IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WASHINGTON

UNITED STATES OF AMERICA
Plaintiffs,

v.

THE BOC GROUP, INC.,
a Delaware Corporation,

Defendant

CIVIL ACTION NO. _____

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I. BACKGROUND

A. The United States of America ("United States"), on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), filed a complaint in this matter pursuant to Sections 106 and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §§ 9606, 9607.

B. The United States in its complaint seeks, inter alia: (1) reimbursement of costs incurred by EPA and the Department of Justice for response actions at the Boomsnub /Airco Superfund Site in Hazel Dell, Washington, together with accrued interest; and (2) performance of remedial design and remedial action by the defendant at the Site consistent with the National Contingency Plan, 40 C.F.R. Part 300 (as amended) ("NCP").

C. In accordance with the NCP and Section 121(f)(1)(F) of CERCLA, 42 U.S.C. § 9621(f)(1)(F), EPA notified the State of Washington (the "State") of negotiations with potentially responsible parties regarding the implementation of the remedial design and remedial action for the Site, and EPA has provided the State with an opportunity to participate in such negotiations and be a party to this Consent Decree. EPA also notified federal natural resource trustees about this Site when EPA began work at the Site.

D. The defendant that has entered into this Consent Decree ("Settling Defendant") does not admit any liability to the Plaintiff or to any other party arising out of the transactions or occurrences alleged in the complaint, nor does it acknowledge that the release or threatened release of hazardous substance(s) at or from the Site constitutes an imminent or substantial endangerment to the public health or welfare or the environment.

E. Pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA placed the Site on the National Priorities List ("NPL"), set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on April 25, 1995, 60 Fed. Reg. 20330.

F. EPA divided the Site into three operable units (OUs). OU-1 was the Boomsnub soil, the source of chromium contamination in groundwater. OU-2 was the source area for volatile organic compounds ("VOC") on the Settling Defendant's property. OU-3 was the site-wide groundwater inclusive of chromium and VOC contamination.

G. In response to a release or a substantial threat of a release of a hazardous substance(s) at or from the Site, EPA commenced in February, 1997, a Remedial Investigation and Feasibility Study ("RI/FS") for the Site pursuant to 40 C.F.R. § 300.430.

H. During the time EPA was conducting the RI/FS the Settling Defendant conducted an evaluation of conditions on its property and throughout the area where VOC were present in the groundwater. The results of this effort were incorporated into EPA's RI/FS and were used to prepare an engineering evaluation/cost analysis that identified technologies to remediate VOC in soil and groundwater. EPA then issued an Action Memorandum on September 25, 2000, which selected in-well stripping and soil vapor extraction as the remedial technologies for OU-2.

I. Pursuant to Section 117 of CERCLA, 42 U.S.C. § 9617, EPA published notice of the completion of the RI/FS and of the proposed plan for remedial action on August 8, 1999, in

the *Vancouver Columbian*, a major local newspaper of general circulation. EPA provided an opportunity for written and oral comments from the public on the proposed plan for remedial action. A copy of the transcript of the public meeting is available to the public as part of the administrative record upon which the Regional Administrator based the selection of the response action.

J. EPA's selection of the remedial action for OU-1 and OU-3 is embodied in a final Record of Decision ("ROD"), executed on February 3, 2000, on which the State has given its concurrence. The ROD includes a responsiveness summary to the public comments. Notice of the final plan was published in accordance with Section 117(b) of CERCLA.

K. Based on the information presently available to EPA, EPA believes that the Work (as defined in Paragraph 4.ff.) will be properly and promptly conducted by the Settling Defendant if conducted in accordance with the requirements of this Consent Decree and its appendices.

L. Solely for the purposes of Section 113(j) of CERCLA, the Remedial Action selected by the ROD, the Action Memorandum for OU-2, and the Work to be performed by the Settling Defendant shall constitute a response action taken or ordered by the President.

