

Permit No.: AK-003865-2

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",

COMINCO ALASKA, INC.  
(Red Dog Mine)

is authorized to discharge 1) treated wastewater through Outfall 001 at latitude of 68° 4' 17" and longitude of 162° 52' 5" to receiving water named Middle Fork Red Dog Creek, 2) treated construction camp site wastewater through Outfall 002 at latitude of 68° 1' 45" and longitude of 162° 54' 56" 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 August 28, 1998.

This permit and the authorization to discharge shall expire at midnight, August 28, 2003.

Signed this 29th day of July, 1998.

/s/ Roger K. Mochnick, Acting  
Director, Office of Water, Region 10  
U.S. Environmental Protection Agency

This permit modification shall become effective August 22, 2003.

Signed this 17<sup>th</sup> day of July, 2003

/s/ Randall F. Smith  
Director, Office of Water, Region 10  
U.S. Environmental Protection Agency

This permit modified 26<sup>th</sup> day of August, 2003 (minor modification, see page 10)

- b. There shall be no discharge from Outfall 001 until there is free flow of water in Main Stem Red Dog Creek. Prior to beginning discharge the permittee shall consult with EPA, Alaska Department of Natural Resources, Office of Habitat, Management, and Permitting, and Alaska Department of Environmental Conservation, and the permittee must receive written approval from EPA.
- c. After the commencement of discharge the permittee shall limit the TDS load discharged from Outfall 001 so as to maintain in-stream TDS concentrations at or below 500 mg/L at the edge of the mixing zone in Main Stem Red Dog Creek. This limitation is in effect until Arctic Grayling have finished spawning in Main Stem Red Dog Creek.
- d. The permittee must consult with the EPA, Alaska Department of Environmental Conservation, and the Alaska Department of Natural Resources, Office of Habitat, Management, and Permitting regarding the end of Arctic Grayling spawning, and must receive written approval from EPA prior to increasing the TDS load discharged from Outfall 001 above the limit specified in I.8.d.
- e. After Arctic grayling have finished spawning and the permittee has received written approval from EPA, 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 concentrations at all times (see Section I.D.1 and Section V. for the monitoring locations):
  - (1) At the edge of the mixing zone in Main Stem Red Dog Creek after Arctic Grayling spawning: 1500 mg/L
  - (2) At the edge of the mixing zone in Ikalukrok Creek: 1000 mg/L throughout the discharge season.
  - (3) Station 160: 500 mg/L from July 25<sup>th</sup> through the end of the discharge season.
- f. In addition to the above limitations the TDS concentration at Outfall 001 shall not exceed 3900 mg/L.
- g. Monitoring by direct laboratory testing shall be conducted. All samples for TDS shall be grab samples, and the date and time of sample collection must be recorded. Sample collection shall be for as follows: