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UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

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EPA REGION VIII
HEARING CLERK

IN THE MATTER OF:

North Facility Soils and
Wastewater Treatment Plant Ponds
Salt Lake County, Utah
Site No. 4B

Administrative Order on
Consent

Kennecott Utah Copper Corporation,
Respondent

US EPA Region VIII

Docket No.
CERCLA-VIII-95-04

Proceeding Under Sections
104(a) and 122(a)
of the Comprehensive
Environmental Response, Compensation,
and Liability Act, as amended, 42 U.S.C.
§§ 9604(a) and 9622(a)

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<input type="checkbox"/>	FOIA Exempt/Claim _____
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	Contract # _____
	File Plan # <u>9.05</u>
	Keyword #(s) <u>14.08, 14.09</u>

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I. JURISDICTION AND GENERAL PROVISIONS

1. This Order is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Kennecott Utah Copper Corporation ("Kennecott"). This agreement provides for the performance by Kennecott of the removal action, as specified in the Statement of Work, and the payment by Kennecott of response costs incurred by the United States in connection with the North Facility Soils ("NFS") and Wastewater Treatment Plant Ponds ("WWTP") removal action located in Salt Lake County, Utah (collectively the "Site").

2. The objectives of EPA and Kennecott under this Order are for Kennecott to conduct, with EPA oversight, a site investigation, response evaluation and removal action at the Site which responds to any releases or threatened releases of hazardous substances, or pollutants or contaminants, if any, that could cause an imminent or substantial threat to public health or welfare, from the Site as described in the Work Plan or modifications thereto, as allowed pursuant to this Order, and which is not inconsistent with CERCLA and the NCP. The objectives of this Order do not include and Kennecott shall not be required, under this Order, to undertake any activity or action that could cause shut-down of, or that could interfere with, Kennecott's ongoing operations. While this Order does address the Site as potential sources of groundwater contamination, it does not address groundwater remediation.

3. This Administrative Order on Consent ("Order") is issued by EPA pursuant to the authority vested in the President of the United States by sections 104(a) and 122(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604(a) and 9622(a), as amended ("CERCLA"). This authority is delegated to the Administrator of the EPA by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, delegated to the EPA Regional Administrators by EPA Delegation No. 14-14-C, and further redelegated to the Assistant Regional Administrator for the Office of Ecosystems Protection and Remediation of Region VIII.

4. EPA has notified the State of Utah of this action pursuant to section 122(a) of CERCLA, 42 U.S.C. § 9622(a).

5. Kennecott's participation in this Order shall not constitute or be construed as an admission of liability or of agreement with EPA's Findings of Fact or Conclusions of Law and Determinations contained in this Order except in a proceeding to enforce the terms of this Order. Kennecott and EPA agree to comply with and be bound by the terms of this Order. Kennecott

further agrees that it will not contest the basis or validity of this Order or its terms.

II. PARTIES BOUND

6. This Order applies to and is binding upon EPA, Kennecott and upon Kennecott's successors and assigns. No change in ownership or corporate status of Kennecott including, but not limited to, any transfer of assets or real or personal property shall alter Kennecott's responsibilities under this Order.

7. Kennecott shall ensure that its contractors, subcontractors, and representatives conducting activities pursuant to this Order shall receive a copy of this Order and comply with this Order. Kennecott shall be responsible for any noncompliance with this Order.

III. DEFINITIONS

8. Unless otherwise expressly provided herein, terms used in this Order which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. For purposes of this Order, the following terms shall have the meanings set forth below.

"**Contractor**" means any person, including the contractors, subcontractors, or agents, retained or hired by Kennecott to undertake any work under this Order.

"**Day**" means calendar day, unless otherwise specified. Time will be computed in accordance with Rule 6 of the Federal Rules of Civil Procedure, unless otherwise specified.

"**Deliverable**" means any written product describing the work performed or to be performed, including, but not limited to, technical reports, data reports, technical memoranda, progress reports, or other documents describing the work performed or to be performed, that Kennecott is required to submit under the terms of this Order.

"**NCP**" means the National Oil and Hazardous Substances Pollution Contingency Plan promulgated under section 105 of CERCLA, 42 U.S.C. § 9605, and codified at 40 C.F.R. Part 300, including, but not limited to, any amendments thereto.

"**Order**" means this Order, the exhibits attached to this Order, and all documents or modifications to documents incorporated by reference into this Order according to the procedures set forth herein. If there is a conflict between

this Order and any documents incorporated into this Order, the terms of text of the Order shall control.

"Site" for purposes of this Order, means the wastewater treatment plant sludge ponds, smelter soils, refinery soils and other north facility soils, including the areal extent of contamination and all suitable areas necessary for implementation of the removal action, including any temporary staging or storage areas for contaminated soils and the wastewater treatment plant sludge/soils repository (sometimes referred to as the Arthur Step-back Repository). The Site is generally limited to the area depicted on Exhibit 2 to this Order.

"Work" means all tasks Kennecott is required to perform under the Statement of Work.

"Statement of Work" or "SOW" means the Statement of Work which is attached hereto as Exhibit 1 and incorporated herein by reference.

"Work Plan" means the detailed plan of activities implementing the requirements of this Order. The Work Plan includes the document which describes Work activities and any other plan (or modifications thereto) required by this Order and approved by EPA. In addition, the Work Plan may include other plans suggested by Kennecott and approved by EPA, after notice and opportunity to comment by the State, pursuant to this Order or produced by EPA pursuant to this Order. Upon approval by EPA, all such plans are incorporated by reference into this Order.

