

RESPONSE TO COMMENTS

City and Borough of Wrangell Wastewater Treatment Plant

NPDES Permit: AK0021466

December 5, 2024

SUMMARY

On October 25, 2022, the EPA issued a public notice for the proposed National Pollutant Discharge Elimination System (NPDES) permit and tentative Clean Water Act 301(h) decision for the City and Borough of Wrangell Wastewater Treatment Plant (Wrangell WWTP) (2022 draft permit). The public comment period closed on December 9, 2022. During this comment period the EPA received comments from:

- City and Borough of Wrangell (Wrangell); and
- State of Alaska Department of Environmental Conservation (ADEC).

On July 28, 2023, the EPA issued a second public notice for a limited comment period on changes that were made to the 2022 draft permit (2023 draft permit). The second public comment period closed on August 28, 2023. During this comment period the EPA received comments from:

- Wrangell

This document presents the EPA's response to comments received during the public comment periods and changes made in the final permit.

CHANGES IN RESPONSE TO PUBLIC COMMENTS AND 401 CERTIFICATION

The following revisions were made to the final permit as a result of comments received and the final 401 certification:

- Chlorine limits were removed from the permit.
- The requirement for the permittee to seek approval from ADEC for the receiving water monitoring locations, and to notify ADEC of the development or implementation of their Operations and Maintenance Plan, Quality Assurance Plan, or Emergency Response and Public Notification Plan have been removed from the permit.
- The language in Permit Part I.D., Receiving Water Monitoring, has been corrected to only require sampling of those parameters identified in Table 2.
- Footnotes 8 and 11 related to percentages applicable to water quality standards (WQS) have been removed from Table 1.
- Language in the Compliance Schedule part of the Schedule of Submissions Table on page 2 of the permit has been corrected.
- Influent flow monitoring has been removed from the permit.

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- The language regarding the Toxic Pollutant Scan in Table 1 and Permit Part II.D.1. has been simplified. The required parameters are now identified in Permit Part II.D.1., and additional language has been added regarding “small” 301(h) facilities.
- The ammonia limits were corrected using the dilution factors provided in Alaska’s final 401 certification, Alaska’s WQS, and the EPA’s permit development procedures.
- The requirement to use a thermistor for temperature monitoring has been removed from the permit.
- The requirement to analyze nearshore samples for all the parameters in Table 2 has been removed from the permit (see Permit Part I.D.1.). Enterococcus, fecal coliform, and temperature are the only parameters required at the nearshore receiving water monitoring locations in the final permit.
- The monitoring frequency for biochemical oxygen demand (BOD₅) and total suspended solids (TSS) concentration limits has been reduced to once per month.
- The Surface Water Monitoring Report part of the Schedule of Submissions table on page 2 of the final permit has been revised to reference the correct Permit Part I.D.
- The requirements of the surface water observations in Permit Part I.B.2 have been clarified. The final permit requires that the surface water observations be conducted during the receiving water monitoring required in Permit Part I.D., and observations must be included with the receiving water monitoring report required in Part I.D.8.
- The Biological Monitoring Report part of the Schedule of Submissions table has been revised to reference the correct Permit Part I.E.
- The perfluoroalkyl and polyfluoroalkyl substances (PFAS) monitoring frequency in Table 1 was corrected to quarterly monitoring for 2 years (8 quarters).
- Permit Part I.B.2.b. was revised to accurately reference the receiving water monitoring report in Permit Part I.D.
- The title of Task 4 in Table 3: *Tasks Required Under the Schedule of Compliance for Bacteria* has been changed to “Construction Begins”.
- Receiving water monitoring for fecal coliform and enterococcus can be discontinued once the permittee has achieved continued compliance with the final bacteria limits and there are no exceedances of Alaska WQS for bacteria at the ZID boundary or nearshore sites. See Permit Parts I.D.9. and I.D.10.
- The final permit has been revised to establish a WET sampling holding time of 36 hours, not to exceed 72 hours. See Permit Part I.C.5.c.v.

CHANGES AS A RESULT OF CONSULTATION WITH THE NATIONAL MARINE FISHERIES SERVICE PURSUANT TO SECTION 7 OF THE ENDANGERED SPECIES ACT

On August 30, 2024, the EPA requested to initiate Endangered Species Act (ESA) Section 7 Consultation with the National Marine Fisheries Service (NMFS) on the reissuance of six (6) 301(h) modified NPDES permits for publicly owned WWTP’s located in SE Alaska, including the Wrangell WWTP. The EPA submitted a Biological Evaluation (BE) analyzing the effects of the discharges on threatened, endangered, and candidate species and designated critical habitats

under the NMFS' jurisdiction. The analysis of effects in the BE determined that the discharges may affect, but are not likely to adversely affect (NLAA), any ESA-listed species or designated critical habitat. On October 15, 2024, NMFS concurred with the EPA's NLAA determination and provided the following conservation recommendations which the EPA has adopted in the final permit as mitigation measures:

- The project proponent will provide NMFS with annual water temperature and water quality reports from each of the six POTWs in Southeast Alaska (email information to akr.prd.records@noaa.gov).
- The project proponent will provide NMFS a report of sunflower sea star sighting and density data collected during benthic surveys around each outfall and reference site once during the 5-year permit period. This report also will include the date, water depth of each survey, and water quality.
- If it appears that a sunflower sea star has sea star wasting syndrome or if any dead sunflower sea stars are observed, pictures of the individuals will be taken and infected individuals will be counted. The infected sunflower sea stars will not be touched or relocated. These and all sunflower sea star survey findings will be reported to NMFS, including latitude/longitude and transect line, at: akr.prd.records@noaa.gov.

The EPA concurs with these conservation recommendations and has included them in the final permit as summarized below:

- Permit Part I.D.11. has been revised – in addition to the EPA and ADEC, the surface water monitoring report must also be provided to the NMFS.
- Permit Part I.E.5. has been added, and Permit Part I.E.6 has been revised – The new Part I.E.5 requires the observation of the presence and density of sunflower sea stars as part of the benthic survey required in Permit Part I.E. Permit Part I.E.6. has been revised to require the reporting of results to NMFS in addition to the EPA and ADEC.

EDITORIAL, TECHNICAL, AND OTHER CHANGES TO FINAL PERMIT

The following editorial and technical errors have been corrected in the permit:

- The EPA corrected typos, formatting, punctuation, and added abbreviations in the permit.
- The EPA corrected internal references and footnotes.
- The EPA clarified in the Schedule of Submissions that the renewal application includes both the NPDES application and the 301(h) application.
- The EPA removed the narrative limitations in Part I.B. from the final permit because they were included in error. Specifically, these limitations came from an Idaho WQS narrative provision. The narrative limitation from the 2001 permit is being retained in the renewed permit.
- “The City of Wrangell” was changed to “The City and Borough of Wrangell.”

RESPONSE TO COMMENTS

Comments Received During the 2022 Comment Period -

COMMENT 1 (ADEC)

The maximum dilution for chronic and acute mixing should be used to develop water quality-based effluent limits (WQBEL) for compliance with marine water quality standards. In places it seems the maximum dilution of 112:1 was used for WQBEL calculations. Use of lowest dilution factor necessary will comply with Alaska Water Quality Standards (WQS) 18 AAC 70.240 for mixing zones.

RESPONSE 1

This comment was addressed by changes made to the 2023 draft permit. Corrections to the WQBELs were made using the dilutions provided by ADEC in the final 401 certification. See 2023 Fact Sheet at p. 15.

COMMENT 2 (ADEC)

40 CFR 122.45(d)(2) requires average weekly and monthly limits for POTWs that discharge continuously, unless impracticable. The proposed permit did not contain weekly effluent limits for all parameters.

RESPONSE 2

The EPA recognizes that 40 CFR 122.45(d)(2) requires average weekly and monthly limits for POTWs that discharge continuously, unless impracticable. The only pollutants in the permit without a weekly limit are ammonia and the final enterococcus limits.

The final enterococcus limits are a condition of the final 401 certification. ADEC included average monthly and maximum daily limits for enterococcus in the certification; ADEC did not provide average weekly effluent limits. Pursuant to Clean Water Act (CWA) section 401(d), the EPA included these limits in the permit.

Section 5.2.3 of the 1991 *Technical Support Document for Water Quality-based Toxics Control* recommends a maximum daily limit in lieu of an average weekly limit where a pollutant can cause acute toxicity because a weekly averaging period can mask potential acute toxicity occurring within that week. Ammonia is an acutely toxic pollutant which makes it impracticable to properly protect acute conditions using an average weekly limit. Therefore, an average monthly and maximum daily limit were established in the permit.

No change was made to the final permit as a result of this comment.

COMMENT 3 (ADEC)

An effluent limit for total residual chlorine may not be necessary for this facility since they do not, at this time, use chlorine disinfection.

RESPONSE 3

This comment was addressed by changes made to the 2023 draft permit. Since chlorine is not currently used in the treatment process, the final permit does not contain chlorine limits. Prior to the use of chlorine in the treatment system the permittee must notify the EPA of the planned changes in accordance with Permit Part IV.I. so the EPA can determine whether the permit must be modified to include chlorine limits.

COMMENT 4 (ADEC)

The facility has not previously monitored for enterococci. Enterococci should be monitored only for this first issuance period.

RESPONSE 4

The permit includes effluent limits for enterococcus; therefore, the EPA must include monitoring for enterococcus that is representative monitoring of the effluent. The monitoring is required to begin within six months of the effective date of the permit; this six-month delay will allow time for the permittee to become familiar with the testing protocol. The final limits come into effect five years after the effective date of the permit at the completion of the compliance schedule outlined in Permit Part II.C. The interim monitoring data will inform the process for achieving the final effluent limitations.

No change was made to the final permit as a result of this comment.

COMMENT 5 (ADEC)

DEC does not require approval of the receiving water monitoring stations. Similarly, the permittee does not need to notify DEC of the development or implementation of their Operations and Maintenance Plan, Quality Assurance Plan, or Emergency Response and Public Notification Plan. Copies should be maintained on site and made available to DEC upon request.

RESPONSE 5

This comment was addressed by changes made to the 2023 draft permit.

The requirement for the permittee to seek ADEC approval of the receiving water monitoring stations was removed from the permit. Additionally, the requirement to notify ADEC of the development and implementation of the following plans and studies was removed from the permit: Operations and Maintenance Plan (Permit Part II.A), Quality Assurance Plan (Permit Part II.B), and Emergency Response and Public Notification Plan (Permit Part II.F).

COMMENT 6 (ADEC)

Permit Table 1, Toxic Pollutant Scan references permit Part 1.C. However, part 1.C. appears to be receiving water monitoring.

RESPONSE 6

This comment was addressed by changes made to the 2023 draft permit. The Toxic Pollutant Scan reference in Table 1 was changed from Part I.C. to Part II.D.

COMMENT 7 (ADEC)

Facility Design Flow: There appears to be a mismatch between the facility design flow used for the permit, and the facility's status as a Major Facility. If the facility design flow exceeds 1 mgd, whole effluent toxicity testing results per 40 CFR 122.21(j)(5)(ii)(A) and the test results for pollutants found in Appendix J, Table 2 of 40 CFR 122 would need to be submitted with their application.

RESPONSE 7

The facility does not have a design flow that exceeds 1 mgd, thus, it is not a major facility per 40 CFR 122.21(j)(5)(ii)(A). The average monthly flows from the facility range from 0.2 to 0.56 million gallons per day. While the peak wet weather design flow of the facility is 3 MGD, the average wet weather design flow is 0.6 MGD. This is documented in the application materials submitted by the applicant.

However, monitoring requirements for whole effluent toxicity (WET) were added to the 2023 draft permit at Part I.C in order to characterize the toxicity of the effluent and ensure the discharge is protective of Alaska's WQS for WET. These requirements have been maintained in the final permit.

No change was made to the final permit as a result of this comment.

COMMENT 8 (ADEC)

Fact Sheet, Table 3: footnotes appear to be missing.

RESPONSE 8

This comment was addressed by changes made in Appendix A of the 2023 revised Fact Sheet.

No change was made to the final permit as a result of this comment.

COMMENT 9 (ADEC)

We are unclear on the differential on Table 8 for Chronic Aquatic Life for ammonia and all except ammonia since the dilution was the same.

RESPONSE 9

This comment was addressed by changes made in Table 3 of the 2023 revised Fact Sheet.

No change was made to the final permit as a result of this comment.

COMMENT 10 (ADEC)

In section C there appears to be a disconnect between Receiving Water Monitoring requirement 10 which contains parameters not required to be sampled in Table 2.

RESPONSE 10

This comment was addressed by changes made to the 2023 draft permit.

The language in Permit Part I.D., Receiving Water Monitoring, has been corrected to only require sampling of those parameters identified in Table 2.

COMMENT 11 (ADEC)

Footnotes 8 and 11 of Table 1 appear to have been adapted from 18 AAC 70.020(b) and the percentages are applicable to the WQS, not necessarily the developed effluent limits.

RESPONSE 11

This comment was addressed by changes made to the 2023 draft permit. Footnotes 8 and 11 related to percentages applicable to WQS have been removed from Table 1.

COMMENT 12 (WRANGELL)

There is considerable concern in regards to the impact new requirements in this permit will impact the CBW ability to remain in compliance while also shouldering the financial burden to meet these requirements. Rates for users connected to the CBW collection system were raised 21% in 2022 with plans to increase charges by 2% each year for the next 5 years. Any additional increases to user fees in this time frame will place a significant burden on individual users.

