

Appendix C

United States v. Cominco Alaska Incorporated CONSENT DECREE

FISH PROTECTION BARRIER STATEMENT OF WORK

I. INTRODUCTION AND GENERAL DESCRIPTION OF PROJECT

The Red Dog Mine is located in northwestern Alaska near the southwestern end of the De Long mountains of the western Brooks Range. Treated effluent from the mine's water treatment plant is discharged into Middle Fork Red Dog Creek. As shown on Attachment A to this Appendix C, Main Stem Red Dog Creek flows into Ikalukrok Creek, a tributary of the Wulik River. There are fish populations in the Wulik, Ikalukrok, and Main Stem. Arctic Grayling migrate up the Wulik, Ikalukrok Creek, Main Stem (passing the confluence of Main Stem with Middle Fork) and go into North Fork Red Dog Creek. North Fork Red Dog Creek supports fish populations.

The Alaska Department of Fish Game has suggested that proactive measures should be taken to ensure that fish do not enter Middle Fork Red Dog Creek. To minimize any risk to local fish populations, Cominco Alaska ("Cominco") will construct a fish protection barrier ("FPB") on Middle Fork Red Dog Creek near its confluence with the Main Stem to prevent the migration of fish into the Middle Fork.

This FPB shall be a weir ("Weir") consisting of a structure of gabions (steel wire mesh, box-shaped baskets filled with clean hard stone) and rock fill wings extending out from each end of the gabion structure as generally depicted on Attachments C and D to this Appendix C. An access road ("Access Road") from the Red Dog Mine to the Weir may also be built (but is not required under the Decree or this Appendix C) for use in the construction and maintenance of the Weir. If the Access Road is built, it is currently anticipated that it would be constructed generally as shown in Attachment B to this Appendix.

Although EPA has primary responsibility for approval of the design, siting and maintenance plan for the FPB, Cominco shall provide a copy of each submittal or deliverable identified herein to the Alaska Department of Fish and Game ("ADF&G") and the Alaska Department of Environmental Conservation ("ADEC"). ADF&G and ADEC are referred to collectively herein

as the "Alaska Agencies." Cominco shall request that the Alaska Agencies provide EPA and Cominco with comments on, and a statement of approval or disapproval of, each submittal and deliverable prepared by Cominco. EPA will consider all timely received comments from the Alaska Agencies prior to issuing to Cominco EPA's comments, approval or disapproval pursuant to Section IX of the Decree (Submissions Requiring Agency Approval). Cominco agrees that although EPA is not obligated to follow or accept the recommendations of the Alaska Agencies, adverse comment or disapproval on a submission by the Alaska Agencies is adequate grounds for disapproval by EPA of such submittal.

II. ELEMENTS OF WORK AND WORK SCHEDULE

A. Design

1. Within 10 days of the entry of the Decree Cominco shall submit the preliminary design submittal for the Weir (and the Access Road, if Cominco elects to build it) to EPA, pursuant to Section IX of the Decree (Submissions Requiring Agency Approval). The preliminary design submittal shall include or address, but not necessarily be limited to:

- (a) design criteria, including but not limited to: (i) specifications for the excavation, processing and placement of fill materials, (ii) specifications for the furnishing and placing of geotextile for use as a permeable separator to prevent intermixing of dissimilar materials such as subgrades and surfaced or unsurfaced pavement materials; and foundations and selected fill materials; and
- (iii) specifications for the use of steel wire mesh baskets filled with stone for use as retaining walls, slope paving, river bank protection, outfall structures, weirs, drop structures, etc.;
- (b) results of field work relevant to the design and other relevant pre-design work;
- (c) project delivery strategy;
- (d) preliminary plans, drawings and sketches;
- (e) preliminary construction schedule;
- (f) anticipated contingencies; and
- (g) a proposed schedule for the submission of the final design submittal.

2. In accordance with the schedule approved by EPA as part of the preliminary design submittal, Cominco shall submit a final design submittal to EPA pursuant to Section IX of the Decree

(Submissions Requiring Agency Approval). The final design submittal shall include, at a minimum, the following:

- (a) final plans and specifications (including drawings) for the Work to be performed pursuant to that plan;
- (b) a construction quality assurance project plan, that is, a plan for assessing that the or construction of improvements pursuant to the plan shall meet applicable criteria stated in the plans and specifications;
- (c) a proposed schedule for the construction of the FPB (weir) and, as appropriate, the Access Road; and
- (d) a contingency plan.

The proposed final drawings shall be stamped by a professional engineer licensed in Alaska.

3. Contemporaneous with its submission to EPA, Cominco shall send copies of the preliminary design submittal, the final design submittal, and all revisions thereto, to the Alaska Agencies. In cover letters transmitting copies of the submittals to the Alaska Agencies, Cominco shall inform those Agencies of the following:

- (a) written comments are requested on the submittal and that comments should be sent to EPA and Cominco by a date certain;
- (b) that EPA may delay authorization to commence construction of the FPB pending written approval by the Alaska Agencies of the siting and design of the FPB; and
- (c) the name and address of the appropriate EPA contact person to whom to direct questions and comments.

4. To expedite the review and approval process, Cominco may at its election provide the preliminary design submittal to EPA and or the Alaska Agencies prior to the entry of the Decree. Upon entry of the Decree, such pre-entry transmittal to EPA and/or the Alaska Agencies shall be deemed to be a submittal under this Decree as of the date of entry.