IV. FINDINGS OF FACT

SITE DESCRIPTION AND HISTORY

9. The NFS/WWTP Site is located adjacent to the intersection of State Highways 201 (2100 south) and 202, north of the Kennecott refinery.

10. The WWTP began operations in 1974. It produces a sludge residual which has been discharged into five ponds, called Ponds A, B, C, C-Extension, and D. All of the ponds are located within 1.5 miles of the WWTP.

11. The WWTP treats approximately 3,000 gallons per minute ("gpm") of process waters from the smelter, refinery, Utah Copper Power Plant, North Concentrator facilities and in-plant sewage. Ferric chloride and/or lime (calcium hydroxide) are added to the wastewater in the treatment process. A sludge residual (calcium

sulfate) from the WWTP is produced at a rate of approximately 250 wet tons per day. The composition of the WWTP sludges has changed over time due to changes in the operation and chemicals used in the wastewater treatment process. Kennecott generated pre-Noranda-smelting process sludge between 1974 and 1978 and placed it in Pond A. Noranda-smelting process sludge was generated from August 1978 until early 1982, and was placed in Ponds A and B. Pond C contains high-lime sludge, placed there between 1983 and 1985. Low-lime Noranda-smelting process sludge resulted from the mid-1989 to August 1991 neutralization process. This sludge is stored in Ponds B, C, C-Extension and D.

12. Calcium sulfate sludge from the WWTP is excluded from classification as a hazardous waste pursuant to 40 C.F.R. § 261.4(b)(7).

ENDANGERMENT

13. Sludge stored in pond A is characterized as having total arsenic levels from 1,700 mg/Kg as an average to 2,700 mg/Kg maximum and copper in excess of two percent. Analytical results from leaching procedures (Toxicity Characteristic Leaching Procedure ("TCLP"), Synthetic Precipitation Leaching Procedure ("SPLP") and EP Toxicity) show relatively low leachability: levels that are below regulatory thresholds. Sludge stored in Pond B is characterized as having total arsenic that ranges from 3,500 mg/Kg to 6,600 mg/Kg. Leaching procedure analytical results show arsenic does leach at relatively high levels using TCLP and EP toxicity, but leaching was relatively low for arsenic using SPLP. Both Ponds A and B also contain other heavy metals including cadmium, lead, and selenium. Leachable cadmium and selenium exceeded regulatory threshold values in several samples for Pond B. Ponds C, C-Extension and D show similar concentrations of heavy metals existing in the sludge. (Table 2 - 6, RUST 9/94)

14. Based upon the type of operations conducted at the site, the North Facility Soils are believed to be contaminated by both RCRA exempt and non-exempt waste. The contamination includes mineral processing wastes such as electrolyte bleed, flue dust, or weak acid blowdown. To the extent these mineral processing wastes exhibit any hazardous characteristics, they are categorized as newly identified characteristic hazardous wastes, having lost their Bevill-exempt status under RCRA in September, 1991. For purposes of this removal action, hydrocarbon or organically contaminated soils will be addressed outside the scope of this Order and are not included as "North Facility Soils."

15. Arsenic is a human carcinogen. Arsenic can be acutely and chronically poisonous and can be fatal if ingested or inhaled in sufficient quantities by humans, livestock, and wildlife.

Arsenic compounds are absorbed into the body primarily through inhalation or ingestion.

16. Lead is a cumulative poison which can cause neurologic, kidney, and blood cell damage in humans. Some lead compounds are also animal carcinogens adversely affecting the lungs and kidneys. Children under the age of seven years are especially sensitive to the effects of lead.

17. Cadmium is a heavy metal, and has been shown to be a carcinogen in both animal studies and occupationally exposed groups of humans via the inhalation route of exposure. No evidence has linked cadmium to cancer via the ingestion pathway. The Carcinogenic Assessment Group ("CAG") has classified cadmium as a Group B1 -- Probable Human Carcinogen for inhalation only. (EPA 1985b). Exposure to toxic amounts of cadmium by either inhalation or ingestion will cause cadmium to accumulate in the renal system and eventually cause kidney failure (EPA 1985a).

18. Selenium is an essential nutrient that at high exposure concentrations may cause acute or chronic poisoning in animals. It is distributed through all organs of the body by the blood vascular system. (Clinical and Diagnostic Veterinary Toxicology, 3rd Ed., 1976)

RELEASE OR THREAT OF RELEASE

19. Soils from the North Facility, and contaminated sludge exposed at the surface of the ponds, may become wind blown causing potential exposure to humans and the environment. Wildlife may come into direct contact with soils thus creating another potential exposure pathway to the environment. The sludge may also leach metals into the groundwater. Analytical results indicate that the metals are leachable and are present in pond liquids. (Table 7, RUST 9./94).

RESPONDENT

20. Kennecott, a corporation incorporated under the laws of the State of Delaware, is a past owner/operator and the current owner/operator of the real property that constitutes the Site. Kennecott is qualified to perform the actions set forth in the Order.

RESPONSE ACTIONS

21. No prior CERCLA enforcement actions have been taken by EPA or the state of Utah at this Site.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

22. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:

23. The NFS/WWTP Site are "facilities" as defined by section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

24. Some of the material found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined by section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

25. Kennecott is a "person" as defined by section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

26. Kennecott may be liable under section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

27. The presence of hazardous substances at the Site and the past, present or potential future release of hazardous substances into the environment constitutes an actual and/or threatened "release" as defined in section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

28. The removal actions required by this Order are necessary to protect the public health, welfare, or the environment, and are not inconsistent with the NCP or CERCLA.