Implementing disinfection alone is expected to cost upwards of \$5 million. Utilities and maintenance for the disinfection process as well as increases in instrumentation, testing and staff is expected to increase annual operating expenses by \$250,000. As of December 2nd, 2022, CBW wastewater reserves amount to \$1,339,550. There is not a practical way for the CBW to cover this expense without considerable outside funding. In order to meet the new requirements of this permit, rates would need to be raised another 49.98% to sustainably cover the annual debt service on a State or Federal issued loan. This rate hike does not take into account unforeseen circumstances or additional payroll costs needed to appropriately staff the new treatment facility.

RESPONSE 12

The EPA appreciates the commentor's concerns about remaining in compliance with the permit, the costs associated with implementing new permit requirements, and the potential increases in user fees and rates.

Under the CWA and its implementing regulations, the permitting authority is required to establish WQBELs when there is reasonable potential to cause or contribute to excursions of applicable water quality standards. See 40 CFR 122.44(d)(1)(i). Compliance and cost are not factors that can be evaluated when determining whether WQBELs are required.

Further, Section 401 of the CWA requires the state in which the discharge occurs to certify that the discharge complies with the appropriate sections of the CWA, as well as any appropriate requirements of state law. See 33 USC 1341. If the certifying authority includes a more stringent

condition in the 401 certification, then the permitting authority is required to include that condition pursuant to CWA section 401(d).

The new more stringent effluent limitations for bacteria are a condition of ADEC's 401 certification, thus, pursuant to CWA section 401(d), these effluent limits have been included in the final permit. However, ADEC has recognized that Wrangell will not be able to comply with these effluent limits immediately upon issuance of the permit. Therefore, ADEC has also provided a compliance schedule as a condition of the 401 certification which the EPA has included as a condition of the final permit. This will allow Wrangell additional time to comply with the final effluent limits in the permit.

The basis for new effluent limitations is discussed in Section IV of the 2022 Fact Sheet and Section III of the 2023 revised Fact Sheet.

No change was made to the final permit as a result of this comment.

COMMENT 13 (WRANGELL)

Page 2 of the draft permit: Compliance Schedule - There appears to be redundancy in reporting compliance that is unclear at this time. Is it required that we will need to submit a compliance report, followed by an additional submission that we have complied with the compliance reporting or is it implied by the initial compliance report submission?

RESPONSE 13

This comment was addressed by changes made to the 2023 draft permit. The language in the Compliance Schedule part of the Schedule of Submissions Table on page 2 of the permit has been simplified and now references the correct Permit Part II.C. The redundant requirement to notify the EPA of the submission of interim and final reports has been removed.

COMMENT 14 (WRANGELL)

Pg 6- Monitoring of influent and effluent flow- The CBW does not currently have an ability to monitor influent flow and would require discussion with the regulatory agencies as to a schedule for compliance.

RESPONSE 14

This comment was addressed by changes made to the 2023 draft permit. Influent flow monitoring has been removed from the permit; only effluent flow monitoring is required.

COMMENT 15 (WRANGELL)

Page 7 of the draft permit: Toxic Pollutant Scan- Is this scan as described in 2D toxic control program?

RESPONSE 15

This comment was addressed by changes made to the 2023 draft permit. The language regarding the Toxic Pollutant Scan in the footnotes of Table 1 and in Permit Part II.D.1 –

Chemical Analysis and Source Identification – Toxic Pollutants and Pesticides has been simplified. The required parameters are now identified in Part II.D.1.a. of the permit, and additional language has been added applicable to “small” 301(h) facilities at Permit Part II.D.1.d.

COMMENT 16 (WRANGELL)

Page 7 of the draft permit: Ammonia limits- Requirements of 0.025mg/l for the average monthly and 0.051mg/l for the maximum daily are simply not practical or realistic to meet. Our understanding from the lab we work with in Juneau is that their EPA approved standard for testing for ammonia has a testing limit of 0.1-0.5mg/l (depending on the method used) for ammonia. Alaska water quality standards for recreational water lists the requirement at 1.2mg/l. 0.025mg/l is 48 times more strict than the AK WQS recreational waters limit. CBW staff have been in communication with the EPA regarding this concern and want to ensure any updates or changes are reflected in the final permit.

RESPONSE 16

This comment was addressed by changes made to the 2023 draft permit. Corrected WQBELs for ammonia were calculated using Alaska’s WQS and the dilution factors provided by ADEC in their 401 Certification. The final permit contains these effluent limits.

Comment 17 (Wrangell)

Page 9 of the draft permit: Observation of surface of receiving water- Please clarify specifically what is all entailed in this observation? Can this be done from shore, does it need to be done from a boat? How often does this need to be done? Observations from a boat is a time consuming process. Depending on frequency and what all entails an “observation” this could have a significant impact on staffing levels for the CBW wastewater department. Regular observations from a boat may require additional staff to be hired, which would further drive up the cost of operation.

RESPONSE 17

Language clarifying the requirements of the surface water observation has been added to Permit Part I.B.2.b. Surface water observations are required during the receiving water monitoring required in Permit Part I.D., and observations must be included with the receiving water monitoring report required in Part I.D.8. Observations must include the date, time, observer, and whether there was presence of floating solids, visible foam or oily wastes which produce a sheen on the surface of the receiving water.

In addition, the EPA has removed the draft narrative limitations in Part I.B. from the final permit because they were included in error. Specifically, the limitations came from an Idaho WQS narrative provision. The narrative limitation from Part I.A.2 of 2001 permit is being retained in the renewed permit as Permit Part I.B.2.a. The final permit requires that there shall be no discharge of floating solids, visible foam or oily wastes which produce a sheen on the surface of the receiving water.

COMMENT 18 (WRANGELL)

Page 9 of the draft permit: Temperature data collection references- Is this temperature sample supposed to be done as a weekly grab sample or from the inline thermistor hourly as referenced in the chart ib3- ib4 vs table 1 on pg 7. This would appear to contradict the sampling requirements in Table 1 Effluent Limitations and Monitoring requirements (I.B.3 and I.B.4).

RESPONSE 18

This comment was addressed by changes made to the 2023 draft permit. The requirement to use a thermistor for temperature monitoring has been removed from the permit.

