

**Department of Environmental Conservation
Response to Comments**

For

**City of Fairbanks and Golden Heart Utilities, Inc.
Wastewater Treatment Facility**

APDES Permit No. AK0023415

Public Noticed November 23, 2015 – January 11, 2016

MARCH 22, 2016



**Alaska Department of Environmental Conservation
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501**

1 Introduction

1.1 Summary of Facility / Permit

The City of Fairbanks and Golden Heart Utilities (also known as permittees) Wastewater Treatment Facility (COF and GHU WWTF) collects and treats domestic and industrial wastewater from the greater Fairbanks area, College, and Fort Wainwright. The WWTF, with a design flow rate of 8 million gallons per day (mgd), is designated as a major facility due to its design flow rate of 1.0 mgd or greater and because the permittees have an approved industrial pretreatment program (IPP). Under the IPP, COF and GHU regulate flow from six significant industrial users (SIU), one of which, Aurora Energy Limited Liability Company, which operates a steam electric-generating plant, is also classified as a categorical industrial user. The other five SIUs include: the University of Alaska Fairbanks Power Plant, Fairbanks Memorial Hospital, Fort Wainwright, the Fairbanks North Star Borough Landfill and the Ruth Burnett Sport Fish Hatchery. The treatment process, which is entirely contained inside the plant, consists of an oxygen activated sludge secondary treatment system. Mechanical bar screens and aerated grit chambers provide preliminary treatment followed by aeration, clarification, and chlorine disinfection prior to discharge to the Tanana River. Biosolids generated by the treatment process are aerobically digested, thickened, and dewatered. The biosolids are then mixed with wood chips and compressed air to produce compost. The National Pollutant Discharge Elimination System (NPDES) permit previously issued by the Environmental Protection Agency (EPA) in 2000 expired on July 25, 2005. Because COF and GHU submitted a timely and complete application for a new permit prior to the expiration of the NPDES permit, the permit was administratively extended until such time that a new permit could be reissued.

1.2 Opportunities for Public Participation

The Alaska Department of Environmental Conservation (DEC or the Department) proposed to issue an Alaska Pollutant Discharge Elimination System (APDES) wastewater discharge permit for the COF and GHU WWTF. To ensure public, agency, local governments and tribal notification and opportunities for participation, the Department:

- identified the permit on the annual Permit Issuance Plan posted online at: <http://www.dec.state.ak.us/water/wwdp/index.htm>
- notified local governments and potentially affected tribes that the Department would be working on this permit via letter, fax and/or email
- posted a preliminary draft of the permit on-line for a 10-day applicant review October 20, 2015 and notified tribes and other agencies

- formally published public notice of the draft permit on November 23, 2015 in the *Fairbanks Daily News-Miner* newspaper and posted the public notice announcing a 45-day public comment period on the Department's public notice web page
- posted the proposed final permit on-line for a five-day applicant review on March 4, 2016.
- sent email notifications via the APDES Program List Serve when the preliminary draft, draft, and proposed final permits were available for review

The Department received comments from GHU, Northern Testing Laboratories (NTL), COF, EPA and a member of the general public on the draft permit and supporting documents. NTL was contracted by GHU to submit comments on their behalf, and COF submitted a letter in support of the comments submitted by both GHU and NTL. In addition, the Department also requested comments from the Alaska Departments of Natural Resources and Fish and Game, the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and EPA. EPA was the sole agency to submit comments. This document summarizes the comments submitted by the permittees, the public and EPA, and the justification for any action taken or not taken by DEC in response to the comments.

1.3 Final Permit

The final permit was adopted by the Department on March 22, 2016. There were changes from the public noticed permit. Any significant changes are identified in the response to comments and reflected in the final documents.

2 Sufficiently Sensitive Methods (SSM)

2.1 Comment Summary

Permit Section 1.2.4.

EPA recommends that DEC incorporate permit language requiring the use of sufficiently sensitive analytical methods asserting that the permit only requires method detection levels necessary for compliance monitoring. EPA states that the SSM rule requires permittees to quantify the level of pollutants to a lower level than applicable limits of water quality standards or use the most sensitive Title 40 Code of Federal Regulations (CFR) Part 136 method available.