29. The designation of discreet portions of this Site as Superfund Corrective Action Management Units (CAMU), 40 C.F.R. Part 264, Subpart S, will facilitate the implementation of a reliable, effective, protective and cost-effective remedy. Unless EPA receives comments during the public comment period for this Order which indicate that this designation is not in the public interest, the parties intend to identify the following areas as CAMUs in the Action Memorandum for this removal action: The RO, TC and SA Decon Pads, WWTP Ponds C, C-Extension and D, and the Arthur Step-Back Repository (including the staging area adjacent to the repository). The above areas are described in Kennecott's document entitled *Information Concerning Proposed Corrective Action Management Units for Implementing the CERCLA Removal Action for the Kennecott North Facility Soils and Waste Water Treatment Plan Ponds Site*, dated May 1996.

VI. ORDER

30. Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record for this Site, it is hereby ordered and agreed that Kennecott shall comply

with the following provisions, including but not limited to all attachments to this Order, and all documents incorporated by reference into this Order, and perform the following actions:

31. Designation of Contractor Kennecott shall notify EPA of the names and qualifications of any contractors or subcontractors to be used in carrying out Work under this Order either within fifteen (15) days after the effective date of this Order, or at least fifteen (15) days prior to any work being performed under this Order. EPA retains the right to disapprove of any, or all, of the contractors and/or subcontractors retained by Kennecott, but must have a good faith basis for such disapproval which must be stated in a written notice to Kennecott. If EPA disapproves of a selected contractor, Kennecott shall notify EPA of the identity and qualifications of any replacement within ten days of selection.

32. EPA and Kennecott shall each designate their own Project Coordinator.

a. EPA's Project Coordinator and designated On-Scene Coordinator is:

Steven Way
On-Scene Coordinator
EPA Region VIII (EPR-ER)
999 18th Street - Suite 500
Denver, CO 80202-2466
(303) 312-6808

b. Kennecott's Project Coordinator is:

William R. Williams
Director, Health, Safety and Environmental Quality
Kennecott Utah Copper Corporation
3595 South 8315 West
Magna, Utah 84004-6001
(801) 252-3110 or Fax (801)252-3083

33. The Project Coordinators shall be responsible for overseeing the implementation of this Order. EPA and Kennecott each have the right to change their respective Project Coordinator. The parties shall notify the other of any change in their Project Coordinator. The initial notification may be made orally, but it shall be followed promptly by a written notice with the name, title, address, and telephone number of the new Project Coordinator. EPA retains the right to disapprove of any Project Coordinator named by Kennecott, for good cause.

34. Kennecott shall direct all submissions required by this Order to the designated State Project Contact and EPA's Project Coordinator by mail, express mail, or other delivery method that will assure prompt receipt. EPA's designated Project Coordinator is named above. The State's designated Project Contact is Kate Johnson whose mailing address and phone number is 168 North 1950 West, 1st floor, Salt Lake City, Utah 84116, (801) 536-4100.

Work to Be Performed

35. Kennecott shall perform, at a minimum, the actions required by the attached Statement of Work, including the activities set forth below.

36. Within 30 days of the effective date of this Order, Kennecott shall submit a Project Schedule of operations to be performed during all phases of this removal action, as described in the SOW. The Project Schedule shall address all major tasks to be accomplished during the Work.

37. Work Plan and Implementation: Within 45 days of the effective date of this Order, Kennecott shall submit a Work Plan. The Work Plan shall, at a minimum, provide a description of all the actions required by the SOW. The Work Plan, as approved by EPA, after notice and opportunity to comment by the State, shall be incorporated into this Order.

a. The Sampling and Analysis Plan ("SAP") shall be included as part of the Work Plan. The SAP shall describe the procedures and strategy for obtaining the information required to characterize the source areas of contamination at the Site. The SAP shall include a Quality Assurance Project Plan. The SAP, upon approval by EPA, and after notice and opportunity to comment by the State, shall be incorporated into this Order.

b. Kennecott shall submit, for EPA review and comment, a Health and Safety Plan that ensures the protection of the public health and safety during performance of on-site work under this Order. This plan shall be submitted with the Work Plan and shall be prepared in accordance with EPA's current Standard Operating Safety Guide, dated November 1984, and currently updated July 1988. In addition, the Health and Safety Plan shall be in accordance with the Occupational Health Hazardous Waste Operations and Emergency Response rule set forth in 29 C.F.R. Part 1910. Kennecott shall incorporate all changes to the plan recommended by EPA, and implement the plan during the pendency of the removal action.

38. EPA may approve, disapprove, require revisions to, or modify the draft Work Plan. If EPA requires revisions, Kennecott

shall submit a revised draft Work Plan within fifteen (15) days of receipt of EPA's notification of the required revisions. Kennecott shall implement the Work Plan as finally approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be fully enforceable under this Order.

39. Design and Construction Plans: Kennecott shall submit Design and Construction Plans for the repository, in accordance with the attached SOW, at a date to be determined in the Project Schedule.

Quality Assurance and Sampling

40. Kennecott shall assure that all sampling and analyses performed pursuant to this Order shall conform to EPA direction, approval and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, chain of custody procedures, the requirements of this Order and the approved Sampling and Analysis Plan. Kennecott shall ensure that any laboratories used to perform analyses participate in a QA/QC program that complies with relevant EPA guidance. Upon request by EPA, Kennecott shall have the laboratory it uses analyze samples submitted by EPA for quality-assurance monitoring. Kennecott shall provide EPA with copies of the QA/QC procedures followed by all sampling teams and laboratories performing data collection or analysis if such procedures differ from the approved Sampling and Analysis Plan of Quality Assurance Project Plan. Kennecott shall allow EPA or its authorized representatives to take split samples of any samples collected by Kennecott while performing work under this Order. Kennecott shall notify EPA not less than two days in advance of any sample collection activity. EPA shall have the right to take any additional samples that it deems necessary.