COMMENT 19 (WRANGELL)

Sampling both the effluent limitations monitoring, and the bacteriological limits of the receiving waters will be difficult to consistently accomplish, specifically because of hold time restrictions and scheduling with flights out of Wrangell. Timing with tides, staff safety operating in the dark, and adverse weather will also contribute to this challenge. Wrangell only has 1 northbound Alaska Airlines flight that takes off around 10-11am depending on the time of year. In order to get samples to the lab the CBW contracts in Juneau, significant burden would be placed on staff, their safety, as well as overall operations. The only alternatives would be to significantly upgrade and staff our own lab in Wrangell which would be cost prohibitive, or to charter a direct flight to Juneau for these samples. This will increase our sampling/shipping expenses exponentially to regularly charter direct flights for samples. Proposed testing requirements are expected to increase testing expenses 300-400% of their current levels. Considering the challenges and associated expenses the City and Borough of Wrangell is requesting a waiver for hold time limitations.

RESPONSE 19

The EPA appreciates the commenter's concern regarding the logistical challenges of meeting hold time requirements for samples, including for WET and bacteria, in remote locations such as Alaska. Samples collected for use in the NPDES permitting program are subject to the holding time requirements outlined in 40 CFR Part 136. The final permit has been revised to establish a WET sampling holding time of 36 hours, not to exceed 72 hours. The permittee must document in the DMR for the month following sample collection the conditions that resulted in the need for the holding time exceeding 36 hours and the potential effect on the sampling results. See Permit Part I.C.5.c.v.

COMMENT 20 (WRANGELL)

Please review Table 2 Receiving Water Monitoring Requirements for location sites A through D to ensure monitoring is being done in the correct locations.

RESPONSE 20

This comment was addressed by changes made to the 2023 draft permit. The requirement to analyze nearshore samples for all the parameters in Table 2 has been removed from the permit

(see Permit Part I.D.1.). Enterococcus, fecal coliform, and temperature are the only parameters required at the nearshore receiving water monitoring locations in the final permit.

COMMENT 21 (WRANGELL)

We have concerns how the EPA has analyzed our mixing zone that does not match up with data from the NOAA website. For instance, in the GLEC report it lists the maximum current velocity for the NOAA tidal current predictions for Wrangell Harbor (Pct 3131) at 1.0 knot. On the NOAA website the same station is listed to have a 1.4 knot maximum current. This is a 40% difference which is significant difference and needs to be addressed as it would have a substantial impact on our effluent limitations that are based on the dilution modeling. The application for a Modified NPDES Permit from the EPA appears to use a different station and different numbers for dilution modeling. The NPDES permit says that monitoring station 1257 was used with an average maximum flood current of 0.8 knots. We have been unable to find station 1257 on the NOAA website.

RESPONSE 21

The EPA did not analyze the mixing zones used in the development of this permit. The mixing zones are a condition of Alaska's 401 certification of the permit and were used to conduct a reasonable potential analysis, develop WQBELs for ammonia and enterococcus, and establish the trigger for accelerated WET testing (see Permit Part I.C.3 and I.C.4). The GLEC¹ report referenced in the comment was not used by ADEC to establish the mixing zones. The mixing zones were determined in a separate mixing analysis conducted by ADEC in coordination with the permittee as part of the 401 certification. The EPA used the mixing zones provided in the ADEC 401 certification to calculate the WQBELs in the final permit.

The GLEC report was used to determine the spatial dimensions and dilution factor achieved at the boundary of the zone of initial dilution (ZID). The ZID is the physical area within the receiving water where initial mixing of the effluent occurs and is separate from the mixing zones established by ADEC for permit development. To maintain a 301(h)-modified permit a facility must be able to meet state and federal WQS at the boundary of the ZID which can be and often is larger than the mixing zones. The EPA used information from the GLEC report to determine the ZID dilution which provided, in part, the basis for continuing the 301(h) waiver. In particular, the GLEC report used the lowest 10th percentile current speed from current data collected every six minutes at Station PCT3131 during the month of August 2021. Station PCT3131 is located approximately 2.5 miles north-west of the outfall and is the closest active station to the discharge location. The EPA could not find references to Station 1257 in the permit documents.

¹ 2021. Great Lakes Environmental Center. Mixing Zone Dilution Modeling for Six Alaska POTWs.

No change was made to the final permit as a result of this comment.

COMMENT 22 (WRANGELL)

Is there any potential for a reduction in compliance testing after consistent satisfactory results within a given time frame? For instance, if we meet certain requirements consistently for a year is there potential for that testing frequency to decrease?

RESPONSE 22

Monitoring frequencies in NPDES permits must be sufficient to characterize effluent quality and detect events of noncompliance. As explained in the *Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies* (monitoring frequency guidance), NPDES reporting and monitoring requirements may be reduced on the basis of excellent historical performance and compliance history. In determining whether reduced monitoring is warranted, the following factors are considered:

- Facility enforcement history
 - Facilities with recent enforcement actions taken against them may not be eligible for a reduction in monitoring.
- Parameter-by-Parameter Compliance
 - No significant noncompliance for parameters under consideration for two years, and
 - No permit violations for critical parameters such as toxics for one year.
- Parameter-by-Parameter Performance History
 - Table 1 in the guidance provides recommendations for monitoring reductions using the ratio of the long-term average discharge rate to the monthly average effluent limits.

The Wrangell WWTP has been in full compliance with their permit for over two years, and between 2016 – 2021 the ratio of their long-term effluent averages to their monthly average permit limits for BOD₅ and TSS are approximately 10% and 15%, respectively. Using the 2001 permit's current monitoring frequency of once a week as the baseline monitoring frequency, Table 1 of the guidance recommends a reduction to once or twice a month. Since BOD₅ and TSS are conventional nontoxic pollutants, and the Wrangell WWTP has a low average effluent concentration to permit limit ratio, the EPA has determined that a reduction in monitoring from once per week to once per month is appropriate and consistent with the guidance. This change was made in the final permit.

It should be noted that Part I.C.1.b. of the final permit provides that WET testing can be reduced to annually if six consecutive tests do not exceed the trigger in Permit Part I.C.3.a. In addition, monitoring for total volatile solids (TVS) in sediment has been removed from the final permit, as well as the requirement to conduct receiving water monitoring for bacteria once certain conditions are met (see Response 42).

Comments Received During the 2023 Comment Period

The following comments were received during the 2023 comment period.

COMMENT 23 (WRANGELL)

The City has a substantial interest in the protection of human health and the environment, particularly related to NPDES permits and the renewal of the Wastewater Treatment Plant 301(h) Waiver. The City appreciates that comments provided on the original draft permit were taken into consideration and changes made to the specific requirements. The City supports the following general approaches regarding NPDES permits:

- The use of compliance schedules and interim limits to allow for the implementation of wastewater facility improvements.
- The use of seasonal receiving water monitoring requirements to protect water quality while taking into consideration Wrangell's unique location and environment.

RESPONSE 23

The EPA acknowledges receipt of the comment.

No change was made to the final permit as a result of this comment.