Response:

- DEC updated APDES Regulations 18 Alaska Administrative Code (AAC) 83 to adopt the SSM rule effective February 19, 2016 (See 18 AAC 83.010(f). Permit Section 1.2.4 was updated and includes the regulatory reference to 18 AAC 83.010(f).

3 Total Residual Chlorine (TRC) and Fecal Coliform (FC) Bacteria Schedule of Compliance

3.1 Comment Summary

Permit Section 1.3.

- GHU states concerns that the TRC and FC Bacteria Schedule of Compliance is overly complicated and requests that DEC work with GHU to revise and simplify the timeline in a manner that would also satisfy DEC's objectives.
- NTL concurs with the decision of a five-year TRC and FC Bacteria compliance timetable. Further stating that the changes have potential for significant and operational and financial impact on the utility.
- The financial impact according to NTL will affect ratepayers and the involvement of the Regulatory Commission of Alaska, which is typically a multiyear process.
- The database driving the FC Bacteria limit is from 1999-2002. An extended timeline allows time to collect new data and to properly design, construct, and optimize any new required treatment facilities.
- NTL states that the compliance schedule appears nonlinear and recommends that a more practical schedule be discussed with the permittees.

Fact Sheet Section 9.6.

- EPA states that DEC's justification for a five-year compliance schedule is insufficient and suggests that DEC work with the permittees to propose a shorter compliance schedule that would address chlorination and dechlorination as soon as possible as per the requirements at 40 CFR 122.47.

Response:

- During the 10-day applicant review period of the preliminary draft permit documents, GHU requested a three year permit extension in order to complete an optimization study given the aging facility. GHU stated that without significant modifications to the treatment process, they would potentially need to upgrade to tertiary treatment in order to meet the new TRC and FC Bacteria effluent limits (note, it is unclear why tertiary treatment is mentioned as tertiary treatment is generally reserved for wastewater treatment facilities that are designed to remove significant amounts of nutrients where the compliance schedule included in the permit is designed to control the discharge of TRC and FC Bacteria). GHU maintained in their comments, that an "assessment of the facility's current hypochlorite production must be completed before any process changes could be evaluated or implemented." DEC found GHU's request to extend the permit an additional three years to be unreasonable consistent with 40 CR 122.47, but found the optimization study reasonable, and incorporated a three year optimization study into the TRC and FC Bacteria Schedule of Compliance section of the draft permit.
- Because the results of the optimization study may require upgrades to the facility, an additional two years is provided in the Schedule of Compliance for construction and construction-related activities. Construction-related activities include: securing engineered plan approval, securing funding, solicitation and awarding of bids, and optimization of facility upgrades. DEC asserts that a five-year Schedule of Compliance timeframe is reasonable and appropriate and has made no changes to its length.
- Consistent with 40 CFR 122.47 and 18 AAC 83.560, Sections 1.3.1.1 and 1.3.1.2 of the permit state that the permittees must achieve compliance with the final TRC and FC Bacteria effluent

limits as soon as possible. The permit also, because of reasons stated above, establishes a five-year compliance deadline for the new TRC and FC Bacteria effluent limits. Regulation 18 AAC 83.560(b) requires that if a permit establishes a schedule of compliance that exceeds one year, the schedule must set out interim requirements and dates for their achievement. DEC made minor revisions to the Schedule of Compliance interim requirements to simplify that portion of the permit while adhering to the requirements of 18 AAC 83.560. DEC maintains that the schedule as proposed is sequential and prescribes a reasonable and critical path forward to ensure that the final TRC and FC Bacteria limits (unless DEC approves the removal of FC Bacteria from the Schedule of Compliance as described in Permit Section 1.3.1.11) are met as soon as possible but no later than five years after the permit's effective date. DEC also provided a more detailed explanation for the five-year Schedule of Compliance in Fact Sheet Section 9.6.

4 Whole Effluent Toxicity (WET)

4.1 Comment Summary

Permit Section 1.4.1.

For clarity and consistency, GHU requested that the days in Permit Section 1.4.1 be changed from days one, three, and five, to Monday, Wednesday, and Friday within the same week, which is similar to language found in Table 6 of the permit.