Reporting

41. Kennecott shall submit a written progress report to EPA describing actions undertaken pursuant to this Order and its management reports verifying contractor work as follows: on the second working day of every week after the effective date of this Order during removal activities; and on the second working day of every month during the planning activities, unless otherwise directed by the Project Coordinator. These reports shall describe all activities listed in the attached SOW as well as significant developments during the preceding period, including: actions performed and any problems encountered, analytical data received during the reporting period, developments anticipated during the next reporting period, a schedule of actions to be performed,

anticipated problems, and planned resolutions of past or anticipated problems.

42. At least 30 days prior to the conveyance of any interest in real property at the Site, Kennecott shall give written notice to the transferee that the property is subject to this Order and written notice to EPA of the proposed conveyance, including the name and address of the transferee. Kennecott agrees to require that its successor in interest comply with the immediately preceding sentence and Access to Property and Information sections of this Order.

Final Report

43. Within 120 days after completion of all Work required under this Order, Kennecott shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Order. The final report shall include a summary of all activities listed in the attached SOW as well as events, the location of the Site, the treatment/disposal approach followed, community relations activities, listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action. The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Access to Property and Information

44. Kennecott shall provide or obtain access to the Site and off-Site areas to which access is necessary to implement this Order, and provide access to all records and documentation related to this Order and the conditions at the Site and the actions conducted pursuant to this Order. Such access shall be provided to EPA employees, contractors, agents, consultants, designees, representatives, and representatives of the State of Utah. These individuals shall conduct themselves in a safe and prudent manner according to the Health and Safety Plan and shall otherwise be

permitted to move freely at the Site and appropriate off-Site areas in order to conduct actions which EPA determines to be necessary in implementing the terms of this Order.

45. Kennecott shall submit to EPA, upon receipt, the results of all sampling or tests and all other data generated by Kennecott or its contractors, or on Kennecott's behalf during implementation of this Order.

46. Where Work under this Order is to be performed in areas owned by or in possession of someone other than Kennecott, Kennecott shall use its best efforts to obtain all necessary access agreements within 60 days after the effective date of this Order, or as otherwise specified in writing by the EPA Project Coordinator. Kennecott shall immediately notify EPA if after using its best efforts it is unable to obtain such agreements. Kennecott shall describe in writing its effort to obtain access. EPA may then assist Kennecott in gaining access, to the extent necessary to effectuate the response actions described in the Work Plan using such means as EPA deems appropriate. Kennecott shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access.

Record Retention, Documentation, Availability of Information

47. Kennecott shall preserve all documents and information relating to Work performed under this Order or relating to the hazardous substances found on or released from the Site, for ten (10) years following completion of the removal actions required by this Order. At the end of this ten year period, and 90 days before any document or information is destroyed, Kennecott shall notify EPA that such documents and information are available to EPA for inspection, and upon request, shall provide the originals or copies of such documents and information to EPA. In addition, Kennecott shall provide documents and information retained under this section at any time before expiration of the ten year period at the written request of EPA. Notwithstanding the above requirements, Kennecott may dispose of sample material after holding it for a one year period and having provided 60 days advance notice to EPA.

48. Kennecott may assert a business confidentiality claim pursuant to 40 C.F.R. section 2.203(b) with respect to part or all of any information submitted to EPA pursuant to this Order, provided such claim is allowed by section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). Analytical and other data specified in section 104(e)(7)(F) of CERCLA shall not be claimed as confidential by Kennecott. EPA shall disclose information covered by a business confidentiality claim only to the extent permitted by, and by means of the procedures set forth at, 40 C.F.R. Part 2,

Subpart B. If no such claim accompanies the information when it is received by EPA, EPA may make it available to the public without further notice to Kennecott.

49. In the event EPA requests documents or information pursuant to the provisions of Paragraph 47 herein, and in the event Kennecott withholds any such information or documentation on the basis of an applicable privilege, Kennecott shall provide EPA with a log of such information or documentation withheld, identifying each such document or information (e.g., letter, memorandum, report, analytical data), the date, the author, the addressee, the subject, and the privilege claimed (e.g., attorney-client communication, attorney work-product). Unless otherwise agreed to, Kennecott shall submit this "Privilege Log" to EPA within 90 days of EPA's written request for documents and information requested under paragraph 47. EPA reserves the right to contest the claims of privilege. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical or engineering data.

Off-Site Shipments

50. All hazardous substances, pollutants or contaminants removed off-Site pursuant to this Order for treatment, storage, or disposal shall be treated, stored, or disposed of at a facility acceptable under the Off-Site Rule, 58 Fed Reg. 49200 (1993) as provided by section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3). EPA regional offices shall determine the acceptability of a facility. Kennecott shall provide prior notification of out-of-state waste shipments as provided in EPA Office of Solid Waste and Emergency Response (OSWER) Directive 9330.2-07.

Compliance With Other Laws

51. Kennecott shall perform all actions required pursuant to this Order in accordance with all applicable and/or relevant and appropriate local, state, and federal laws and regulations except as provided in section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. section 300.415(j).

Emergency Response and Notification of Releases

52. If any incident or change in Site conditions during Work conducted pursuant to this Order threatens to cause a release of hazardous substances from the Site or causes or threatens to cause an endangerment to the public health, welfare or the environment at the Site, Kennecott shall immediately take all appropriate actions, in accordance with all applicable provisions of this Order, including, but not limited to the Health and Safety Plan,

to prevent, abate or minimize the threatened release or endangerment caused or threatened by a release. Kennecott shall also immediately notify the EPA Project Coordinator or, in the event of his/her unavailability, shall notify the EPA Region VIII Regional Duty Officer at (303) 293-1788, of the incident or Site conditions. If Kennecott fails to respond to the threatened release or endangerment, EPA may respond and reserves the right to pursue cost recovery.