COMMENT 24 (WRANGELL)

Since 2021, the City and Borough of Wrangell has raised wastewater rates approximately 39%. To make up millions of dollars that will be required to meet the new permit requirements including installation of disinfection and potentially dechlorination, and when considering reserve and revenue levels, user rates would need to be increased considerably. This also does not consider any other wastewater-related needs for sewer mains or lift stations. It is estimated that the City will need several million dollars for other capital projects in the next 5 to 10 years.

RESPONSE 24

This comment was addressed in Response 12.

No change was made to the final permit as a result of this comment.

COMMENT 25 (WRANGELL)

The compliance schedule to meet the new fecal coliform and enterococcus limits needs to be extended to give the City time to secure funding, complete a disinfection study, design, and construction a disinfection system.

RESPONSE 25

Under the State's regulations, ADEC is responsible for issuing the compliance schedule as part of their 401 certification. The permittee submitted this comment to ADEC during the public comment period for the 401 certification. ADEC's notice of review, responses to comments, and final 401 certification were provided to the permittee on January 17, 2024, and are available with the final permit and 401 certification on the website at: <https://www.epa.gov/npdes->

[permits/npdes-permit-wrangell-wastewater-treatment-facility-alaska](#). Pursuant to CWA section 401(d), the EPA has included the compliance schedule in the permit.

The EPA has established November 1, 2025, as the effective date of the final permit. Since the schedule of compliance for bacteria begins at the effective date of the permit, this will provide additional time for the permittee to secure funding, complete a disinfection study, and design and construct a disinfection system. Establishing a later effective date is consistent with the EPA's regulations at 40 CFR 124.15(b)(1).

The effective date of the final permit has been set to November 1, 2025.

COMMENT 26 (WRANGELL)

Introducing a PFAS monitoring program before regulations have been enacted is premature and should not be required of communities that have little to no industrial activities. The burden of cost is being put on the community to determine if PFAS exists and should be funded by EPA for research purposes. It is also unknown if the results of the sampling could potentially lead to or have major repercussions for the small communities once regulations are put in place.

RESPONSE 26

This comment is addressed in Response 37.

No change was made to the final permit as a result of this comment.

COMMENT 27 (WRANGELL)

WET testing is a difficult and costly test for the City to undertake. Based on geographical location, it is difficult to ship samples and meet hold times and temperature requirements.

RESPONSE 27

This comment was addressed in Response 19.

No change was made to the final permit as a result of this comment.

COMMENT 28 (WRANGELL)

The new ammonia effluent limits are not the limits requested by ADEC in the 401 certification. It appears that a mixture of ADEC's methodology and EPA's methodology for calculating limits was used. This is confusing and it is not understood why the limits recommended by ADEC are not being used.

RESPONSE 28

Marine ammonia criteria are based on a formula which relies on the pH, temperature, and salinity of the receiving water, because the fraction of ammonia present as the toxic, un-ionized form increases with increasing pH and temperature and decreases with increasing salinity. Therefore, the criteria become more stringent as pH and temperature increase, and less stringent as salinity increases. Appendices F and G of the *Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances* provides tables for

determining the applicable acute and chronic criteria based upon these parameters. See 2022 Fact Sheet at p. 26.

ADEC used the 85th percentile of ambient pH and temperature data and the 15th percentile for salinity to determine the ammonia criteria in their draft 401 certification. As discussed on pg. 26 of the 2022 Fact Sheet, the EPA selected a salinity of 10 mg/L given the estuarine nature of the receiving water and several ambient salinity measurements below 10 ppt. Consistent with EPA Region 10's standard procedures for calculating ammonia limits, the 95th percentile of temperature (13.65°C, rounded to 15°C) and pH data (8.0 s.u.) collected near the outfall at the trapping depth of the effluent plume was used. The resulting acute and chronic criteria used in calculating WQBELs for ammonia are 7,700 and 1,200 µg/L, respectively. The EPA acknowledges these criteria and the limits in the permit are more stringent than the criteria and limits ADEC developed in their draft 401 certification; this is because of the more stringent statistics EPA uses. In the final 401 certification, ADEC did not include ammonia criteria or effluent limits; thus, the final 401 certification did not include any limits associated with ammonia. The final permit contains the WQBELs that were proposed in the draft permit.

No change was made to the final permit as a result of this comment.

COMMENT 29 (WRANGELL)

Comment 1. Page 2, Schedule of Submissions, Surface Water Monitoring Report.

Surface Water Monitoring Report (SWMRP) section references Permit Part I.C. Part I.C is WET Testing Requirements. The Receiving Water Monitoring Section is I.D.

Request 1.

Change permit to say "(See Permit Part I.D)"

RESPONSE 29

The Surface Water Monitoring Report part of the Schedule of Submissions table has been revised to reference the correct Permit Part I.D.

COMMENT 30 (WRANGELL)

Comment 2. Page 2, Schedule of Submissions, Biological Monitoring Report.

Biological Monitoring Report (BMR) section references Permit Part I.D. The BMR is Section I.E.

Request 2.

Change permit to say "(See Permit Part I.E)"

RESPONSE 30

The Biological Monitoring Report part of the Schedule of Submissions table has been revised to reference the correct Permit Part I.E.

COMMENT 31 (WRANGELL)

Comment 3. Page 7, Table 1, Total Ammonia Effluent Limit.

The Total Ammonia Permit Limits of 15.5 mg/L AML and 34.6 mg/L Maximum Daily are not the limits provided to the City of Wrangell by ADEC on May 9, 2023. According to the email and the RPA tool provided, the permit limits should be 42 mg/L MDL and 22 mg/L AML. It is also called out in ADEC's 401 Certification attached to the Fact Sheet.

Request 3.

Change the permit limits for Total Ammonia to 42 mg/L MDL and 22 mg/L AML.

RESPONSE 31

This comment was addressed in Response 28.

No change was made to the final permit as a result of this comment.

COMMENT 32 (WRANGELL)

Comment 4. Page 7, Total Ammonia Effluent Limit

The Total Ammonia Permit limit is being calculated using a mixture of ADEC's dilution factors from DEC's mixing zone analysis methodology which is different from EPA's dilution methodology and ZID, since the EPA's ZID and DEC's mixing zone are not the same, using the dilution factors from the other method is not appropriate for calculating the RPA and effluent limitation.

Request 4.

Change the permit limits for Total Ammonia to 42 mg/L MDL and 22 mg/L AML.

RESPONSE 32

This comment was addressed in Response 28.

No change was made to the final permit as a result of this comment.

COMMENT 33 (WRANGELL)

Comment 5. Page 7, Total Ammonia Effluent Limit

It is not understood why an effluent limit for ammonia in lbs/day is included. The typical permit limit is usually only in mg/L and is inconsistent with other permits being issued.

Request 5.

Delete the effluent limitation for Total Ammonia that is lbs/day.

RESPONSE 33

As discussed on page 20 of the 2022 Fact Sheet, 40 CFR 122.45(f) requires that effluent limits be expressed in terms of mass, except under certain conditions.

No change was made to the final permit as a result of this comment.

COMMENT 34 (WRANGELL)

Comment 6. Page 7, Table 1, Enterococcus Effluent Limit.

The City of Wrangell is aware that ADEC adopted a rule for recreational criteria for bacteria which includes both fecal coliform and enterococcus and with this rule comes potential requirements of discharge permittees. However, there are concerns about enterococcus being an indicator of human health risk as enterococcus is not necessarily an indicator of a fecal source being present. To use this new parameter in a discharge permit to determine impacts from the discharge of wastewater does not take the possibility into account that there could be naturally occurring enterococcus and could potentially cause the utility to violate the permit requirements due to a naturally occurring source.

Additionally, the wastewater treatment plant has been collecting fecal coliform data as required by previous permit cycles and an established monitoring process is established.

Request 6.

Remove enterococcus as a permit effluent limit.

RESPONSE 34

A response to a related comment from ADEC is provided in Response 4.

Under the CWA and its implementing regulations, the permitting authority is required to establish WQBELs when there is reasonable potential to cause or contribute to excursions of applicable WQS. See 40 CFR 122.44(d)(1)(i). Since ADEC has approved WQS for enterococcus applicable to the discharge area and the discharge has reasonable potential, enterococcus limits are required.

Further, Section 401 of the CWA requires the state in which the discharge originates to certify that the discharge complies with the appropriate sections of the CWA, as well as any appropriate requirements of state law. See 33 USC 1341. If the certifying authority includes a more stringent condition in the 401 certification, then the permitting authority is required to include that condition pursuant to CWA section 401(d). The new more stringent effluent limitations for bacteria are a condition of ADEC's 401 certification, thus, pursuant to CWA section 401(d), these effluent limits have been included in the final permit.

No change was made to the final permit as a result of this comment.

COMMENT 35 (WRANGELL)

Comment 7. Page 7, PFAS Monitoring.

In Table 1 for PFAS it shows a frequency of sampling as 2/year. Footnote 12 references See I.B.10, this section should not exist and instead should be I.B.8. I.B.8 states that monitoring is required for 8 quarters or 2 years. The table and the reference are confusing as the table makes it sound like 2 time per a year whereas I.B.8 states quarterly.

Request 7.

Change the frequency in the table to say quarterly with the footnote.

RESPONSE 35

The EPA agrees with the commenter. The PFAS monitoring frequency in Table 1 of the draft permit is incorrect and footnote 12 references the incorrect permit part. Minor POTWs without a pretreatment program are to conduct quarterly PFAS monitoring for 2 years (8 quarters), beginning at the start of the first complete quarter in the third year of the permit term. Table 1 in the final permit has been revised to require two years of quarterly monitoring for PFAS chemicals and footnote 12 has been corrected to reference the correct Permit Part I.B.8.

COMMENT 36 (WRANGELL)

Comment 8. Pages 9, I.B.2.b

The first sentence references Permit Part I.C for receiving water monitoring. It should be Permit Part I.D.

Request 8.

Change the reference to Permit Part I.D.

RESPONSE 36

Part I.B.2.b. has been revised with the correct reference to the Receiving Water Monitoring requirements in Permit Part I.D.

COMMENT 37 (WRANGELL)

Comment 9. Page 10, I.B.8

Currently there are no regulations pertaining to PFAS for wastewater discharge. The only proposed regulation pertains to drinking water set at 4 ng/L. Therefore, the City of Wrangell objects to the wastewater discharge permit that sampling will be required on a quarterly basis for two years and furthermore seeks relief from this monitoring based on the following rationale.

First, the currently proposed regulations are for drinking water which typically come from freshwater sources. The communities that are renewing the 301(h) wastewater discharge permits are all discharging to the marine environment. Therefore, there is no impact to potential drinking water sources for any of these communities. The City of Wrangell has had PFAs sampling conducted by ADEC at the one groundwater well in the community by ADEC which was conducted in 2022. There were no detected PFAS in the groundwater. Additionally, the fire department has not used foam containing PFAS for many years and is unlikely to show up in the water as is confirmed by the PFAS groundwater results taken by ADEC.

Second, a presence/absence study of PFAS in wastewater discharge for small communities that have little to no industrial activity calls into question if the requirement even makes sense for

the City of Wrangell. This puts all of the burden of cost (dollars, labor availability and time, risks, etc.), on very small utilities whose budgets are already strapped. With the new disinfection requirement in the draft permit, communities are already wondering where the money is going to come from to design, build, and implement disinfection. To require expensive tests for research purposes of the EPA causes additional burden for something that does not even have a regulation in place.

The 1633 methodology is not yet approved by EPA, but its use is being required in the draft permit. Additionally, the method detection limit for this methodology is extremely low and has communities concerned about what the ramifications are if PFAS is detected at all. With no regulatory requirements being in place at this time, consequences could potentially come back to the communities in the form of requirements of treatment which is extremely expensive and which these small communities cannot afford.

The PFAS sampling requirement also includes the sampling of influent, effluent, and sludge. Three samples that may not be necessary. Knowing that these facilities are primary treatment, if PFAS concentrations are entering the facility, then they are likely also leaving the facility. Again, these communities do not have the money for sampling for research purposes.

Instead, a common-sense stepwise approach should be employed. First, conduct an industrial user survey to determine if there is a likelihood of PFAS being present in the community at levels higher than the proposed drinking water standard. If the survey indicates that there is a possibility, then require sampling at the cost to the potential polluter, not the utility.

The City of Wrangell believes that this requirement is being required too early in the process and requests that this requirement be delayed until EPA is further in the process of drafting regulations and determining what would be required if PFAS is detected in these facilities.

Request 9.

Delete the monitoring requirements for PFAS on Pages 7, 8, and 10 of the permit, and update the fact sheet. Add to the final permit the requirement to conduct an industrial user survey with a focus on potential introduction of PFAS into the sewer collection system and submit a report summarizing the findings not later than 3 years or during the permit cycle from the effective date of the permit.

RESPONSE 37

The EPA is not limited to requiring monitoring only for pollutants that have established water quality standards. Under CWA section 308, the EPA has broad authority to prescribe the collection of data and reporting requirements in NPDES permits. See also 40 CFR 122.44(i) (permittees must supply monitoring data and other measurements as appropriate).

