Response to Comments AK-000134-1

EPA public noticed the draft permit for Eielson Air Force Base's Central Heating and Power Plant (CHPP) on August 7, 2007, for a comment period which ended September 6, 2007.

ADEC provided the final § 401 Certification on September 27, 2007. Any Certification conditions more stringent than those contained in the draft permit must be included in the final permit. ADEC may provide justification for less stringent conditions to be placed in the permit and EPA may consider these justifications when making a final permitting decision.

EPA received comments on the draft permit from Eielson Air Force Base (AFB).

1. <u>Comment:</u> Increase the average monthly flow to 7.5 mgd to accommodate the expected flow increases as discussed in the Fact Sheet.

Response: The application submitted to EPA on November 10, 2000, indicated that the average daily flow was 5 mgd and that application has not been amended to include a justification for higher flows. ADEC did not considered higher flows in its mixing zone analysis so a higher flow could not be authorized by EPA without re-analysis and possibly re-noticing the permit action. Since the previous permit is woefully out of date, EPA has decided to reissue this permit and, since the CHPP has indicated that they may file a new permit application, modify the permit in another action when all the necessary information is submitted.

2. <u>Comment:</u> Clarify the term "treatment unit" since the CHPP does not treat the effluent prior to discharging it.

Response: The CHPP does not have a formal method for treatment, "treatment units" can include more informal methods like aeration as the effluent travels down the overboard ditch. The sampling point should be located just prior to the effluent entering the receiving water to take advantage of any form of treatment, in this case, heat transfer, that may be offered prior to that point. The permit will not be changed.

3. <u>Comment:</u> Remove the ammonia sampling because the original application indicated non-detect for ammonia.

Response: Form E of the application signed on November 10, 2000, indicates that ammonia was measured at a maximum of 0.602 mg/L, as stated in the Fact Sheet. Since ammonia is more toxic at higher temperatures, it is important to conduct adequate monitoring (statistically, at

least 10 samples) to determine whether a limit is necessary in the permit to protect water quality.

4. <u>Comment:</u> The Best Management Practice (BMP) Plan is redundant with the current Stormwater Pollution Prevention Plan (SWPPP).

Response: EPA has amended the language so that if the SWPPP contains all the requirements of the BMP Plan, it can be referenced and utilized as such. If the SWPPP does not contain the necessary requirements, then it can either be amended or referenced in developing a BMP Plan for the facility.

5. Comment: Permit Part I.E.5.e. should list 40 CFR 112 instead of 50 CFR.

Response: The commentor is correct and this change has been made.

6. Comment: Clarify the definition of the term "facility site."

Response: The permit referenced the term "facility site" once in the BMP Plan section. This language has been revised so that all storm water would be handled in accordance with the SWPPP. CHPP may include specific BMPs for the overboard ditch to prevent any degradation to water quality as the effluent passes through the ditch on its way to the receiving water.

7. <u>Comment:</u> Reduce effluent sampling requirements for BOD, fecal coliform, and oil-grease because these parameters are not discharged in the cooling water because there is no contact with any source that would add these constituents while in the system as cooling water. The AFB also indicates that in the original application indicated that the BOD, COD and oil-grease were measured at non-detect.

<u>Response:</u> Form E of the November 10, 2000, application contained the following information:

Parameter (units)	Measure
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BOD, mg/L	2.0
TSS, mg/L	2.15 – 4.0
Fecal Coliform, mg/L*	0 – 2
Total Residual Chlorine, mg/L	0.200 u**
Oil and Grease, mg/L	2.20 – 3.0
COD, mg/L	10 – 15
TOC, mg/L	2.7 – 4.6
* Fecal Coliform is not measured in mg/L but in # of colonies/100mL	
** undetected at this level	

The date of the "original" application is not indicated but the most current application does not contain non-detects as indicated in the comment.

Values for these parameters must be reported in the next permit application so the intent of this monitoring is to facilitate a complete application being submitted to EPA as required in Permit Part IV.B. if the CHPP wishes to continue operations. The monitoring directions accompanying Form E are as follows:

A. Existing Sources

You are required to provide at least one analysis for each pollutant or parameter listed by filling in the requested information under the applicable column. Data reported must be representative of the facility's current operation (average daily value over the previous 365 days should be reported). Most facilities routinely monitor these pollutants or parameters as part of existing permit requirements.

The pollutants or parameters listed are: average flow, biochemical oxygen demand (BOD), total suspended solids (TSS), fecal coliform (if believed present or if sanitary waste is discharged), pH, total residual chlorine (if chlorine is used), temperature (winter and summer), oil and grease, chemical oxygen demand (COD), total organic carbon (TOC) (COD and TOC are only required if noncontact cooling water is discharged), and ammonia (as N). The analysis of these pollutants or parameters must be done in accordance with procedures promulgated in 40 CFR Part 136. Grab samples must be used for pH, temperature, residual chlorine, oil and grease, and fecal coliform. For all other pollutants, 24hour composite samples must be used. Any further questions on sampling or analysis should be directed to your EPA or State permitting authority. The authority may request that you do additional testing, if appropriate, on a case-by-case basis under Section 308 of the Clean Water Act (CWA).

Since the directions require representative values over the previous year, the sampling frequency shall be reduced to 2/month over the discharge season prior to the submission of the new application (Summer 2011). Fecal coliform will be removed from the sampling regime since there is no known source of fecal coliform in the discharge.

8. Comment: Clarify the required monitoring point(s) for ammonia.

Response: The original intent of the requirements in the draft permit was to gather data from upstream of the discharge and at the edge of the authorized mixing zone. EPA has reconsidered the value of collecting data from the upstream point and has decided that whether a permit limit is required can be determine with only the downstream monitoring so the final permit requires sampling at MP 7. Effluent sampling is still required as described in Comment # 3, above.