

RESPONSE TO COMMENTS – APRIL 10, 2007
REISSUANCE OF NPDES PERMIT NO. NH0100854
TOWN OF FARMINGTON WASTEWATER FACILITY
FARMINGTON, NEW HAMPSHIRE

From October 20, 2006 through November 18, 2006, the U.S. Environmental Protection Agency (EPA-New England) and the New Hampshire Department of Environmental Services, Water Division (NHDES-WD) solicited public comments on the draft National Pollutant Discharge Elimination System (NPDES) permit to be reissued to the Town of Farmington, NH.

EPA-New England received comments from the Town of Farmington and the Conservation Law Foundation during the public comment period. The following are responses to those comments and a description of changes made to the public-noticed permit as a result of those comments. A copy of the final permit may be obtained by writing or calling Dan Arsenault, United States Environmental Protection Agency, 1 Congress Street, Suite 1100 (CMP), Boston, Massachusetts 02114-2023; Telephone (617) 918-1562. Copies may also be obtained from the EPA Region I web site at <http://www.epa.gov/region1/npdes/index.html>.

COMMENTS FROM THE TOWN OF FARMINGTON

GENERAL COMMENTS:

COMMENT NO. 1:

“The Farmington Wastewater Treatment Facility (WWTF) was constructed in 1976. The WWTF was not designed for ammonia-nitrogen, phosphorus or metals removal and, therefore, will not achieve the specified effluent limits without a significant capital upgrade. Specifically, the following conditions preclude the Town from meeting the DRAFT limits:

- The existing mechanical brush aerators are undersized for peak oxygenation requirements during summer time operations, primarily related to nitrification oxygen demand.
- The existing secondary clarifiers are marginally sized for chemical phosphorus removal.
- The existing WWTF has no chemical storage and feed facilities required for phosphorus removal and supplemental alkalinity (due to nitrification).
- The existing WWTF solids handling facilities consist of sand drying beds, which are not functional in the winter, and an aerobic digester/sludge holding tank, which holds approximately 23 days of waste sludge under current conditions. The WWTF does not have a viable outlet for biosolids disposal during the winter months. Currently, the WWTF staff fill the sludge holding tank and one oxidation ditch with waste biosolids during the winter months and dewater these

biosolids during the spring months by way of rental dewatering equipment. Without the second oxidation ditch available for operation there is insufficient tank volume to reliably meet the non-summer ammonia limit. The second oxidation ditch cannot be made available without providing alternative solids handling facilities (capital improvement) or procedures (inter-municipal agreement).

- The existing WWTF has no means to provide for metals removal.”

RESPONSE NO.1:

We understand that the existing treatment plant will be unable to achieve many of the new water quality-based limits in the reissued permit. EPA cannot establish a compliance schedule in the permit for achieving the limits because the NH Water Quality Standards do not specifically include such an authorization. We anticipate that following the effective date of the permit, EPA or NHDES will issue a reasonable compliance schedule in an administrative order. If you wish to discuss this matter with EPA’s enforcement program you should contact Joy Hilton in the Region I Office of Environmental Stewardship at (617) 918-1877.

COMMENT NO. 2:

“The New Hampshire Department of Environmental Services (NHDES) has identified the Cocheco River as requiring a Total Maximum Daily Load (TMDL) Study; however, the NHDES has not completed the Cocheco River TMDL Study and is not currently scheduled to do so until 2009 or later. The DRAFT effluent limitations are almost certainly higher, if not significantly higher, than what could eventually result from a TMDL Study. The Town of Farmington is a relatively distressed community with a low Median Household Income relative to others in the State of New Hampshire and New England. The issuance of these DRAFT effluent limitations prior to the completion of the expected TMDL Study put the Town in an extremely difficult situation relative to recognizing its effluent treatment and disposal obligations and to planning and implementing a capital project which is responsible to the rate payers and tax payers of the Town of Farmington.”

RESPONSE NO. 2:

The segment of the Cocheco River which includes the Farmington discharge has been identified by New Hampshire’s 2004 303(d) list as being impaired for aluminum, dissolved oxygen saturation, dissolved oxygen, pH, mercury and escherichia coli. Municipal point sources and landfills have been identified as the probable sources of the dissolved oxygen impairments. NHDES collected data during the summers of 2001 and 2002 for a dissolved oxygen TMDL that is not scheduled to be completed until 2009 or later (the most recent NHDES schedule is that the draft TMDL will not be completed until June 30, 2011). As stated above, the probable sources of water quality impairments in this section of the river are municipal point source discharges and landfills, and the

data collected by NHDES shows that the Farmington discharge causes or contributes to violations of water quality standards.

Pursuant to New Hampshire Surface Water Quality Regulation Env-Ws 1703.07(b), Class B waters shall have a dissolved oxygen content of at least 75% of saturation, based on a daily average, and an instantaneous minimum dissolved oxygen of at least 5 mg/l. As can be seen in the Table shown below, all but one of the data points above Farmington’s outfall meet the instantaneous minimum dissolved oxygen content of 5 mg/l, while 19 data points on the main stem of the Cocheco below Farmington’s outfall fail to meet this standard.

Dissolved Oxygen Monitoring Data (mg/l)						
Sampling Location	August 2, 2001		August 8, 2001		August 1, 2002	
	AM	PM	AM	PM	AM	PM
26-Cch	8.44	7.90	7.78	7.37	7.38	7.03
1-Mdr¹	7.63	7.75	6.89	7.24	6.06	7.13
25-Cch	9.17	8.03	8.46	8.19	8.61	7.68
1-Dms²	6.49	7.23	5.91	6.65	4.89	6.29
23S-Cch	7.93	9.09	6.22	8.47	6.5	7.76
POTW³	---	6.09	---	7.11	---	---
23M-Cch	5.55	8.28	4.27	6.74	4.39	8.03
23D-Cch	5.03	5.63	4.00	4.71	3.29	7.75
OA-Pok⁴	3.63	4.51	2.46	3.52	1.75	4.05
23-Cch	5.83	6.74	4.96	5.84	4.45	6.8
22U-Cch	4.46	4.69	3.30	3.76	3.10	---
22S-Cch	4.79	6.02	4.05	5.91	3.82	5.6
1-Rat⁵	6.64	7.85	5.25	6.32	Dry	---
22J-Cch	5.60	6.50	3.95	4.60	4.14	7.47
22-Cch	5.59	6.76	4.33	5.43	5.30	6.34
21M-Cch	7.11	7.10	6.67	6.48	6.74	6.94
21-Cch	7.89	6.99	7.66	7.27	5.39	7.63

1. Mad River.

2. Dames Brook

3. Farmington Wastewater Facility.

4. Pokamoonshine Brook.

5. Rattlesnake River.

Where it is shown that a pollutant has the reasonable potential to cause or contribute to a violation of water quality standards, the permit must include an effluent limit on that pollutant. The diurnal swings in dissolved oxygen between the morning and afternoon readings, particularly in the August 1, 2002 data, show that phosphorus discharges are causing or contributing to these violations. EPA understands that the TMDL will contain an allocation for biochemical oxygen demand and total phosphorus, and those limits may be more stringent than the limits in this permit. However, we believe that is necessary to move forward with water quality-based phosphorus limitations given water the quality data of the Cocheco River. Additionally, uncertainty regarding the date for completion and final approval of a TMDL is another factor in the decision to proceed with water quality based limits at this time.

In the absence of a TMDL, EPA is required to use available information to establish water quality limits when issuing NPDES permits to impaired waters. See generally 40 C.F.R. § 122.44(d). EPA has used the data collected by NHDES for the TMDL and has established water-quality based limits for total phosphorus using this data, applicable narrative State water quality standard, Federal water quality criteria guidance, and other relevant information. Effluent limitations for copper and ammonia are based upon State Surface Water Quality Regulations Env-Ws 1703.21.

COMMENT NO. 3:

The Town is currently preparing a wastewater facilities evaluation. The proactive evaluation includes river-based, land-based, and a combination land/river-based discharge options.

RESPONSE NO. 3:

We applaud the Town for moving forward with facilities planning. This is a necessary first step in completing upgrades necessary to comply with the new permit limits. We would encourage a full investigation of ground water disposal options since elimination of the point source discharge would obviate the need for an NPDES permit. If a point source discharge alternative is selected the Town should give strong preference to technologies which are easily retrofitted to attain more stringent discharge limitations for phosphorus.

COMMENT NO. 4:

“Based on the above, the Town requests that the DRAFT effluent limits be modified as summarized below until such time as the State of New Hampshire or the Environmental Protection Agency completes a TMDL Study for the Cocheco River.”

Parameter	Draft NPDES License (October 2006)	Proposed NPDES License
Flow	0.35 mgd (MA)	0.35 mgd (MA)
Biochemical Oxygen Demand	30 mg/l – 88 lbs/day (MA)	30 mg/l – 88 lbs/day (MA)
	45 mg/l – 131 lbs/day (WA)	45 mg/l – 131 lbs/day (WA)
	50 mg/l – 146 lbs/day (DM)	50 mg/l – 146 lbs/day (DM)
Total Suspended Solids	30 mg/l – 88 lbs/day (MA)	30 mg/l – 88 lbs/day (MA)
	45 mg/l – 131 lbs/day (WA)	45 mg/l – 131 lbs/day (WA)
	50 mg/l – 146 lbs/day (DM)	50 mg/l – 146 lbs/day (DM)
pH	6.5 – 8.0	6.5 – 8.0
Escherichia coli	126/100 ml (GM)	126/100 ml (GM)
	406/100 ml (DM)	406/100 ml (DM)
Dissolved Oxygen	≥ 5 mg/l (June 1 – Oct. 1)	≥ 5 mg/l (June 1 – Oct. 1)
Chlorine Residual	0.056 mg/l (MA)	0.056 mg/l (MA)
	0.10 mg/l (DM)	0.10 mg/l (DM)
Total Recoverable Copper	0.014 mg/l (MA)	Report (MA)
	0.019 mg/l (DM)	Report (DM)
Ammonia-Nitrogen	15.3 mg/l (MA) Summer	Report (MA) Summer
	30.1 mg/l (MA) Winter	Report (MA) Winter
	Report (DM)	Report (DM)
Total Phosphorus	0.5 mg/l (MA) Summer	Report (MA) Summer
	1.0 mg/l (MA) Winter	Report (MA) Winter
Orthophosphorus	Report (MA)	Report (MA)

MA = Monthly Average; WA = Weekly Average; DM = Daily Maximum; GM = Geometric Mean

RESPONSE NO. 4:

As stated above, in the absence of a TMDL and uncertainty regarding the time frame for issuance of a final TMDL, EPA believes it reasonable to move forward with permit issuance given the water quality data from the Cocheco River. Additionally, 40 C.F.R. 122.44(d)(1)(iii) requires pollutant to be limited if there is reasonable potential for the discharge to cause or contribute to exceedances of applicable water quality criteria. Therefore, limits for total recoverable copper, ammonia nitrogen, and total phosphorus have been included in the permit. We note that the TMDL is not being done for copper. This limit is based on numeric state water quality criteria.

FACT SHEET SPECIFIC COMMENTS:

COMMENT NO. 1:

“Page 5, Flow. The Town exceeded 80 percent of the 0.35 mgd monthly average design flow (0.28 mgd) for greater than 3 consecutive months in 2005. The Town is currently implementing a wastewater facilities evaluation and an infiltration/inflow (I/I) study. As a part of these studies, the Town is reviewing influent flow and load projections, I/I sources and potential flow reduction, and wastewater treatment facilities needs and

upgrade requirements to meet current and projected effluent limitations for a river discharge, land-based discharge and a combination river/land-based discharge.”