53. In addition, in the event of any release of a hazardous substance in a reportable quantity (as defined by 40 C.F.R. Part 302) from the Site, that is associated with this removal action, the Kennecott Project Coordinator or the Project Manager, shall immediately notify EPA's Project Coordinator of such release (other than a federally permitted release or the legal application of a pesticide). Within 7 days after the initial report, Kennecott shall submit a written report to EPA setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, not in lieu of, reporting under CERCLA section 103(c) and section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. Sections 11001 et seq.

VII. AUTHORITY OF THE EPA ON-SCENE COORDINATOR

54. The EPA Project Coordinator shall be responsible for overseeing Kennecott's implementation of this Order and shall have the authority vested in an On-Scene Coordinator ("OSC") by the NCP, including the authority to halt, conduct, or direct any Work required by this Order. The OSC also has the authority to direct any other removal action undertaken at the Site. Absence of the EPA Project Coordinator from the Site shall not be cause for stoppage of work unless specifically directed by the EPA Project Coordinator.

VIII. REIMBURSEMENT OF COSTS

55. Response costs are all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Order, verifying the Work, or otherwise implementing, overseeing, or enforcing this Order. Response costs shall also include all costs, including direct and indirect costs, paid by the United States in connection with the Site from the date the site specific identification number was first assigned to this Site through close-out of this Order so long as such costs are not inconsistent with the NCP. Nothing in this section shall be construed as requiring Kennecott to reimburse EPA costs that are

inconsistent with the NCP, the result of an accounting error or not within the definition of response costs as defined in this Order.

56. EPA shall periodically submit to Kennecott a bill for response costs that includes a SCORE\$ report or its equivalent. Kennecott shall, within 60 days of receipt of EPA's bill, remit payment for the amount of the bill made payable to the "Hazardous Substance Superfund." Payment, in the form of a cashier's check or certified funds, should be mailed to:

Mellon Bank
EPA Region VIII
Attn: Superfund Accounting
Post Office Box 360859
Pittsburgh, Pennsylvania 15251-6859

or other such address as EPA may designate in writing. Wire transfers must be sent to the Federal Reserve Bank in New York and include the following wire transfer information.

ABA = 021030004
TREAS NYC/CTR/
BNF=/AC-68011008

Payments must be designated as "Response Costs -North Facility Soils" and shall reference Kennecott's name and address, the EPA site specific identification number (SSID No 4B), and the docket number of this Order. Copies of the transmittal letter and check or other payment form shall be sent at the time of payment to the EPA Enforcement Specialist, Paul Rogers, at the following address:

U.S. Environmental Protection Agency
STE 500 (8ENF-T)
999 18th Street
Denver, Colorado 80202

57. In the event that payment for response costs is not made within 60 days of Kennecott's receipt of EPA's bill, Kennecott shall pay interest on the unpaid balance. Interest is established at the rate specified in section 107(a) of CERCLA. Interest shall begin to accrue on the date Kennecott received EPA's bill, however, no interest shall accrue if Kennecott pays all costs in full within 60 days of the date of billing. Interest shall accrue at the rate specified through the date of payment. Payments of interest made under this paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Kennecott's failure to make timely payments under this Section.

58. Kennecott may dispute all or part of any bill for response costs submitted under this Order, if Kennecott alleges that EPA has made an accounting error, or if Kennecott alleges that a cost item is inconsistent with the NCP or is not within the definition of response costs as defined in this Order.

59. If any dispute over costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Kennecott shall pay the full amount of the uncontested costs into the Hazardous Substance Fund as specified above on or before the due date. Within the same time period, Kennecott shall pay the full amount of the contested costs into an interest-bearing escrow account. Kennecott shall simultaneously transmit a copy of both checks to the EPA Enforcement Specialist. Kennecott shall ensure that the prevailing party in the dispute shall receive the amount upon which they prevailed from the escrow funds plus interest within 30 days after the dispute is resolved. If the parties cannot resolve the dispute within 30 days either party may invoke the Dispute Resolution procedures in Section XVIII of this Order.

IX. FORCE MAJEURE

60. Kennecott agrees to perform all requirements under this Order within the time limits established under this Order, unless the performance is delayed by a force majeure. For purposes of this Order, a force majeure is defined as any event arising from causes beyond the control of Kennecott or of any entity controlled by Kennecott, including but not limited to its contractors and subcontractors, that delays or prevents performance of any obligation under this Order despite Kennecott's best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the work or increased cost of performance.

61. Kennecott shall notify EPA orally within 48 hours after the event, and in writing within five (5) days after Kennecott became or should have become aware of events which constitute a force majeure. Such notice shall: identify the event causing the delay or anticipated delay; estimate the anticipated length of delay, including necessary demobilization and re-mobilization; state the measures taken or to be taken to minimize the delay; and estimate the timetable for implementation of the measures. Kennecott shall take all reasonable measures to avoid and minimize the delay. Failure to comply with the notice provisions of this section shall waive any claim of force majeure by Kennecott.

62. If EPA agrees that a delay in performance of a requirement under this Order is or was attributable to a force majeure, the time period for performance of that requirement shall be extended by agreement of the parties. Such an extension shall

not alter Kennecott's obligation to perform or complete other tasks required by the Order which are not directly affected by the force majeure.

