

Response to Comments from GEPA on Draft NPDES Permit for the Umatac Merizo STP

Comment #1: As noticed in the receiving waters monitoring results, nutrients and bacteria are in high level, is it possible to make the effluent limits more stringent than proposed in order to anticipate early the impact as of the Jeff Pirates Cove algae problems?

Response: It is possible that the algal growth observed in Jeff Pirates Cove may be due to nutrient loading from a combination of both point and nonpoint sources. As a result, in accordance with Section 303(d) of the Clean Water Act, EPA will continue to work with GEPA to assess all potential sources of nutrients to Toguan Bay in an effort to minimize the impact of nutrient loading in Jeff Pirates Cove. EPA believes that the effluent limitations for total phosphorus and total nitrogen proposed in the draft permit are consistent with Guam's water quality standards and has determined that no change to these limits is necessary at this time. However, EPA has revised the Reopener Provisions in Part III.a of the draft permit to reflect GEPA's concern with nutrient loading from the Umatac-Merizo STP. Part III.a of the draft permit has been revised as follows:

“In accordance with 40 CFR 122 and 124, this permit may be modified by EPA to include effluent limits, monitoring, or other conditions to implement new regulations, including EPA-approved water quality standards **or EPA-approved Total Maximum Daily Load for nutrients**; or to address new information indicating the presence of effluent toxicity or the reasonable potential for the discharge to cause or contribute to exceedances of water quality standards.”

Comment #2: If possible, it should be clearly emphasized in the permit condition that any sewage spill shall be reported immediately to USEPA and GEPA if determined hazard to health and environment or large spills that discharges into the body of water. 24-hour reporting can be considered as the maximum.

Response: In accordance with 40 CFR 122.41(1)(6), the draft Permit states: “Permittee shall report any noncompliance which may endanger human health or the environment... Any information shall be provided orally, within 24 hours from the time the permittee becomes aware of the circumstances, to EPA and GEPA.” The draft permit requires that the permittee provide notification of a spill *within* 24 hours, which EPA believes to mean no later than 24 hours. EPA believes that the draft permit adequately reflect NDPEs regulations at 40 CFR 122.41(1)(6) for wastewater treatment facilities. Therefore, EPA has determined no change to the draft permit is necessary at this time.

Comment #3: The water quality monitoring at the outfall shows that bacteria and nutrient levels are high especially in the rainy season. The wetlands overland treatment should be re-assessed to ensure it is not being overwhelmed during heavy precipitation

and is working properly. Water quality monitoring should be examined and analyzed again. The terraced slopes should be properly maintained. If the existing phragmites wetlands plants are not meeting nutrient removal levels maybe another type of wetlands plant (duckweed if available locally) should be considered or added to the overland design in addition to phragmites. Replacing a terraced cell or two with this species can be suggested. Then require follow-up study comparison of water quality. The primarily goal is to improve water quality discharged at the outfall.

Response: EPA agrees that it is important to properly operate and maintain the constructed wetlands system to meet Guam's water quality standards. In the draft permit, the permittee is required to develop and implement a Wetlands Wastewater Treatment System Operations and Maintenance Plan, which shall include the physical and biological measures necessary to adequately manage the Wetlands Wastewater Treatment System. The draft permit also requires that this plan be reviewed by both EPA and GEPA within 90 days of the effective date of the final permit and that the plan be updated annually as new information is collected. Upon review of this plan, EPA will work with GEPA to ensure that the plan adequately incorporates all necessary measures to ensure that water quality standards are met and that the permittee implements the plan accordingly.

Comment #4: Keep Enterococcus as additional indicator of disinfection effectiveness to allow comparison with receiving water monitoring results.

Response: Per the comment, EPA has revised the draft permit to retain Enterococcus as a parameter in the effluent monitoring and receiving water monitoring.

Comments #5 and #9: Enterococci/ Monitoring frequency in effluent and in receiving waters should be weekly, not monthly and continue for the entire length of the permit.

Response: Per comment received, EPA has revised the draft permit to require weekly bacterial indicator monitoring when the facility is discharging.

Comment #6: New map with GPS location of all sample sites submitted in first quarter report of new permit term.

Response: EPA agrees that it is important to have accurate up-to-date GPS locations for all receiving water sampling sites. Accordingly, the draft Permit states on p. 14: “The permittee shall verify all station locations (latitude and longitude) and submit this information in the first quarterly receiving water monitoring report.” Therefore, EPA believes that the draft permit adequately requires the need for accurate up-to-date information on sampling sites and has determined no change to the draft permit is necessary at this time.

Comment #7: QA document will be submitted to Guam EPA for review and approval prior to implementation.

Response: Per comment received, EPA has changed the permit to include the following statement: “The QA plan shall be submitted to GEPA for review prior to implementation.” EPA also encourages GEPA to work with the permittee in the development of their QA manual if there are specific concerns with the collection and analysis of samples in Guam.

Comment #8: Draft permit page 13 of 26: Part V.A.1.a BMP will be submitted to Guam EPA for review and approval prior to implementation.

Response: Per comment received, EPA has changed the permit to include the following statement: “The BMP plan shall be submitted to GEPA for review prior to implementation”. EPA also encourages GEPA to work with the permittee in the development of their BMPs if there are specific concerns with the pollution prevention measures.

Comment #10: Draft permit page 16 of 26: C.iv. monitoring frequency should remain weekly and only decrease if data supports. Sampling day should coincide with effluent sampling day.

Response: Per comment, permit was revised to state that effluent sampling and receiving water sampling should occur on the same day. EPA has revised the draft permit to require weekly monitoring of most parameters listed in Table 1 (effluent monitoring) and

of all parameters listed in Section C. (receiving water monitoring) when the facility is discharging.