RESPONSE NO. 1:

Again, we applaud the Town for undertaking these planning efforts. Controlling I/I minimizes the necessary wastewater treatment capacity and also prevents overflows of the collection system during wet weather.

COMMENT NO. 2:

“Page 9, Phosphorus. The Fact Sheet does not recognize the NHVRAP data collected on the Cocheco River. It is important to note that the 2004 and 2005 NHVRAP Cocheco River Water Quality Report showed in-stream total phosphorus concentrations of less than 0.033 mg/l and 0.037 mg/l, respectively, both upstream (26-Cch) and downstream (23-Cch) of the Farmington WWTF. This information should be included in the Fact Sheet.

Further, whereas the limit is based on judgment, the Town requests that the phrasing in the last paragraph on page 11 should be modified to include a statement similar to “Using Best Professional Judgment, EPA has applied the Gold Book criterion...” If the anticipated TMDL Study concludes that a higher limit is justified, will this current licensing action preclude raising the limit based on the anti-backsliding provisions of the Clean Water Act? Or can the limit be raised based on “New Information” provisions?”

RESPONSE NO. 2:

The information concerning upstream and downstream phosphorus level from the 2004 and 2005 NHVRAP Cocheco River Water Quality Report has been included in the administrative record.

EPA disagrees that the phosphorus limit was established using Best Professional Judgment. Best Professional Judgment is a procedure for establishing case-by-case technology-based limits for non-POTWs (see CWA at 402(a)(1)(B) and 40 CFR Part 125.3) The total phosphorus limit is a water quality based limits established using the Gold Book recommended criteria of 0.1 mg/l to interpret the state’s narrative water quality criteria.

If an approved TMDL concludes that a higher phosphorus limit is justified, the limit can be modified. This modification would be allowed under 40 C.F.R. §122.62(a)(2) which allows a permit to be modified if new information becomes available that was not available at the time of permit issuance.

PERMIT SPECIFIC COMMENTS:

COMMENT NO. 1:

“Page 1: The zip code for Farmington is 03835.”

RESPONSE NO. 1:

This information has been included in the administrative record.

COMMENT NO. 2:

“Page, Part I.A.1: The existing final effluent sample location for all parameters requiring a 24-hour composite sample is at the outlet of the secondary clarifiers and the existing final effluent sample locations for all parameters requiring a grab sample is at the effluent aeration chamber. The Town should request that the existing sample locations be approved by EPA and NHDES until such time as a WWTF upgrade is completed.”

RESPONSE NO. 2:

EPA concurs that the existing sampling locations for 24-hour composite and grab samples are appropriate until such time as the treatment plant upgrade is completed.

COMMENT NO. 3:

“Page 2, Part I.A.1- Total Copper: EPA Method 1669 does not specifically mention the use of automatic composite samplers and this method would potentially increase the potential for sample contamination. The Town requests that the sample type be changed from 24-hr composite to grab.”

RESPONSE NO. 3:

The sample type for total recoverable copper on page 2 of 11 of the permit has been changed to a grab sample.

COMMENT NO.4:

“Page 2, Part I.A.1 – Total Copper: See General Comments above.”

RESPONSE NO. 4:

40 C.F.R. 122.44(d)(1)(iii) requires pollutant to be limited if effluent concentrations exceed applicable water quality criteria. Therefore, a limit for total recoverable copper has been included in the permit.

COMMENT NO.5:

“Page 2, Part I.A.1 – Ammonia: See General Comments above.”

RESPONSE NO.5:

40 C.F.R. 122.44(d)(1)(iii) requires pollutant to be limited if effluent concentrations exceed applicable water quality criteria. Therefore, a limit for ammonia nitrogen has been included in the permit.