X. STIPULATED PENALTIES

63. Kennecott shall be liable for stipulated penalties in the amounts set forth in this section for failure to comply with the requirements of this Order, unless such failure to comply resulted from a force majeure event. For each day, or portion thereof, that Kennecott fails to fully perform any requirement of this Order in accordance with its established schedule, Kennecott shall be liable under a two tiered system of penalties as set forth below.

Tier I

64. The following Tier I stipulated penalties shall be payable per violation per day to the United States for:

- a. Failure to submit or submittal of inadequate Site specific SAP, removal Work Plan or Design and Construction Plans;
- b. Failure to adequately complete the activities required by the SAP, the removal Work Plan or the Design and Construction Plans;
- c. Failure to submit or implement a post-removal Site control plan in a timely or adequate fashion;
- d. Failure to pay response costs in a timely manner;

<u>Period of Failure to Comply</u>	<u>Penalty Per Violation Per Day</u>
1st through 15th day	\$1,000
16th through 30th day	\$5,000
31st day and beyond	\$25,000

Tier II

65. The following Tier II stipulated penalties shall be payable per violation per day to the United States for:

- a. Failure to comply with the EPA approved dates in the Project Schedule or this Order;
- b. Failure to report a change in conditions at the Site which requires modification of the Work Plan or response action;

- c. Failure to comply with reporting requirements in a timely or adequate manner;
- d. Failure to make modifications to Deliverables based upon EPA comments, as allowed by the terms of this Order;
- e. Removal of funds from any escrow account associated with this Order without written confirmation of the resolution of dispute from EPA;
- f. Failure to comply with analytical and construction QA/QC procedures;
- g. Failure to provide EPA and/or the State with adequate access to the Site;
- h. Failure to provide the privilege log in a timely or adequate fashion upon request by EPA;
- i. Failure to designate contractors in a timely manner;
- j. Failure to notify EPA and/or the State of changes in Kennecott's Project Coordinator in a timely manner;
- k. Failure to comply with record retention requirements as required by this Order;
- l. Failure to respond appropriately to emergency release(s) at the Site.

<u>Period of Failure to Comply</u>	<u>Penalty Per Violation Per Day</u>
1st through 15th day	\$100
16th through 30th day	\$500
31st day and beyond	\$10,000

66. Upon receipt of written demand by EPA, Kennecott shall make payment of stipulated penalties to EPA within 60 days. Interest shall accrue only on late payments (payments made 61 or more days after the date of written demand.) Interest shall run from the date of the violation or act of non-compliance triggering the stipulated penalty through the date of payment. Payment of stipulated penalties shall be made by forwarding a certified or cashiers check payable to the "Hazardous Substance Superfund" to:

EPA Docket No.
CERCLA-VIII-95-04

Mellon Bank
EPA Region VIII
Attn: Superfund Accounting
Post Office Box 360859
Pittsburgh, Pennsylvania 15251-6859

or such other address as EPA may designate in writing or by wire transfer to:

ABA = 021030004
TREAS NYC/CTR/
BNF=/AC-68011008

Wire transfers must be sent to the Federal Reserve Bank in New York. Payments must be identified as "Stipulated Penalties - North Facility Soils" and shall include Kennecott's name and address, the EPA site specific identification number (SSID No. 4B) and the docket number of this Order. Copies of the transmittal letter and check shall be sent simultaneously to the EPA Project Coordinator and EPA Enforcement Specialist.

67. Even if violations are simultaneous, separate penalties shall accrue for separate violations of this Order. Penalties accrue and are assessed per violation per day. Penalties relating to the timeliness of scheduled Work, Deliverables, reports or notices shall accrue without any notice from EPA. All other penalties shall begin to accrue from the date EPA notifies Kennecott of such violation or act of noncompliance.

68. If any dispute over the payment of stipulated penalties is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Kennecott shall pay the full amount of the uncontested costs into the Hazardous Substance Fund as specified above on or before the due date. Within the same time period, Kennecott shall pay the full amount of the contested costs into an interest-bearing escrow account. Kennecott shall simultaneously transmit a copy of both checks to the EPA Enforcement Specialist. Kennecott shall ensure that the prevailing party in the dispute shall receive the amount upon which they prevailed from the escrow funds plus interest within 30 days after the dispute is resolved. If the parties cannot resolve the dispute within 30 days, either Party may invoke the Dispute Resolution procedures in Section XVIII of this Order.

69. Violation of any provision of this Order may subject Kennecott to civil penalties of up to twenty-five thousand dollars (\$25,000) per violation per day, as provided in section 106(b)(1) of CERCLA, 42 U.S.C. section 9606(b)(1). Kennecott may also be

subject to punitive damages in an amount up to three times the amount of any cost incurred by the United States as a result of such violation, as provided in section 107(c)(3) of CERCLA, 42 U.S.C. Section 9607(c)(3). Should Kennecott violate this Order or any portion hereof, EPA may carry out the required actions unilaterally, pursuant to section 104 of CERCLA, 42 U.S.C. Section 9604, and/or may seek judicial enforcement of this Order pursuant to section 106 of CERCLA, 42 U.S.C. Section 9606.

70. In the event that EPA provides for corrections or modifications to a document to be reflected in a subsequent Deliverable and does not require resubmission of that Deliverable, stipulated penalties for that interim Deliverable shall cease to accrue on the date of such decision by EPA.

71. The imposition of stipulated penalties is in EPA's discretion. EPA may in its discretion impose a lesser penalty or no penalty at all for violations subject to stipulated penalties. EPA agrees that if it seeks stipulated penalties for a violation, EPA shall not seek statutory penalties for the identical violation. Similarly, if EPA seeks statutory penalties for a violation, it shall not seek stipulated penalties for the identical violation. Imposition of the stipulated penalties provisions does not preclude EPA from conducting all or part of the Work because of Kennecott's failure to comply with this Order. Payment of stipulated penalties does not alter Kennecott's obligation to complete performance under this Order.