B. Permits.

Nothing in this Decree, any of its appendices, or in any federal or state agency's approval of any design or maintenance plan under this appendix shall constitute, nor shall be interpreted to take the place of, any application for a permit or a permit from any local, state or federal agency required for the construction or maintenance of the Access Road or Weir. Cominco

shall be responsible for applying for and obtaining all such permits needed for the construction and maintenance of the Access Road and Weir.

C. Construction.

After (1) receipt of approval by EPA of the final design submittal, and (2) obtaining all necessary permits and authorizations for the use of any land or waters required for the construction and maintenance of the Access Road and Weir, Cominco shall commence and diligently pursue construction of the FPB in accordance with the construction schedule approved by EPA. Construction shall be undertaken when the surface soils are frozen and the flow rate is low in Middle Fork Red Dog Creek to minimize environmental impacts. Construction of the Weir shall be completed within two (2) years of the EPA's approval of the final design submittal.

D. FPB Maintenance Plan.

1. No later than thirty days following completion of construction of the Weir, Cominco shall submit a proposed plan for maintenance of the FPB ("FPB Maintenance Plan") to EPA pursuant to Section IX (Submissions Requiring Agency Approval) of the Decree. Cominco shall contemporaneously send a copy of the proposed FPB Maintenance Plan to the Alaska Agencies with a request for comments. The proposed FPB Maintenance Plan shall specify and describe those activities necessary to maintain the effectiveness of the FPB, including but not limited to, the following maintenance activities.

a. Perform the following inspection and maintenance after breakup each year:

(i) Clear accumulations of sediment and debris from behind weir and rock berms; and

(ii) Check gabions for damage, broken wires, etc. Repair broken wires and replace lost fill as necessary. In cases of severe damage, replacement of entire gabion basket(s) may be necessary.

(b) Before freeze up each year check gabions and rock fill berms for settlement and other damage. Add fill and regrade as necessary to original crest elevation.

2. Within 30 days of the receipt of EPA's comments on the proposed FPB Maintenance Plan, Cominco shall submit a final maintenance plan to EPA pursuant to Section IX (Submissions Requiring Agency Approval) of the Decree.

E. Acceptance of Construction.

Within one hundred and twenty days following completion of construction of the Weir, Cominco shall submit the following to the Agencies:

1. As built survey of the Access Road (if built) and Weir; and
2. Cominco's request for certification of completion pursuant to Section XIII of the Decree.

III. LONG TERM MAINTENANCE

Cominco shall maintain the Weir in accordance with the FPB Maintenance Plan approved under Section II.D above to insure the continued integrity of the structure as provided in Paragraphs 24 and 25 of the Decree.

IV. DECOMMISSIONING OF THE WEIR

The Weir shall be removed or otherwise decommissioned by Cominco at the request of ADF&G or its successor in accordance with Section VIII D of the Decree.

V. PERFORMANCE STANDARDS

Cominco shall satisfy the requirements under this Appendix and Section VIII of the Decree and all other sections of the Consent Decree, as they apply to this Supplemental Environmental Project by:

- A. construction of the Weir in substantial conformance with the final specifications and drawings approved EPA pursuant to Section II.A above.
- B. submission of the as built survey to the Agencies as described in Section II.E.2 above.
- C. submission, and the Agencies approving, the FPB Maintenance Plan described in Section II.D above.
- D. maintaining the Weir in accordance with the approved FPB Maintenance Plan.

VI. GENERAL PROVISIONS

All Work performed pursuant to this Appendix is subject to the terms of the Consent Decree. Any contractors providing services to Cominco in connection with the Work are expected to be aware of the provisions of the Decree relating to this Work, including but not limited to the provisions of Sections V (General Provisions), VIII (Performance of Supplemental Environmental Projects by Cominco), IX (Submissions Requiring Agency Approval), XIII (Certification of

Completion), XV (Information), and XXIV (Modifications), as they apply to this Supplemental Environmental Project.

Copies of all design plans, maintenance plans, together with all substantive correspondence or other submittals and written communications from Cominco or its contractors relating to the work shall be sent to the following:

Joe Roberto
Office of Water
United States Environmental Protection Agency
Region X
1200 Sixth Avenue, Mail Code OW-133
Seattle, Washington 98101

Joel Gross
Environmental Enforcement Section
United States Department of Justice
P.O. Box 7611
Ben Franklin Station
Washington, D.C. 20044

Dr. Alvin G. Ott and Dr. Phyllis Weber Scannell
Habitat and Restoration Division
Alaska Department of Fish and Game
1300 College Road
Fairbanks, Alaska 99701-1599

Paul Bateman
Alaska Department of Environmental Conservation
610 University Avenue
Fairbanks, Alaska 99709-3643

Communications with Cominco regarding its implementation of this SEP may be addressed

to:

John L. Key,
General Manager
James Kulas,
Manager, Environmental Affairs
Cominco Alaska Incorporated
Environmental Department
P.O. Box 1230
Kotzebue, AK 99752,

Courtesy copies should be sent to:

C. Bruce DiLuzio,
Attorney and Corporate Secretary
Cominco American Incorporated
P.O. Box 3087
Spokane, WA 99220-3087,

and

Charlotte MacCay
Senior Administrator, Environmental and
Regulatory Affairs
Cominco Alaska Incorporated
1133 West 15th Avenue
Anchorage, AK 99501

The above names and address may be changed by written notice.