COMMENT NO. 6:

“Page 2, Part I.A.1 – Total Phosphorus: See General Comments above.”

RESPONSE NO. 6:

40 C.F.R. 122.44(d)(1)(iii) requires pollutant to be limited if effluent concentrations exceed applicable water quality criteria. Therefore, a limit for total phosphorus has been included in the permit

COMMENT NO. 7:

“Page 5, Part I.A.4: Whereas the Town has had long standing issues with infiltration/inflow and periodically has influent values which are less than 200 mg/l, the Town requests that the following sentence be added at the end of the Paragraph: “The requirement to maintain a minimum of 85 percent removal shall be waived if the influent concentration of BOD or TSS drops below 200 mg/l.””

RESPONSE NO. 7:

Pursuant to 40 C.F.R. § 133.103, the Regional Administrator is authorized to substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements provided that the permittee satisfactorily demonstrates the following three provisions:

1. The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits but its percent removal requirements cannot be met due to less concentrated influent wastewater.
2. To meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standards.
3. The less concentrated influent wastewater is not the result of excessive I/I.

Since the less concentrated influent wastewater is a result of I/I, the percent removal for both BOD₅ and TSS shall remain at 85%. Additionally, as can be seen from the table below, the effluent concentrations have not been consistently met when percent removals have been below 85%.

	12/31/04	2/28/05	Permit Limit
TSS % Removal	80	57	85
BOD₅ % Removal	82.7	68.3	85
BOD Mon. Ave. (mg/l)	41	50.8	30
BOD Week Ave. (mg/l)	55	56.5	45
BOD Max. Day (mg/l)	67	61	50
TSS Mon. Ave. (mg/l)	32.2	64	30
TSS Week Ave. (mg/l)	56	120	45
TSS Max. Day (mg/l)	56	186	50

COMMENTS FROM THE CONSERVATION LAW FOUNDATION

COMMENT NO.1:

“In light of (1) increasing nitrogen loading trends in the Great Bay Estuary, (2) the significant contribution to those loads from the Cocheco River, and (3) recognition by multiple agencies that total nitrogen limits are needed for freshwater rivers that are tributaries to the estuary, the draft NPDES permit’s failure to in any way address total nitrogen must be corrected. The draft permit’s deficiency in failing to address total nitrogen is greatly compounded by the additional fact that the Cocheco River has been identified as not meeting aquatic life uses as a result of dissolved oxygen concerns, among others, and that the TMDL to address this impairment has not yet been conducted (despite a 2005 schedule for doing so). *See* Fact Sheet, Permit No. NH0100854 at 11. *See also* Draft 2006 List of Threatened or Impaired Waters that Require a TMDL (NHDES).

In light of the foregoing, CLF urges EPA and NHDES to require discharge limitations and reporting requirements relative to total nitrogen. With respect to the specific limit for total nitrogen, it is CLF’s position that, in light of cumulative stresses to the Cocheco River and Great Bay estuary, a limit of 8 mg/l is not sufficient. Rather we note that a limit of at least 3 mg/l is achievable and urge EPA and NHDES to impose a discharge limit for total nitrogen that ensures the maintenance of water quality standards in the Cocheco River and in the estuary, and mitigates current nitrogen loading trends and associated impacts to the estuary.”

RESPONSE NO.1:

In general, NPDES permit limits are based on either technology requirements or water quality requirements, whichever are more stringent for any given pollutant. In the case of

Publicly Owned Treatment Works (POTWs), EPA is directed to establish technology treatment requirements based upon secondary treatment standards (see § 301 of the CWA, 40 C.F.R. Section 125.3(a)(1)(i), and 40 C.F.R. Part 133). These technology-based requirements were specified in the draft permit and are retained in the final permit. The secondary treatment requirements in 40 C.F.R. Part 133 do not specify a technology-based limit on nitrogen. EPA does not dispute that meeting a limit of 3 mg/l is technologically feasible. Nevertheless, because the technology-based requirements for POTWs do not include limits on nitrogen, the Region may not set a technology-based nitrogen permit limit on Farmington's discharge.

