

**Responses to Comments and Questions**  
**April, 2010**  
**Apra Harbor Wastewater Treatment Plant**  
**NPDES PERMIT NO. GU0110019**

Comments and questions submitted September 1, 2009 via email from Maria Lewis, NAVFAC Marianas Environmental to John Tinger, US EPA.

**COMMENT:** Under Effluent limitations and Monitoring Requirements, Pp 6&7, Table 1: 1) Flow: In your response to comments dated July 13, 2009, you stated that the limit for flow had been removed, but it is still listed in the table.

**REPOSE:** The Flow limits have been removed.

**COMMENT 2) Oil and grease (O&G):** The response to comments stated that the EPA found a reasonable potential for O&G to be present in our wastewater. Though I admit we have had O&G present, it has historically been at low levels. The data does not support the idea that we would pollute the receiving water. Please consider removing this monitoring requirement or relaxing it to a quarterly or annual basis. We will continue to make observations of the receiving waters.

**REPOSE:** O&G has been detected in the effluent at concentrations up to 10 mg/L. The data supports the conclusion that O&G levels are of concern, and that an effluent limit should be established. Monthly monitoring is a low frequency of monitoring for a 4.3 MGD facility, and is considered appropriate.

**COMMENT 3) Copper:** Attachment C demonstrated the calculations for WLA which did not consider background concentrations. We request that background levels be considered for this and other metals calculations.

**REPOSE:** EPA has determined there is a reasonable potential to cause or contribute to an exceedance of water quality standards for the following pollutants based on an assumption of zero background concentrations: copper, nickel, and aluminum. Any background concentration found at detectable concentrations will further support the determination that the effluent has the reasonable potential to cause or contribute to an exceedance. Based on a review of background concentrations, background concentrations were generally found to be at non-detect levels.

EPA has determined there is no reasonable potential for zinc based on an assumption of background concentrations equal to zero. In this case, any background concentrations found above zero may lead to a determination that zinc may be discharged

at a level that causes or contributes to an exceedance. Based on a review of background concentrations, background concentrations were generally found to be at non-detect levels, and EPA has therefore determined that this assumption was accurate. Therefore, EPA continues to conclude that there is no reasonable potential for zinc.

**COMMENT** In Part II A, paragraph 3.b.ii, (pp 9&10) it was stated that NODI(Q) should be used in the DMR if the result was between the MDL and the ML. In contrast, in paragraph 3.f.ii, it was stated that the lab's MDL should be used under these conditions. Is the latter just for the sake of calculating the average? If the average is still between these values, will NODI(Q) still be used in the DMR?

**RESPONSE:** Yes, the laboratory MDL should be used for the sake of calculating the average (according to paragraph 3.f. "Report for Average Monthly Limitation") when the result is between the MDL and the ML. The average should be calculated as the arithmetic mean of these results.

**COMMENT** In Part II B, we request the reduction in frequency for WET testing from quarterly to annual. We have qualified for this reduction according to the language in current permit.

**RESPONSE:** The monitoring frequency has been changed from quarterly to annually.

**COMMENT** Paragraph 2 lists the species and the methodology. A local lab is in the process of being certified for the WET test using *Tripneustes gratilla*. We would like this species included in the permit along with the *Strongylocentrus purpuratus*.

**RESPONSE:** *Tripneustes gratilla* has been added to the approved list of species for WET testing.

For Hawaii, Guam, and American Samoa NPDES effluents, EPA allows chronic WET testing by Hawaii labs using the *T. gratilla* protocol refined by Amy Wagner and CCH. Use of *t. gratilla* is authorized as there are no tropical Pacific marine species available for chronic testing in the WET methods approved for NPDES under 40 CFR 136, including the "grandfathered" 1995 West Coast marine chronic methods.

As an alternative to *T. gratilla* testing in Hawaii, effluent samples from Hawaii, Guam, and American Samoa facilities may be shipped to a West Coast lab and tested using the purple urchin and West Coast marine methods manual.

**COMMENT** Part II C requires us to conduct annual priority toxic pollutants analyses. GWA is permitted for the same outfall yet their permit only requires a scan during the

fourth year of the five-year permit. We request the same consideration to perform the scan only during the fourth year.

**REPOSE:** Apra Harbor has twice the annual discharge flow of GWA, supporting more frequent monitoring. Additionally, Apra Harbor has demonstrated issues with a lack of controls for non-domestic wastewater (see Findings of Violation, November 2008). EPA has concluded that annual monitoring for priority pollutants is appropriate.

**COMMENT Part III:** We request the inclusion in paragraph (B) to allow for modification of the permit due to new information including, but not limited to, approved mixing zones for specific pollutants.

**REPOSE:** This reopener provision has been added to paragraph (A).

**COMMENT Part V, paragraph 2.a.** states that a review of the fourth year of coverage under the final permit should take place to develop and implement a toxic pollutant minimization program no later than the end of the second year of coverage under the final permit. Does the "fourth year of coverage under the final permit" refer to the current permit? And the "second year..." refer to this draft (new) permit?

**REPOSE:** All conditions in the renewed permit refer to the renewed permit. The permit language has been clarified.

**COMMENT:** Under Receiving Waters, Page 18, Table 3: 1) Temperature: In the previous revision, the temperature had the sample type of "CDP" and has been changed to "Surface, mid-depth, bottom grab." We currently sample as CDP and would prefer to keep that method.

**REPOSE:** The change has been made.

**COMMENT 2) pH:** A footnote is indicated to correlate with CDP"1". The current permit has the footnote that depth intervals would be no more than 2m. Did you mean to continue this footnote or to remove it completely?

**REPOSE:** The footnote has been corrected.

Comments and questions submitted September 18, 2009 via letter from Alan Everson, NOAA MNFS to Richard Remigio, US EPA.

**COMMENT:** We have some concerns however that we wish to highlight. While we consider that EFH will not be directly impacted by reduced water quality from the discharge at the outfall as standards will be met, we are concerned about the indirect effects to EFH through trophic links by impact to fisheries. It has not been clearly determined whether fish aggregate to the outfall, and whether these as a result are targeted for harvest. If harvested, there may pose a risk to human health through consumption of fish feeding on sewage discharge, and a risk to the ecosystem through a reduction in the functions and services that the fishes provide. As it seems that there are no studies so far that address this issue at the outfall in Tupalao Bay, we suggest if possible, that fish and fisheries surveys be conducted alongside water quality monitoring to shed some light on the matter.

**RESPONSE:** Water quality-based effluent limits are derived using the most stringent available numeric criteria designed to satisfy designated uses in a waterbody, such as human health and aquatic life. Thus, EPA believes that the derived limit will be protective of both human health and aquatic life.

To determine outfall impact to ecosystem, EPA suggests collaboration with Guam EPA to perform ambient water monitoring. EPA also recommends initiating coordination with Guam EPA and GWA to determine if such biological data and/or information are available.