As discussed on page 19 of the 2023 revised fact sheet, the purpose of these monitoring and reporting requirements is to better understand potential discharges of PFAS from this facility and to inform future permitting decisions, including the potential development of water

quality-based effluent limits. In December 2022, the EPA released a guidance memo² to the EPA Regions and states for addressing PFAS in NPDES permitting. The memo recommends PFAS monitoring for all POTW permits since they are known contributors of PFAS into the aquatic environment through a variety of industrial, commercial, and consumer sources. The permit conditions reflect the recommendations in the memo as well as the EPA's commitments in the PFAS Strategic Roadmap, which directs the Office of Water to leverage NPDES permits to reduce PFAS discharges to waterways "at the source and obtain more comprehensive information through monitoring on the sources of PFAS and quantity of PFAS discharged by these sources."

PFAS regulations currently in development as part of the Strategic Roadmap include efforts to develop a primary drinking water regulation and ambient water quality criteria for the protection of aquatic life and human health. Aquatic life criteria are designed to protect aquatic life from toxics exposure and typically include both a freshwater and marine component. The draft aquatic life criteria for PFAS, released for public comment in April of 2022, includes benchmarks for marine waters. Human health criteria are designed to protect people from exposure to toxics resulting from the consumption of water and/or fish or other aquatic organisms. While direct exposure to PFAS through the consumption of water influenced by the permitted discharge is not likely since the discharge is to estuarine waters, the consumption of fish and other aquatic organisms within the receiving waters could be a potential exposure pathway since PFAS chemicals have been shown to bioaccumulate and biomagnify within the aquatic environment.

The EPA agrees with the commenter that any PFAS chemicals entering the facility are likely to be exiting the facility. Sampling the influent, effluent, and sludge will provide necessary data to determine PFAS levels at each of these three points in the treatment process for use in future permitting decisions. Influent data shows how much PFAS is entering the facility, effluent data will provide data on how much is being discharged and removed through the primary treatment process, and sludge data will show how much PFAS is partitioned within the sludge.

As stated on page 19 of the revised fact sheet, the EPA acknowledges there is currently no approved analytical method for PFAS in 40 CFR Part 136. However, 40 CFR 122.44(i)(1)(iv)(B) provides that, in the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR Part 136 or methods are not otherwise required under 40 CFR chapter I, subchapter N or O, monitoring shall be conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters. Therefore, the final permit retains the requirements that until there is an analytical method approved in 40 CFR Part 136 for PFAS, monitoring shall be conducted using Method 1633, which was finalized on January 31, 2024.

² Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs, Office of Water, USPEA, Dec 2022.

The EPA recognizes the costs associated with these monitoring requirements for small communities. To help alleviate some of this burden on small communities, the revised draft permit requires PFAS monitoring for only two years (8 sampling events) and the permittee is not required to begin until the third year of the permit. This will allow time for planning and preparation associated with the costs and logistics involved in successfully completing the required monitoring.

The EPA appreciates the commenters concerns about the uncertainty of potential future permitting decisions that will be informed by the data collected. In spite of these, the EPA and states have obligations under the CWA to ensure permits are protective of human health and the environment and the conditions in the permit reflect the agencies latest efforts and commitments to address PFAS as described in the Strategic Roadmap and 2022 guidance memo.

The comment closes with a request that the PFAS monitoring provisions be removed from the final permit and an industrial user survey with a focus on potential introduction of PFAS into the sewer collection system be added. The EPA maintains that PFAS monitoring is necessary to obtain comprehensive PFAS information and ensure sufficient and representative data is available to inform future permitting decisions, including the potential development of effluent limits to meet future water quality standards, and fulfill our obligation to carry out the CWA. The PFAS monitoring provisions have not been removed from the final permit. The only PFAS monitoring provision that was changed in the final permit was a correction to the monitoring frequency specified in Table 1 from 2/year to quarterly for two years (see Response 35).

The revised draft permit required the permittee to conduct an industrial user survey and assess which users may be potential sources of PFAS chemicals; those requirements have not changed in the final permit.

No change was made to the final permit as a result of this comment.

COMMENT 38 (WRANGELL)

Comment 10. Page 10, I.C

WET testing is challenging due to the geographical location of the City of Wrangell. Shipping companies such as UPS and Fed-ex are unreliable and have been known to have outgoing shipments sit for weeks to months before making it to the final destination. The only reliable shipping service is Alaska Air Cargo (which typically flies in/out once a day), but flights are frequently canceled (especially in the winter). Additional resources also need to be found to get the samples from the airport to the lab. This all takes additional time and money. Reducing the sampling frequency to the summer months is more realistic and feasible.

Request 10.

Request reduced monitoring frequency to only during the summer and provide an allowance for missed hold times.

RESPONSE 38

Pursuant to 40 CFR 122.41(j) and 122.48(b), NPDES monitoring is supposed to be representative of the monitored activity. WET is required in the permit two times per year; reducing the frequency to only the summer months would not provide representative data of the continuous discharge.

The comment regarding the difficulties of meeting WET holding times was addressed in Response 19.

No change was made to the final permit as a result of this comment.

COMMENT 39 (WRANGELL)

Comment 11. Page 21, Table 3.

Table 3 The Schedule of Compliance for Bacteria at year 4 is titled Construction Complete. However, in the verbiage it states that construction must begin by the fourth year. The title Construction Complete is misleading and should be changed to Construction Begins.

Request 11.

Item 4 of Table 3 Change title to Construction Begins.

RESPONSE 39

The EPA agrees with the commenter. The title of Task 4 in Table 3: *Tasks Required Under the Schedule of Compliance for Bacteria* has been changed to *Construction Begins*.

COMMENT 40 (WRANGELL)

Comment 12. Page 21, Table 3 Schedule of Compliance Bacteria

Five years is not enough time to secure funding, complete the disinfection study, design, and construct a disinfection system. Adding effluent disinfection will likely cost the City of Wrangell ~\$12.5M (currently ~\$11M short in terms of funding). This will put a significant burden onto the rate payers. Extending the compliance schedule will allow the City of Wrangell to seek grant opportunities and/or alternative funding. Wrangell has been working on the water plant and is short on funding for that project and the schedule is being extended, so funding and workload for this wastewater project needs additional schedule.

Request 12.

Extend compliance schedule to ten years.

-Facility Planning Deliverable: The permittee must provide written notice to EPA and ADEC no later than two years and 14 days after the effective date...

-Final Design Deliverable: The permittee must provide written notice to EPA and ADEC no later than four years and 14 days after the effective date...

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-Funding and Contractor Selection Deliverable: The permittee must provide written notice to EPA and ADEC no later than six years and 14 days after the effective date...

-Construction Begins Deliverable: The permittee must send EPA and ADEC written notification that construction has begun, no later than seven years and 14 days after the effective date...

-Meet Effluent Limits for Fecal Coliform and Enterococcus Deliverable: The permittee must provide written notice to the EPA and ADEC no later than 10 years and 14 days after the effective date...

RESPONSE 40

This comment was addressed in Response 25.