Response:

Table 6 of the permit contains pretreatment monitoring sample frequencies. The influent and effluent frequency requirement is three days within a week (Monday -Friday). This requirement does not restrict the permittees from sampling on three sequential days, only that the permittees sample three times in a given week between Monday and Friday. However, GHU's request to change the sampling days at Permit Section 1.4.1 from days one, two, and three to Monday, Wednesday, and Friday within the same week is consistent with WET sampling objectives. Therefore, DEC has modified Permit Section 1.4.1 to reflect the new sampling description.

Permit Section 1.4.2.2.

GHU requested clarification on sensitivity screening requirements.

Response:

- DEC clarified the sensitivity screening requirements language in Permit Sections 1.4.2.2 and 1.4.2.4.

5 Mixing Zone

5.1 Comment Summary

Permit Section 1.5, Fact Sheet Section 6.6.

EPA provided the following comments regarding the mixing zone:

- A mixing zone should be authorized for FC Bacteria because the interim limits exceed water quality criteria.
- It is appropriate to remodel the mixing zone and reduce the mixing zone size when the lower limits for TRC become effective.

Response:

- FC Bacteria has been added to the mixing zone. It will not be authorized in the mixing zone upon compliance with the final FC Bacteria effluent limits withstanding Permit Section 1.3.1.11. Updates of this nature have been added to Permit Section 1.5 and Fact Sheet Section 6.6.
- DEC will re-evaluate the mixing zone upon GHU's achievement of the final TRC effluent limits. A statement to this effect has been added to Permit Section 1.5 and Fact Sheet Section 6.6.

6 Positive Interference of Manganese in TRC Test Method

6.1 Comment Summary

Permit Section 1.6.5.

GHU provided the following comments in regards to the requirement that the permittees demonstrate the availability of an analytical method that will detect TRC samples without interference from manganese:

- Demonstrating the availability of an analytical method that will detect TRC samples without interference from manganese is impracticable per Standard Methods and is acknowledged in APDES General Permit AKG572000.
- GHU requests the removal of Permit Section 1.6.5 and that the fact sheet be updated accordingly.
- GHU requests that DEC adopt, where applicable in the permit and fact sheet, a TRC method detection limit/compliance level of 0.1 milligrams per liter (mg/L).

NTL provided the following comments in regards to the requirement that the permittees demonstrate the availability of an analytical method that will detect TRC samples without interference from manganese:

- There is no current, approved method available for accomplishing what is required in Permit Section 1.6.5 for the determination of the TRC.
- *Standard Methods for the Examination of Water and Wastewater, 22nd Edition, APHA, AWWA, WEF, Washington, DC (2012) Method 4500-Cl, A.3, Selection of Method, b. Wastewaters,* discusses interference caused by oxidized manganese for each of the approved test methods available for both TRC and free chlorine residual. The use of a blank correction for manganese in DPD (diethyl-p-phenylene diamine) colorimetric determination methods is cited in Standard Methods.
- NTL applied a blank correction factor to the DPD measurements in the 1999-2002 receiving water monitoring program.
- DEC has addressed this issue in other APDES permits by establishing of 0.1 mg/L as the compliance level for TRC. NTL cites the following footnote from AKG572000: "The TRC

effluent limits are not quantifiable using EPA-approved analytical methods. DEC will use the minimum level (ML) of 0.1 mg/L as the compliance evaluation level for this parameter.”

- NTL recommends that the above footnote be incorporated into the permit and fact sheet.

Response:

- As documented in the NTL comment summary immediately above and contained in their comments, NTL has provided sufficient evidence that there is no current approved method available to satisfy the requirement at Permit Section 1.6.5 and that the DPD method with a blank correction factor for manganese employed by NTL during the 1999-2002 receiving water monitoring program is an approved method. DEC has therefore removed the requirement of demonstrating the availability of an analytical method that will detect TRC samples without interference with manganese.
- The footnote cited by NTL does not specifically address the manganese interference issue. It can, however, be applied for sampling events whereby TRC limits are lower than EPA-approved analytical methods such as in AKG572000 for the TRC water quality criteria limits (freshwater average monthly limit (AML) 0.011 mg/L, maximum daily limit (MDL) 0.019 mg/L).
- Permit Section 1.2.4 states that the permittees must use an EPA-approved test method that quantifies the level of pollutants to a level lower than applicable limits or water quality standards or the most sensitive test method available. An EPA-approved test method is available to determine compliance with the TRC effluent limits (interim AML 0.83 mg/L, MDL 1.0 mg/L and final AML 0.2 mg/L, MDL 0.3 mg/L); therefore, the footnote to the TRC interim and final effluent limits is not necessary. DEC has also added a note to Receiving Waterbody Monitoring Section 1.6.6 that establishes 0.1 mg/L as the TRC compliance level.

