No. 1 allows dilution provided by the Slag Settling Pond to act as a treatment means for the effluent discharged from WTP No. 1. The dilution provided by the Slag Settling Pond can mask or conceal treatment deficiencies occurring in WTP No. 1. Based on the following analysis, EPA and NHDES have relocated Outfall 003B to the discharge pipe for WTP No. 1. The compliance point for the effluent limitations required for WTP No. 1 is now considered WTP No. 1's discharge pipe.

EPA and NHDES have set the Total Recoverable Copper limits for Outfall 003B in the draft permit based on technology based effluent limits for metal cleaning wastes found in 40 C.F.R. § 423.13(b)(5).

Flow

Since the sampling point for Outfall 003A is relocated to the discharge pipe of WTP No. 1, the flow limits need to be revised to reflect the flows expected from the treatment plant. The new flow limits for WTP No. 1 are 0.2 MGD for average monthly flow and 0.3 MGD for the maximum daily flow.

Total Suspended Solids (TSS)

The chronic and acute concentration limits for Total Suspended Solids (TSS) for Outfall 003B are carried over to the draft permit from the present permit. These parameters are limited in accordance with the technology-based limits for metal cleaning wastes streams from 40 C.F.R. § 423.12(b)(5).

Oil and Grease

The chronic and acute concentration limits for Oil and Grease for Outfall 003B are carried over to the draft permit from the present permit. These parameters are limited in accordance with the technology-based limits for metal cleaning wastes streams from 40 C.F.R. § 423.12(b)(5).

Total Recoverable Iron

The chronic and acute concentration limits for Total Recoverable Iron for Outfall 003B are carried over to the draft permit from the present permit. These parameters are limited in accordance with the technology-based limits for metal cleaning wastes

streams from 40 C.F.R. § 423.13(b)(5).

pH

The current permit has a requirement to "Report" the minimum and maximum monthly reading for pH. This report only requirement is inconsistent with the requirement of 40 C.F.R. § 423.12(b)(1) which states, " The pH of all discharges, except for once through cooling water, shall be within the range of 6.0-9.0."

Accordingly, a pH range limit has been added to the draft permit. However, the pH range limit will be 6.5-9.0. In accordance with New Hampshire Env-Wq 1703.18 the pH limit for Class B waters (which is the Merrimack River's classification) shall be 6.5-9.0, unless due to natural causes. In accordance with 40 C.F.R. § 124.53 a State may certify a draft permit with more stringent limitations if the State considers that the more stringent limits are required to protect the State's surface water quality. Anticipating that New Hampshire will require the more stringent pH range limit in order to certify the draft permit, EPA has included the 6.5-9.0 pH range limit in the Merrimack Station's draft permit.

Outfall 003B Effluent Monitoring for Metal Cleaning Waste Stream

When WTP. No. 1 is employed for the treatment of metal cleaning wastes the monitoring of all effluent parameters, except flow, will be accomplished daily.

6.5.3.3 Outfall 003B Low Volume Waste Stream Effluent Limits.

When WTP No. 1 is employed solely to treat Merrimack Station's low volume waste stream the effluent limits are in accordance with 40 C.F.R. § 423.12(b)(1) and (3).

Total Suspended Solids (TSS)

The chronic and acute concentration limits for Total Suspended Solids (TSS) for Outfall 003B when WTP No. 1 is solely used to treat low volume waste streams are in accordance with 40 C.F.R. § 423.12(b)(3).

Oil and Grease

The chronic and acute concentration limits for Oil and Grease for Outfall 003B when WTP No. 1 is solely used to treat low

volume waste streams are in accordance with 40 C.F.R. § 423.12(b)(3).

pH

The current permit has a requirement to "Report" the minimum and maximum monthly reading for pH. This report only requirement is inconsistent with the requirement of 40 C.F.R. § 423.12(b)(1) which states, " The pH of all discharges, except for once through cooling water, shall be within the range of 6.0-9.0."

Accordingly, a pH range limit has been added to the draft permit. However, the pH range limit will be 6.5-9.0. In accordance with New Hampshire Env-Wq 1703.18 the pH limit for Class B waters (which is the Merrimack River's classification) shall be 6.5-9.0, unless due to natural causes. In accordance with 40 C.F.R. § 124.53 a State may certify a draft permit with more stringent limitations if the State considers that the more stringent limits are required to protect the State's surface water quality. Anticipating that New Hampshire will require the more stringent pH range limit in order to certify the draft permit, EPA has included the 6.5-9.0 pH range limit in the Merrimack Station's draft permit.

Outfall 003A Effluent Monitoring for
Low Volume Waste Stream

As was used for Outfall 003A, EPA and NHDES have required the same monthly sampling in the draft permit for TSS and Oil and Grease when WTP No. 1 is solely used to treat low volume waste streams. The same weekly monitoring that was used for Outfall 003A was also used for Outfall 003B's low volume waster stream pH monitoring when WTP No. 1 is solely used to treat low volume waste streams.