No change was made to the final permit as a result of this comment.

COMMENT 41 (WRANGELL)

Comment 13. Schedule of Submissions

Due limited staff, scheduling of workload for a small staff, financial ability, economical affordability of raising rates, and the extensive changes since the last permit, Wrangell cannot take on all the additional changes at once. The deadline for annual submittals on January 31st is impractical for several reasons. First, it's unlikely that all of the data from monitoring will be available and enough time allowed to conduct any meaningful analysis of the entire previous calendar year. That's why the other permits have annual reports due on March 31st each year. There is always got a cutoff point in earlier months for the data that can be analyzed for the annual report, which just tangles things up when you're trying to track year over year trends on a calendar year basis.

Request 13.

Change the submission dates to March 31st or over a period of months to allow for submissions to have complete data available for analysis and to allow time for the staff to meet the demands of normal running of the facility and meet the submission deadlines.

RESPONSE 41

The submission dates for the following report submittals have been changed from January 31 to March 31 in the final permit: Surface Water Monitoring Report (Permit Part I.D.); Biological Monitoring Report (Permit Part I.E.); Toxic Control Program – Chemical Analysis and Source Identification (Permit Part II.D.); Nonindustrial Source Control (Permit Part II.D.3).

COMMENT 42 (WRANGELL)

Due limited staff, scheduling of workload for a small staff, financial ability, economical affordability of raising rates, and the extensive changes since the last permit, Wrangell cannot take on all the additional changes at once. Other Wastewater Treatment Facilities, (with more staff, funding, and workload capacity), have been able to take on over a twenty year period of time is being requested by Wrangell to taken on in a single permit within a few years. Wrangell

seeks a reduction in the requirements, reduced frequency of activities, and an increased compliance schedule.

Request 14.

Remove PFAS monitoring as a requirement and change WET testing one once per year. Increase the compliance schedule to at least 10 years.

RESPONSE 42

This comment was addressed in Response 12, Response 38, and Response 39.

In terms of a reduction in permit requirements, EPA has made two changes to the final permit.

- 1) The sediment analysis for TVS has been removed from the Biological Monitoring requirements in Permit Part I.E.

The 301(h) regulations at 40 CFR 125.63(b)(2) provide that small 301(h) applicants are not subject to sediment analysis requirements if they discharge at depths greater than 10 meters and can demonstrate through a suspended solids deposition analysis that there will be negligible seabed accumulation in the vicinity of the modified discharge. The Wrangell WWTP discharges at depths greater than 10 meters and the suspended solids deposition analysis provided below demonstrates there will be negligible seabed accumulation in the vicinity of the discharge.

Figure B-2 in Appendix B of the 1994 Amended Section 301(h) Technical Support Document provides a simplified graphical method for small estuarine dischargers to assess the potential for suspended solids deposition around their outfall using the reported daily solids mass emission rate (y-axis in Fig. B-2) and the height-of-rise of the discharge (x-axis in Fig. B-2). For the discharge height-of-rise, also known as the plume trapping depth, the height-of-rise from dilution modeling should be used, or 0.6 times the water depth, whichever is larger. The height-of-rise of the Wrangell discharge is approximately 6 meters (~20 feet) and the discharge depth is ~ 30.5 meters (~100 feet); accordingly, 18 meters (~60 feet) was selected for the x-axis in Figure B-2 ($0.6 \times 30.5\text{m}=18\text{m}$).

The guidance recommends calculating the suspended solids daily mass emission rate using the average flow rate and an average suspended solids concentration. The reported monthly average flow rate from the Wrangell WWTP between 2016 and 2021 was approximately 0.35 million gallons per day and the monthly average TSS concentration was 34.3 mg/L. To determine the daily loading of solids the monthly average concentration of TSS was multiplied by the reported average monthly flow and the loading conversion factor of 8.34. See Footnote 1 in Table 1 of the final permit for more information on mass loading calculations.

$34.3 \text{ mg/L} \times 0.35 \text{ million gallons per day} \times 8.34 = 100.12 \text{ lbs/day}$.

Using this loading rate along the y-axis and 18 meters along the x-axis in Figure B-2, the projected steady state sediment accumulation is expected to be well below 25g/m². The EPA considers this to be a negligible accumulation of sediment. Therefore, the applicant has

satisfied the requirement of 40 CFR 125.63(b)(2) and the requirement to conduct sediment TVS analysis has been removed from the final permit.

- 2) Receiving water monitoring for bacteria can be discontinued if the permittee achieves 12 consecutive months of compliance with the final bacteria limits and the following summer's receiving water sampling results demonstrate full compliance with Alaska's water quality standards for bacteria at all ZID Boundary (Permit Part I.D.2.b.) and Nearshore Sites (Permit Part I.D.2.d.).

The EPA has determined that once the facility is able to consistently achieve compliance with the final fecal coliform and enterococcus limits in the permit and has demonstrated ongoing compliance with Alaska WQS at the boundary of the ZID, continued sampling for bacteria in the receiving water is no longer warranted to satisfy the requirements of 40 CFR 125.62(a). By achieving compliance with the final fecal coliform and enterococcus limits the EPA expects that the facility will be able to meet Alaska's WQS for fecal coliform and enterococcus at the edge of the ZID after initial mixing. See Permit Part I.D.9. and I.D.10.

COMMENT 43 (WRANGELL)

Draft NPDES Fact Sheet for City and Borough of Sitka WWTP

Comment 15. Page 7, Table 1.

For the total ammonia permit limit, show calculations of how the effluent limits were determined.

Request 15.

This is the limits that ADEC requested EPA made limits more stringent. Discussion in comments above.

RESPONSE 43

Comments were accepted on the draft permit for the City and Borough of Sitka WWTP from June 7 through July 24, 2023. This comment was received after the close of the public comment period, on August 28, 2023.

No change was made to the final permit as a result of this comment. For more information on changes to the ammonia limits in the final permit refer to response to comment 28.

COMMENT 44 (WRANGELL)

Comment 16. Page 7, Table 1

In Table 1, temperature shows that it has to be measured once a week. However, it states that the average monthly and maximum daily have to be reported. Instead of these two, it should be average weekly and average monthly.

Request 16.

It doesn't make sense to require daily maximum.

RESPONSE 44

As discussed on page 16 and 17 of the 2023 Revised Fact Sheet, monitoring and reporting the daily maximum are standard practice for most monitored parameters in NPDES permits, including temperature. Daily maximum reporting for temperature was inadvertently omitted from Table 1 of the 2022 draft permit.

Alaska WQS for temperature in marine waters requires the discharge to not exceed 15° Celsius. To protect this instantaneous maximum standard, maximum daily reporting is necessary, even though monitoring is only required once a week.

No change was made to the final permit as a result of this comment.