7 FC Bacteria Water Quality Criteria Limits

7.1 Comment Summary

Fact Sheet Section 9.2. GHU submitted the following comments in regards to FC Bacteria. COF submitted a letter in support of the comments submitted by GHU:

- GHU states that the proposed FC Bacteria final effluent limits appear to be based on data that does not consider the facility’s FC Bacteria discharge to the Tanana River, the hydraulic variation of the Tanana, and the seasonal nature of the ambient FC Bacteria excursions.
- Imposing FC Bacteria water quality criteria will not result in a meaningful and/or measurable environmental benefit.
- Reasonable potential does not exist for GHU’s effluent to cause or contribute to excursions above water quality criteria.
- GHU’s effluent does not contribute significantly to the Tanana River’s loading capacity, thus an assimilative capacity exists.
- GHU provides an example of a wastewater treatment plant upset whereby the Tanana River did not exceed the acute water quality criterion, thus concluding that the Tanana River has assimilative capacity for FC Bacteria even during extreme upset conditions.

- Water quality based effluent limits are unreasonable.
- GHU requests that DEC consider revising the draft to maintain the current permit limits and remove the optimization study requirements and other language associated with FC Bacteria water quality based effluent limits found in the current draft of the permit.
- The enforcement of unnecessary FC Bacteria water quality criteria may come at an extreme cost to the utility's rate payers.
- Section 302(b)(2) of the Clean Water Act (CWA) requires the permitting agency to consider the "reasonable relationship between the economic and social costs and the benefits to be obtained (including attainment of the objective of this Act) from achieving such limitation." GHU states that such a cost benefit analysis is not reflected in the permit, and that an analysis would show that the final FC Bacteria limits are unreasonable and would not significantly benefit the objective to the CWA.

Fact Sheet Section 9.2. NTL submitted the following comments in regards to FC Bacteria:

- Consumer costs should only be imposed if there is a quantifiable environmental gain.
- There is no measurable effect on the FC Bacteria concentrations in the Tanana River attributable to GHU at the current permit effluent limits.
- Nearly all the FC Bacteria samples that exceeded the maximum water quality criteria occurred during unusually high river stages levels and flow events. When high flow events subside, FC Bacteria concentrations in the Tanana River also typically abate to water quality criteria.
- Changing effluent standards will not result in a measurable improvement in the water quality of the Tanana River.
- Process control changes could have a negative effect on the Tanana River. Chlorination followed by dechlorination could increase disinfection by-products such as chloroorganic compounds. Some dechlorinating agents can cause oxygen depletion, lower pH, and increased toxicity in WET tests.
- NTL believes that a major source of Tanana River FC Bacteria during high water flow/wet weather events is from wildlife.
- Placing an additional financial burden on the wastewater utility and its ratepayers to attain an arbitrary standard seems unreasonable.

Response:

- Alaska does not have an acute criterion for FC Bacteria. The Alaska Water Quality Standards (WQS) at 18 AAC 70.020(a)(2)(A) states that the geometric mean may not exceed 20 FC/100 mL, and not more than 10% of the samples may exceed 40 FC/100 mL.
- The Tanana River Outfall Sampling Program was conducted between 1999 and 2002. GHU and NTL both provided comments regarding the age of the data during their review of the preliminary draft permit documents. GHU stated that “Reliance on stale data as a basis to require the permittees to undertake significant changes, to the facility, operation and processes is unreasonable in these circumstances.” NTL recommended that GHU request a delay of more restrictive permit requirements until the thirteen plus year old sample results could be updated with a new sampling program of at least one to two full years. DEC agreed with GHU and NTL’s comments that the data is dated, and reintroduced ambient FC Bacteria monitoring into the permit. The monitoring requirements will provide the permittees an opportunity to demonstrate through updated data that FC Bacteria discharged from their WWTF does not cause or contribute to an exceedance of FC Bacteria outside of the authorized mixing zone.
- While DEC acknowledges GHU’s and NTL’s DEC’s alternate analysis of the 1999 - 2002 receiving water monitoring data, DEC’s analysis remains unchanged. DEC’s evaluation of the data was comprehensive and included Tanana River flow, GHU flow, FC Bacteria effluent and receiving water data. DEC does find that the 1999 - 2002 FC Bacteria monitoring data is indeed dated and potentially may not be representative of current conditions. As such, updated FC Bacteria monitoring data should be collected for a new evaluation. Withstanding the outcome of the monitoring required by Permit Section 1.3.1.11, DEC will maintain the permit requirement that COF and GHU must achieve compliance with the final FC Bacteria limits as soon as possible, but no later than five years after the effective date of the permit.
- In recognition that Tanana River conditions may have changed since the 1999-2002 FC Bacteria monitoring period, DEC has added language to the permit at Section 1.3.1.11 that FC Bacteria may be removed from the Schedule of Compliance after two years if FC Bacteria concentrations do not exceed water quality criteria. Also, in recognition that unusual conditions may result in samples that are not representative of normal river conditions, DEC has added to the permit at Section 1.3.1.12 a provision that receiving water monitor data resulting from a verifiable unusual condition, not representative of normal river conditions, may be excluded from the receiving waterbody monitoring data set.
- CWA Section 302, specifically 302(b)(2), requires a cost-benefit hearing prior to the establishment of new effluent limitations where the effluent limitations required under Section 301(b)(2) are not sufficient to attain the goals of the Federal Water Pollution Control Act. Section 301(b)(2) requires the achievement of effluent limitations applying Best Available Technology (BAT) by July 1, 1984. Since the proposed water quality-based effluent limitations do not constitute BAT (i.e., technology based effluent limitations), but are a reflection of implementation of the state’s WQS, as well as the fact that the July 1, 1984 deadline has long since passed, DEC fails to see the applicable legal merits of the comment. Further, Section 302 guarantees a hearing only if the effluent limitations are adopted under EPA authority, not state authority. The rights of the states to promulgate WQS are clearly protected by the CWA and states are intended to be an

integral component in the operation of the CWA through implementation of WQS in state-issued NPDES permits. No changes to permit documents were made based on this comment.

- It should be noted that between January 2010 and February 2015, effluent from the GHU WWTF, prior to discharge into the Tanana River, met the Alaska WQS monthly geometric mean of 20 FC/100 mL 90% of the time with an average of 8 FC/100 mL.

8 WET trigger, 5-day Biochemical Oxygen Demand (BOD₅), pH Limits

8.1 Comment Summary

Permit Section 1.2. GHU submitted the following comments in regards to the WET trigger, BOD₅, and pH limits:

- GHU maintains that they will initially attempt to meet the more stringent FC Bacteria limits through chlorination and dechlorination and that they will likely struggle with meeting permit limits for pH, BOD₅, and WET. If DEC proceeds with enforcing the final FC Bacteria limits, GHU requests that the DEC reconsider the WET trigger, lower pH limit, and BOD₅ limit.
- GHU cites EPA fact sheet *Wastewater Technology Fact Sheet, Dechlorination (EPA 832-F-00-022)* to state that dechlorination using sulfite salts, the best conventional pollutant control technology, can lead to “sulfate formation, suppressed oxygen content, and lower pH of the finished effluent.”

Response:

- EPA’s Dechlorination Fact Sheet and the quote, as cited above, discusses the condition of “significant overdosing” as a dechlorination disadvantage. Significant overdosing of sulfite should not be employed as a normal operational procedure to control residual chlorine.
- The WET trigger is linked to the available dilution in the mixing zone. Regulation 18 AAC 70.030 (a) states that “An effluent discharged to a water may not impart chronic toxicity to aquatic organisms expressed as 1.0 chronic toxic unit (TU_c), at the point of discharge, or if the Department authorizes a mixing zone in a permit, approval, or certification, at or beyond the mixing zone boundary, based on the minimum effluent dilution achieved in the mixing zone.” The minimum effluent dilution achieved in the mixing zone as modeled by CORMIX is 29. DEC applied the minimum dilution as the WET trigger to protect the receiving water at and beyond the mixing zone boundary. If the WET trigger is not exceeded, the permittees discharge will not violate the WET limit at 18 AAC 70.030. A higher WET trigger would potentially result in an exceedance of the 1.0 TU_c WET limit at the boundary of the mixing zone. No changes have been made to the WET trigger.
- The BOD₅ effluent limitations are the regulatory secondary treatment requirement found in 40 CFR 133.102 adopted at 18 AAC 83.010(e). The secondary technology-based effluent limits apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by application of secondary treatment in terms of BOD₅, total suspended solids (TSS), and pH. BOD₅ and TSS do not have applicable WQS, as such, there are no water quality-

