

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 et seq., as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act",

TECK COMINCO ALASKA, INC.
Red Dog Mine

is authorized to discharge 1) treated wastewater through Outfall 001 at latitude of 68° 4' 17" North and longitude of 162° 52' 5" West to receiving water named Middle Fork Red Dog Creek, 2) treated construction camp site wastewater through Outfall 002 at latitude of 68° 1' 45" North and longitude of 162° 54' 56" West to the tundra, and 3) storm water in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective April 12, 2007.

This permit and the authorization to discharge shall expire at midnight, March 31, 2012.

Signed this 7 day of March 2007.

_____/s/_____
Michael F. Gearheard
Director, Office of Water & Watersheds, Region 10
U.S. Environmental Protection Agency

approximately 3,420 feet. Station 150 is the monitoring station at the edge of this mixing zone.

- b. The permittee shall limit the TDS load discharged from Outfall 001 so as to maintain in-stream TDS concentrations at or below all of the following:
 - (1) At the edge of the mixing zone (Station 151) in Main Stem Red Dog Creek: 1500 mg/L throughout the discharge season.
 - (2) At the edge of the mixing zone (Station 150) in Ikalukrok Creek: 1000 mg/L throughout the discharge season.
 - (3) Station 160: 500 mg/L from July 25th through the end of the discharge season.
- c. When discharging, monitoring by direct laboratory testing shall be conducted. All samples of the receiving waters for TDS shall be grab samples, while effluent samples shall be composite samples as shown in Table 1. Sample collection shall be as follows:
 - (1) TDS shall be monitored once per week at Station 151, Station 150, Station 160, and the effluent.
 - (2) Conductivity and temperature shall be monitored concurrently with TDS sampling at Stations 151, 150, and 160.

The results of all monitoring and measurements must be submitted with the monthly DMR.
- d. The permittee shall calculate and record the allowable flow volume from Outfall 001 at least twice each day using the formulas below and shall submit all of the data involved in those calculations (including the time the measurements were taken), and the calculation results, each month along with the DMR. The permittee shall base each calculation on data collected within two hours of each shift change, and shall make each calculation within one hour of the collection of data. The allowable flow calculated from measurements taken at Station 151 and the outfall must reflect the stream conditions at the station and the outfall flow that are occurring at approximately the same time frame (i.e., the conductivity and flow measurements at Station 151 and the flow from the outfall must be taken within 30 minutes of each other). The following shall be collected and calculated:

EFFLUENT

- (1) Assume the effluent concentration (C_e) is equal to 10% above the highest measured effluent value.
- (2) Measure the effluent flow (Q_e)