XI. RESERVATION OF RIGHTS

72. Except as specifically provided in this Order, each party reserves all rights and defenses it may have, including assertion of applicable privileges. Additionally, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief pursuant to CERCLA or any other applicable law, to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Kennecott in the future to perform additional activities that are not within the scope of the covenant not to sue granted in this Order. EPA reserves the right to bring an action against Kennecott under section 107 of CERCLA, 42 U.S.C. section 9607, for recovery of any response costs incurred by the United States related to this Order or the Site and not reimbursed by Kennecott.

XII. OTHER CLAIMS

73. By issuance of this Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Kennecott. Neither the United States nor EPA shall be deemed a party to any contract entered into by Kennecott or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out Work pursuant to this Order.

74. Except as expressly provided in the covenant not to sue granted under this Order, nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against Kennecott or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or the common law, including but not limited to any claims of the United States for costs, damages, interest and Natural Resource Damage Claims, if any, under sections 106(a), 107(a) and 107(f) of CERCLA, 42 U.S.C. Sections 9606(a) and 9607(a), and 9607(f).

75. This Order does not constitute a preauthorization of funds under section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2). Kennecott waives any claim to payment under sections 106(b), 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611, and 9612, against the United States or the Hazardous Substance Superfund arising out of any action performed under this Order.

76. No action or decision by EPA pursuant to this Order shall give rise to any right to judicial review under federal law except as set forth in section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XIII. COVENANT NOT TO SUE

77. Except as otherwise specifically provided in this Order, upon issuance of EPA's Notice of Completion, EPA covenants not to sue Kennecott for judicial imposition of damages or civil penalties or to take administrative action against Kennecott for any failure to perform removal actions agreed to in this Order except as otherwise reserved herein.

78. Except as otherwise specifically provided in this Order, in consideration and upon Kennecott's payment of response costs as specified in this Order, EPA covenants not to sue or to take administrative action against Kennecott under section 107(a) of CERCLA for recovery of response costs incurred by the United States in connection with this removal action and reimbursed to the United States under this Order. This covenant not to sue shall take effect upon the receipt by EPA of the payments required under the Reimbursement of Costs section of this Order, including

receipt of any disputed costs for which the parties have not reached an agreement.

79. These covenants not to sue are conditioned upon the complete and satisfactory performance by Kennecott of its obligations under this Order. These covenants not to sue extend only to Kennecott, its successors and assigns, and do not extend to any other person.

XIV. CONTRIBUTION PROTECTION

80. With regard to claims for contribution against Kennecott for matters addressed in this Order, the parties hereto agree that Kennecott is entitled to protection from contribution actions or claims to the extent provided by section 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. Sections 9613(f)(2) and 9622(h)(4). Nothing in this Order precludes the United States or Kennecott from asserting any claims, causes of action or demands against any persons not parties to this Order for indemnification, contribution, or cost recovery.

XV. INDEMNIFICATION

81. Kennecott agrees to indemnify, save and hold harmless EPA and DEQ, their officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action: (A) arising from, or on account of, acts or omissions of Kennecott, Kennecott's officers, directors, employees, agents, contractors, subcontractors, receivers, trustees, successors or assigns, in carrying out activities pursuant to this Order; and (B) for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Kennecott, and any persons for performance of Work on or relating to the Site, including claims on account of construction delays.

XVI. FINANCIAL ASSURANCE AND SELF INSURANCE

82. Kennecott has provided EPA with a financial statement certified by Kennecott's chief financial officer which indicates that Kennecott meets or exceeds the following financial parameters: a) net working capital of \$40 million; b) tangible net worth of \$250 million; and c) assets located in the United States amounting to 75% of its total assets or \$250 million. For purposes of this Order, "tangible net worth" is defined as net worth minus goodwill, patents, trademarks, copyrights, non-compete agreements and royalty and price participation rights. EPA agrees that the financial statement submitted by Kennecott in support hereof is confidential business information and shall be given the full protection provided by 40 C.F.R. Part Two, Subpart B. Kennecott agrees to provide updated information on its financial

status within 45 days of any written request from EPA or in the event of a change in circumstances that causes Kennecott to fail to meet the above criteria.

83. At least seven (7) days prior to commencing any on-site Work under this Order, Kennecott shall provide certifying documentation to EPA that ensures that Kennecott shall maintain for the duration of this Order, comprehensive general and automobile liability insurance coverage with limits up to three million dollars, combined single limit.

XVII. MODIFICATIONS

84. If EPA determines that significant unanticipated or changed circumstances (as measured with regard to the effective date of this Order) warrants changes in the Work to be performed, EPA may take any of the following actions so long as such actions are in compliance with CERCLA and the NCP and within the scope of this Order: (1) require Kennecott to modify or amend the Work Plan; or (2) EPA may modify or amend the Work Plan. Kennecott shall perform the Work as modified or amended so long as it is necessary to accomplish the objectives of this Order. The scope of this Order and the objectives of this Order do not include and Kennecott shall not be required, under this Order, to undertake any activity that could cause shut-down of, or that could interfere with, Kennecott's ongoing operations. Furthermore, for purposes of this section (XVII Modifications), neither the scope of this Order nor the objectives of this Order shall include any Work modification or amendment that is estimated to cost \$500,000.00 or more, including but not limited to, contractors' direct costs, engineering and construction management costs, owner's costs, disposal costs and/or other costs associated with the modification, unless otherwise agreed to by Kennecott. EPA may take any other action authorized by CERCLA or the NCP.