In the case of establishing a water-quality based permit limit, EPA must first determine whether the discharge will cause, has the reasonable potential to cause, or contributes to an excursion above any state water quality standard, including narrative criteria (see 40 C.F.R. Section 122.44(d)(1)).

New Hampshire has not as yet adopted a numeric criterion for nitrogen, although the New Hampshire Estuary Program (NHEP) has agreed to lead an effort to develop water quality criteria for estuarine waters. Data from NHEP indicators such as dissolved oxygen, chlorophyll-*a*, total suspended solids, and eelgrass biomass are being reviewed to better understand nutrient dynamics and impacts in the Great Bay Estuary. The outcome of this analysis will be recommendations to the State Water Quality Standards Advisory Committee for specific criteria to protect the water quality of New Hampshire's estuaries from the effects of excess nutrients (See State of the Estuaries, 2006, New Hampshire Department of Environmental Services, pg. 13). Currently, the water quality standards provide that "Class B waters shall contain no phosphorus or nitrogen in such concentrations that would impair existing or designated uses, unless naturally occurring." Env-Ws 1703.14(b). Excess nitrogen can affect water quality by causing algae blooms and/or low dissolved oxygen levels, both of which can impair existing or designated uses. To date, neither of these conditions is evident in the Great Bay Estuary. While the commenter has submitted information indicating that the trend of dissolved inorganic nitrogen concentrations in the Great Bay estuary is generally upward, this information is insufficient to indicate that Farmington's discharge will cause, has the reasonable potential to cause, or contributes to an excursion of water quality standards. Therefore, at the current time, EPA does not have sufficient justification to impose a nitrogen limit for this discharge.

The commenter states that the "NHDES recommended 8 mg/l" in the context of the Seacoast Region Wastewater Management Study. EPA does not believe that this information is relevant to the permitting action. The NHDES comments were made on a draft "methodology" for development of future WWTF discharge limits. The "recommended" nitrogen levels were not based on information relevant to the Great Bay estuary, rather they were taken from the State of Connecticut's Long Island Sound Nitrogen Total Maximum Daily Load (TMDL). The purpose of this methodology was to allow planners to evaluate various wastewater management alternatives in New Hampshire's seacoast region. These "hypothetical" permit limits were proposed for the year 2025. The "proposed" permit limits could be used to determine the need for future

WWFT upgrades in the seacoast area. The draft methodology clearly states that these “proposed future limits are intended to be *only* (emphasis added) used in this study as a means of comparison for the various wastewater management alternatives and should not be taken to have any legal implication or indicate suggested future permit limits.” In other word, these hypothetical permit limits were to be used only as a planning tool.

While it is EPA’s position that there currently is not sufficient justification to impose a nitrogen limit on the discharge, the final permit includes a monitoring requirement for total nitrogen at a frequency of twice per month. Should water quality criteria for total nitrogen be developed, this monitoring data can be used to determine whether or not a permit limit would be needed.

COMMENT NO.2:

“In light of the foregoing, and in light of the downstream impairment of the Cocheco River relative to dissolved oxygen saturation, the draft NPDES permit should be amended to include a more stringent phosphorus limit of at least 0.3 mg/l, and any further limitation necessary to ensure the attainment and maintenance of water quality standards. This is especially important in light of the fact that, according to NHDES’ 2004 Section 303(d) list, a TMDL to address dissolved oxygen was scheduled for 2005 and has yet to be completed.”