based effluent limitations to compare technology limits to; therefore, only technology based effluent limitations apply and are included in the permit. Appendix B to the Fact Sheet, Section B.2 provides more information regarding the application of secondary treatment effluent limitations. No changes have been made to the BOD₅ limitations.

- The pH limits in the proposed final permit are the same limits that were included in the prior permit. Based on review of the facility historical pH performance data, there is no evidence of a reasonable potential to exceed the current pH limits; therefore, consistent with 18 AAC 83.480 that requires that “effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit”, no changes will be made to the pH limits. Fact Sheet Section 7.0 contains more information regarding Antibacksliding.

9 Pollutants of Concern (POC) and Reasonable Potential Analysis (RPA)

9.1 Comment Summary

Fact Sheet Appendices B and C:

- EPA states that the fact sheet discussion regarding POC appears incomplete. The fact sheet should summarize Discharge Monitoring Report (DMR) data, application data and data about pollutants that could be present based on the use of chemicals or additives by the facility.
- The fact sheet fails to document RPA for all known POC as required by 40 CFR 122.44(d)(i)(i).
- DEC should clarify if ammonia, TRC, and copper were the only pollutants detected through priority pollutant and pretreatment monitoring requirements under the current permit.
- DEC should clarify that both acute and chronic criteria were evaluated in the RPA.
- EPA recommends that the TRC limits be expressed to no less than two significant figures.

Response

- Fact Sheet Appendix B.4, Reasonable Potential Analysis, contains a discussion that states that DEC reviewed DMRs for the previous five years to identify POC, and the results of DEC’s findings are that TRC, ammonia, and copper were detected at levels above water quality criteria and therefore selected for further RPA. DEC clarified in Appendix B.4 that no other pollutants were selected for RPA.
- DEC added information in Fact Sheet Appendix B.4 that Pretreatment Program monitoring data and Form 2A Effluent and Expanded Effluent Testing data were also reviewed to identify potential POCs.
- Fact Sheet Appendix C provides a reasonable potential determination using TRC as an example. The example includes a comparison of both the acute criterion and chronic criterion to the highest projected concentration at the boundary of the mixing zone. In addition, Table C-1 contains RPA information demonstrating compliance with 40 CFR 122.44(d)(i)(i).

- DEC clarified in Fact Sheet Appendix B.4 that both the acute and chronic criteria were evaluated in the RPA. Fact Sheet Appendix C, Table C-1 has been modified to include both acute and chronic summaries.
- DEC has modified the TRC effluent limits in the permit and fact sheet to include two significant figures. The mass-based TRC effluent limits have also been adjusted accordingly.

10 Pretreatment

10.1 Comment Summary

Permit Section 2.0.

- GHU requested that the sampling dates be changed from once between June 1 and August 31 and once between September 1 and May 31 to once between June 1 and September 30 and once between October 1 and May 31 to coincide with the receiving waterbody monitoring schedule in Permit Section 1.6.

Response

- DEC finds GHU's request reasonable and has modified the pretreatment monitoring sampling dates to once between June 1 and September 30 and once between October 1 and May 31.

Permit Section 2.0.

- NTL requested that the method detection limit (MDL) for zinc be modified to 0.005 mg/L citing that the MDL for zinc presently obtainable by GHU's subcontract laboratory is 0.0024 mg/L. NTL also indicates that zinc is usually detected at higher concentrations than the presently required MDL of 0.005 mg/L, so there is no practical need for a more stringent MDL for non-detect measurements.
- Because subcontract laboratories usually use method reporting limits in their final laboratory reports, NTL requested that GHU be allowed to report the required monitoring data using method reporting limits as long as they certify in their annual pretreatment program report that the MDL requirements had been met by the laboratory or subcontract laboratory.

