Department of Environmental Conservation
Response to Comments

for

Rock Creek Mine

APDES Permit No. AK0053627


June 8, 2011
1. Introduction

Summary of Facility/Permit

This fact sheet provides the basis for the conditions and requirements of the APDES permit AK0053627, which authorizes the discharge of treated wastewater to Rock Creek from the Rock Creek Mine tailings storage facility (TSF), the main pit, and recycle water pond (RWP) located near Nome. The permit authorizes discharges while the mine remains in temporary closure status (i.e., no active process operations or tailings deposited to TSF during the term of this permit). If a decision is made to re-open the mine, DEC would require the applicant to apply for a new APDES permit authorizing discharges from the entire operating mine facility. The permit includes effluent limits and monitoring requirements for proposed discharges to Rock Creek. The effluent limits are both technology- and water quality-based. No mixing zones are authorized.

Opportunities for Public Participation

The Department of Environmental Conservation proposed to issue an Alaska Pollutant Discharge Elimination System (APDES) wastewater discharge permit to Rock Creek Mine. To ensure public, agency, 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 potentially affected tribes that the Department would be working on this permit via letter, fax and/or email
- formally published public notice of the draft permit on May 5, 2011 in the Nome Nugget and posted the public notice on the Department’s public notice web page
- 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 two interested parties on the draft permit and supporting documents. The Department also requested comment from the Departments of Natural Resources (DNR) Fish and Game (DFG), the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency.

This document summarizes the comments submitted and the justification for any action taken or not taken by DEC in response to the comments.
**Final Permit**

The final permit was adopted by the Department on June 24, 2011. There were changes from the public noticed permit. Significant changes are identified in the response to comments and reflected in the final fact sheet for the permit.

2. General Support and Opposition for the Permit

2.1 Comment Summary

The Department received one comment in general opposition to the permit.

3. General Comments

3.1 Comment Summary

A commenter pointed out that that the receiving water, Rock Creek, was incorrectly characterized as having neither anadromous fish nor a definable channel near the crossing of the Glacier Creek Road in the Fact Sheet. A reference was provided that indicates Rock Creek has a defined channel near the proposed outfall and that it is a cataloged anadromous fish habitat up to 100 feet upstream from the Glacier Creek Road Crossing. Authorization from Alaska Department of Fish & Game (ADF&G) would be required if the outfall is located within the designated anadromous reach.

**Response:**

The appropriate sections of the Fact Sheet were corrected with the additional information regarding Rock Creek channelization and anadromous fish habitat. The outfall location is approximately 300 feet upstream the Glacier Creek Road culvert and outside of the designated anadromous reach. ADF&G authorization will not be required. An additional stipulation was added to the Permit that requires the outfall to be located upstream of the designated anadromous fish reach.

3.2 Comment Summary

The Department received a comment on the Fact Sheet Section 4.0 Compliance History and indicated that the section was incomplete and contained a comment from a reviewer.

**Response:**

The compliance history cited by the commenter involves storm water issues that are unrelated to this permit and outfall. There is no compliance history for the proposed discharge since it will be a new outfall. Fact Sheet Section 4.0 has been corrected by deleting the deliberative review comment.
3.3  **Comment Summary**
The Department received comment on Fact Sheet Section 7.0 Antibacksliding. The comment pointed out that a Fact Sheet template language was not deleted and that the backsliding regulations are not necessary since this is the first permit proposed to be issued for this facility.

   **Response:**
The Department concurs that the regulatory references and discussion of antibacksliding is not necessary since this is the first issuance of an APDES permit and effluent limits are newly established and the antibacksliding requirements do not apply. Fact Sheet template language and the references to antibacksliding regulations were deleted from Fact Sheet Section 7.0.

3.4  **Comment Summary**
The Department received a comment that the anti-degradation analysis was unnecessary for this permit. The commenter also stated that the Interim Anti-Degradation Implementation Methods guidance document is an illegal regulation because it was not adopted through a proper rulemaking procedure.

   **Response:**
The Permit does not violate any aspect of State or federal anti-degradation regulation.

3.5  **Comment Summary**
The Department received comment that the permit should contain Whole Effluent Toxicity (WET) limits.

   **Response:**
In accordance with 18 AAC 83.435(f), limits on whole effluent toxicity are not required if the Department demonstrates in the Fact Sheet of the APDES permit that chemical-specific limits for the effluent are sufficient to attain and maintain applicable numeric and narrative State water quality standards. Further, Permit Section 1.3 requires monthly chronic WET monitoring and establishes specific requirements that must be met if WET is detected, including performing toxicity identification and reduction evaluations as necessary.

3.6  **Comment Summary**
The Department received comment that the Permit effluent limits should contain technology based effluent limits for cadmium and mercury under the Effluent Limitation Guidelines for Gold Mining.
Response:
Rock Creek is not an active mine; therefore, effluent limit guidelines are not applicable to this discharge and cadmium and mercury limits are not required. See Fact Sheet Appendix B1.

3.7 Comment Summary
The Department received comment that a reasonable potential analysis needs to be conducted for mercury.

Response:
There is no treatment plant effluent data for mercury that would allow the parameter to be evaluated in a similar manner to the other metals. However, as indicated in the Fact Sheet, monitoring of the water in the tailings storage facility (TSF), which represents the influent to the treatment plant, has shown mercury either below detection limits or significantly below the most stringent water quality standard. Therefore, there is no reasonable potential for mercury to exceed water quality standards. To be consistent with the Fact Sheet, the permit has been modified to include monthly monitoring for mercury to further confirm the finding of no reasonable potential.

3.8 Comment Summary
The Department received comment that monitoring data for Total Dissolved Solids (TDS) indicate that the project maximum effluent concentrations will be greater than the effluent limits for TDS.

Response:
The permit has properly calculated effluent limits for TDS. An evaluation of the TDS data indicates that the highest concentrations of TDS occur during the winter when ice formation increases contaminant concentrations. High TDS is not expected in the TSF or pit during the permitted discharge period. From late May to early November 2010, there were no exceedances of the proposed TDS limits in the wastewater treatment plant effluent.

4. Additional Changes
- Corrected permit numbering
- Added condition “The discharge to Rock Creek may only occur during open water periods in Rock Creek, typically during the months of May through December.” To Permit part 1.2 to be consistent with the Fact Sheet.
- Corrected minor errors in spelling and punctuation.