RESPONSE NO.2:

CLF is correct that a TMDL is scheduled to be done for the Cocheco River. This TMDL was originally scheduled for completion in 2005 but the completion date has been pushed out to 2011. In the absence of a TMDL, EPA is required to use available information to establish water quality limits when issuing NPDES permit to impaired waters (See generally 40 C.F.R. § 122.44(d)). EPA has used instream monitoring data collected by the NHDES for the TMDL and has established a water quality based limit for total phosphorus using this data, applicable narrative State water quality criteria, Federal water quality criteria guidance, and other relevant information discussed in the “Phosphorus” section of the fact sheet. EPA believes the summer time phosphorus limit of 0.5 mg/l and the winter time limit of 1.0 mg/l are protective of the water quality of the Cocheco River. However, if an approved TMDL shows that more stringent phosphorus limits are necessary or if NHDES promulgates numeric water quality criteria for phosphorus then the permit can be modified pursuant to 40 C.F.R. § 122.62(a)(2).

COMMENT NO.3:

“In addition to the above, it is important to note that NHDES’ draft 2006 303(d) list identifies the Cocheco River as not meeting aquatic life uses as a result of impairments caused by lead. The draft NPDES permit needs to be amended to include specific limits relative to lead (as well as aluminum for which the river is also impaired), to ensure that the facility’s effluent discharge will not cause or contribute to this water quality violation.”

RESPONSE NO.3:

CLF is correct that the NHDES draft 2006 303(d) list identifies this stretch of the Cocheco River as not meeting aquatic life criteria as a result of lead. Additionally, the 2004 303(d) list (and the draft 2006 303(d) list) identifies this stretch of the Cocheco River as not meeting aquatic life criteria for aluminum.

In order to evaluate the effluent concentrations of lead and aluminum in the effluent from the Town of Farmington Wastewater Facility, toxicity tests from the last six years were reviewed. The aluminum and lead concentrations in the effluent from these tests are shown below.

Pb and Al Toxicity Test Concentrations		
Date	Effluent Concentration (mg/l)	
	Aluminum	Lead
9/06	<0.01	<0.005
2/06	0.016	0.009
7/05	<0.01	0.008
3/05	0.05	<0.005
8/04	0.03	<0.005
3/04	0.04	<0.005
7/03	0.04	0.018
1/03	0.052	<0.003
7/02	0.0851	<0.0026
3/02	0.0425	<0.0026
7/01	<0.0197	<0.0026
3/01	0.0439	0.0027

The acute and chronic criteria for aluminum are 0.750 and 0.087 mg/l, respectively. Each of the effluent samples above are less than the chronic threshold of 0.087 mg/l, therefore EPA does not believe that an effluent limit is warranted for this pollutant.

The acute and chronic criteria for lead are 0.0141 and 0.00054 mg/l, respectively. With a dilution of 5.1, applicable permit limits for this pollutant would be a monthly average of 0.0028 mg/l and a daily maximum of 0.072 mg/l. Based on the data above, the monthly average threshold of 0.0028 mg/l has been exceeded on at least three occasions. Four of the tests have results of less than 0.005 mg/l and one has a result of less than 0.003 mg/l. Since the minimum level of detection for these tests is above the monthly average limit of 0.0028 mg/l there is a possibility that the lead criteria was also exceeded in these tests. Therefore, given the fact that the monthly average limit of 0.028 mg/l was exceeded on three occasions and six of the tests have questionable results, a monthly average effluent limitation for lead of 0.0028 mg/l has been included in the permit. The permit also requires monitoring and reporting of the daily maximum effluent lead concentrations. The monitoring frequency shall be two (2) times per month using a 24-hour composite sample. The testing shall be performed using EPA Method 200.8.

TESTING METHOD FOR ESCHERICHIA COLI BACTERIA

On March 26, 2007, 40 C.F.R. Parts 136 and 503 were modified. Among these modifications, were changes to the approved methods for Escherichia coli (E. coli) bacteria testing. EPA method 1103.1 which was specified in the draft permit is no longer approved for E. coli testing in a wastewater matrix. The permit has been modified to specify E. coli testing using a method approved in 40 C.F.R. Part 136, List of Approved Biological Methods for Wastewater and Sewage Sludge.