Response

- Permit Section 2.1.8.4 contains MDLs for pretreatment influent and effluent monitoring. Because it is not apparent at this time that the requested higher MDL for zinc will be in compliance with Permit Section 1.2.4 regarding the use of sufficiently sensitive test methods, adopted by reference at 18 AAC 83.010(f), DEC is not making any changes to the permit based on this comment. However, as indicated in Permit Section 2.1.8.4, requests for higher MDLs may be submitted in writing to the DEC Pretreatment Coordinator after the permit is issued. The request should demonstrate compliance with Permit Section 1.2.4.
- A requirement has been added to Permit Section 2.1.8.8 that if laboratory results are reported as a reporting limit, the permittees must certify in their annual pretreatment report that the pretreatment program MDLs have been met.

11 Operation and Maintenance Plan (OMP)

11.1 Comment Summary

Permit Section 2.4.

- GHU and NTL request that the due date for the OMP be changed from within 180 days of the effective date of the permit to a date after the completion of the optimization study, so that only one update will be needed.

Response:

- Permit Section 2.4.1 requires the permittees to review and update, as necessary, the OMP within 180 days of the effective date of the permit. As a requirement of the NPDES 2000 wastewater discharge permit, COF and GHU were required to develop an OMP. Permit Section 2.4.3 of the new permit states that the OMP must be reviewed annually. The requirement that the permittees review and update their existing OMP, which may not have been updated for a long period of time, within 180 days of the effective date of the permit is a reasonable requirement. While the optimization study may result in significant changes in how the plant is operated, there are key elements in the OMP such as best management practices that prevent and minimize the potential of release of pollutants to the environment that apply regardless of facility upgrades. Changes to the OMP that occur as the result of facility upgrades can be made as they occur or during the required annual review. No changes have been made to the permit or fact sheet based on these comments.

12 Disapproval of Wastewater Discharge into the Tanana River

12.1 Comment Summary

A member of the general public submitted the following comments in opposition to the discharge of wastewater from the COF and GHU WWTF into the Tanana River:

- People rely on the river and use it for personal uses, one of the biggest of which is drinking.
- There are fish in every waterway. Fish and animals that use the waterway and those down the food chain will be affected.
- There must be other ways to dispose of the wastewater.

Response:

- DEC thanks the commenter for their concern and comments. The permit has been developed to protect the Tanana River for all uses as defined in the WQS and as required by the CWA. The commenter should refer to the fact sheet for more information, or contact the DEC technical contact listed in the fact sheet with any questions or to discuss further. No changes have been made to the permit or fact sheet based on these comments.

13 Comments Received During the Five-Day Applicant Review Period

13.1 Comment Summary

Permit Section 1.3

- If FC Bacteria is removed from the Schedule of Compliance as per Permit Section 1.3.1.12, would the FC Bacteria effluent limits revert to the current 200/400/800 FC/100 mL effluent limits, and would the 20/40 FC/100 mL water quality criteria apply only to the mixing zone?
- Can DEC add a footnote to FC Bacteria in Permit Section 1.3, Table 2 to state that not more than 10% of the samples may exceed 40 FC/100 mL?

Response

- Clarification has been added to Permit Section 1.3 and Fact Sheet Section 9.6 that if DEC approves the removal of FC Bacteria from the Schedule of Compliance, the permittees must comply with the FC Bacteria effluent limits of the prior permit and the receiving waterbody requirements of Permit Section 1.6. FC Bacteria is contained within the larger chronic mixing zone sized for TRC; therefore, compliance with FC Bacteria water quality criteria are expected to be met prior to the boundary of the mixing zone sized for TRC. While FC Bacteria water quality criteria limits are not included in the boundary of the mixing zone requirements, boundary of the mixing zone monitoring results will nonetheless be assessed for compliance with applicable water quality criteria.
- Alaska WQS at 18 AAC 70.020(b)(2)(A)(i) states that the FC Bacteria geometric mean may not exceed 20 FC/100 mL, and not more than 10% of the samples may exceed 40 FC/100 mL. GHU's request is consistent with the above stated water quality standard; therefore the clarifying footnote has been added to Permit Section 1.0, Table 2, and the corresponding table in Fact Sheet Section 5.3.