85. Within seven calendar days of receipt of EPA's notice of modification, Kennecott shall either confirm its willingness to perform the additional work or invoke the Dispute Resolution procedures in Section XVIII of this Order concerning any issue of fact relating to the modification. If Kennecott invokes Dispute Resolution, EPA has the option to proceed with Dispute Resolution or to take other actions as authorized by CERCLA and the NCP such as performing the work itself or issuing an Unilateral Administrative Order to Kennecott, or any other party, for the performance of the additional work.

86. Modifications to the schedule may be made in writing by the EPA Project Coordinator or at his or her oral direction. Modifications to the Work Plan or the schedule may also be made by

agreement of both parties Project Coordinators. Any oral modification shall be memorialized in writing within 10 days.

87. Any other requirement of this Order may be amended by mutual agreement of EPA and Kennecott. Amendments shall be in writing and shall be effective when signed by both parties. The

EPA On-Scene Coordinator and/or the Remedial Project Manager does not have the authority to sign amendments to the Order.

88. If Kennecott seeks permission to deviate from the approved Work Plan it shall submit a written request to EPA's Project Coordinator for approval outlining the proposed Work Plan modification and its basis.

89. No informal advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by Kennecott shall relieve it of its obligations to obtain such formal approval as may be required by this Order, and to comply with all requirements of this Order unless it is formally modified.

XVIII. DISPUTE RESOLUTION

90. If Kennecott objects to EPA's bill for response costs, written demand for stipulated penalties or notice of modification, Kennecott may invoke the following Dispute Resolution procedures. If the dispute involves a Modification, in accordance with Section XVII of this Order, the conditions of paragraph 85 must also be met prior to proceeding with Dispute Resolution. EPA and Kennecott shall have 14 days from the invocation of Dispute Resolution to attempt to resolve the dispute through formal negotiations (Negotiation Period). The Negotiation Period may be extended if EPA and Kennecott agree to such extension. Kennecott shall have 20 days from the end of the Negotiation Period to submit its written objections to EPA's bill for response costs, written demand for stipulated penalties or notice of modification, the basis for its objections and any arguments in favor of its position (Position Paper). EPA shall have 20 days from the receipt of Kennecott's Position Paper to submit its response. Unless otherwise agreed, Position Papers by EPA and Kennecott shall not exceed 5 pages in length and shall be sent in the manner prescribed in Paragraph 34. The matter shall then be submitted to the EPA Region VIII Presiding Officer for a final written decision. The Presiding Officer may waive the imposition of stipulated penalties incurred for items directly related to the subject matter of the Dispute Resolution if he/she determines that Kennecott's objections are based upon a reasonable interpretation of a legitimate area of dispute.

XIX. NOTICE OF COMPLETION

91. When EPA determines, after EPA's review of the Final Report, that this removal action has been fully performed in accordance with this Order, with the exception of any continuing obligations required by this Order, including post-removal site controls and record retention, EPA will provide a written Notice of Completion to Kennecott. EPA's issuance of the Notice of Completion shall constitute a determination that the Work performed pursuant to this Order, excepting any continuing obligations, is consistent with the NCP. If EPA determines that any portion of this removal action has not been completed in accordance with this Order, EPA will notify Kennecott and provide a list of the deficiencies. EPA will require that Kennecott modify the Work Plan to the extent allowable under the terms of this Order, if appropriate in order to correct such deficiencies. Kennecott shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Kennecott's failure to implement the approved modified Work Plan shall be deemed a violation of this Order.

XX. PUBLIC COMMENT

92. This Order, the attached SOW, the Engineering Evaluation/Cost Analysis ("EE/CA"), documents explaining the proposed CAMUs and other supporting documentation shall be made available for a thirty (30) day public comment period. EPA shall publish a notice of its intent to conduct this removal action and to identify CAMUs at this site as well as the existence and availability of the supporting documentation in a major newspaper of general circulation in Salt Lake County. After consideration of any comments submitted during the thirty (30) day public comment period, EPA will issue the Action Memorandum announcing the selection of a removal alternative and responding to significant comments received during the comment period.

XXI. SEVERABILITY

93. If a court issues an order that invalidates any provision of this Order or finds that Kennecott has sufficient cause not to comply with one or more provisions of this Order, Kennecott shall remain bound to comply with all provisions of this Order not invalidated or determined to be subject to a sufficient cause defense by the court's order.

XXII. EFFECTIVE DATE

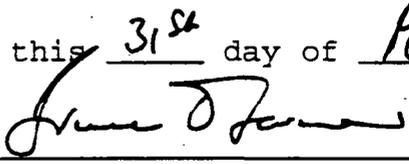
94. This Order may be executed in any number of counterparts, each of which when executed and delivered to EPA

shall be deemed to be an original, but such counterparts shall together constitute one and the same document.

95. This Order shall be effective five (5) days after the Order is signed by the Assistant Regional Administrator for the Office of Ecosystems Protection and Remediation of EPA Region VIII.

96. The undersigned representatives of the Parties to this Order hereby certify that they are fully authorized to enter into the terms and conditions of this Order and to bind the parties they represent to this document.

Agreed this 31st day of May, 1996.

By 

Title PRESIDENT

Kennecott Utah Copper Corporation

It is so ORDERED and Agreed this 4th day of June, 1996.

BY: _____

DATE: 6/4/96



Max H. Dodson
Assistant Regional Administrator for Ecosystems
Protection and Remediation
Region VIII
U.S. Environmental Protection Agency

EFFECTIVE DATE: 6/10/96