M. The Site is the location of a chromium plating facility owned and operated by Pacific Northwest Plating, a division of the Boomsnub Company, from 1978 to 1994. The Washington Department of Ecology ("WDOE" or "Ecology") issued enforcement orders to Boomsnub in 1982, 1987, and 1990, with respect to WDOE's discovery that Boomsnub's plating operations had released heavy metals such as chromium and lead into the soils and groundwater at the Site. EPA issued Boomsnub an enforcement order in 1994, and following a federal criminal indictment Boomsnub and three of its officials pled guilty to unlawful storage and disposal of chromium containing wastes. In 2000 Boomsnub entered into a Consent Decree with the United States to resolve its civil liability under CERCLA for the Site.

N. The Site is also the location of a facility owned and operated since 1964 by Settling Defendant, and its predecessor Airco, which manufactures and distributes compressed and liquified gases such as nitrogen, argon, and oxygen. The Settling Defendant's facility and the Boomsnub facility are located near the intersection of NE 47th Ave. and NE 78th St. in Hazel Dell, Washington and are separated by NE 47th Ave.

O. Operations at the Settling Defendant's facility resulted in the release of volatile organic compounds into the soils and groundwater at the Site. In 1992 the Settling Defendant voluntarily undertook soils and groundwater testing at the Site. Settling Defendant subsequently entered into an agreed order with WDOE in 1993 to continue this testing and to operate an air stripper which the State previously operated and which removed VOCs from groundwater at the Site. Settling Defendant has also entered into the following four administrative orders on consent with EPA between 1997 and 2002: CERCLA-10-0097-0065 (conducting a site evaluation); CERCLA-10-2001-0005 (construction of a sewer line to discharge treated groundwater into the City of Vancouver sewer system); CERCLA-10-2001-0014 (conducting a removal action targeted at the BOC Soils OU-2); CERCLA-10-2002-0052 (takeover from EPA of the operation and maintenance of the site-wide groundwater extraction/treatment system, including chromium treatment, for the Site-Wide Groundwater OU-3).

P. The actions presently being undertaken by the Settling Defendant under EPA orders (CERCLA No. 10-2001-0014 and CERCLA No. 10-2002-0052) will be continued under this Consent Decree. Both orders will be terminated on the Effective Date of this Consent Decree.

Q. The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and implementation of this Consent Decree will expedite and continue the ongoing cleanup of the Site and avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, it is hereby Ordered, Adjudged, and Decreed:

II. JURISDICTION

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1345, and 42 U.S.C. §§ 9606, 9607, and 9613(b). This Court also has personal jurisdiction over the Settling Defendant. Solely for the purposes of this Consent Decree and the underlying complaint, Settling Defendant waives all objections and defenses that it may have to jurisdiction of the Court or to venue in this District. Settling Defendant shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Notwithstanding the above, the Parties are not precluded from advocating their interpretation of the terms of this Consent Decree in the event of a dispute under Section XIX.

III. PARTIES BOUND

2. This Consent Decree applies to and is binding upon the United States and upon Settling Defendant and its successors and assigns. Any change in ownership or corporate status of Settling Defendant including, but not limited to, any transfer of assets or real or personal property, shall in no way alter Settling Defendant's responsibilities under this Consent Decree.

3. Settling Defendant shall provide a copy of this Consent Decree to each contractor hired to perform the Work (as defined in Paragraph 4.ff.) required by this Consent Decree and to each person representing Settling Defendant with respect to the Site or the Work and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this Consent Decree. Settling Defendant or its contractors shall provide written notice of the Consent Decree to all subcontractors hired to perform any portion of the Work required by this Consent Decree. Settling Defendant shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work contemplated herein in accordance with this Consent Decree. With regard to the activities undertaken pursuant to this Consent Decree, each contractor and subcontractor shall be deemed to be in a contractual relationship with Settling Defendant within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

IV. DEFINITIONS

4. Unless otherwise expressly provided herein, terms used in this Consent Decree that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are

used in this Consent Decree or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. "Action Memorandum" shall mean the EPA Region X Action Memorandum dated September 25, 2001, pertaining to OU-2 as set forth in Appendix A and attachments and amendments thereto.

b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*

c. "Consent Decree" shall mean this Decree and all appendices attached hereto (listed in Section XXIX). In the event of conflict between this Decree and any appendix, this Decree shall control.

d. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

e. "Effective Date" shall be the date that this Consent Decree is entered by the Court as provided in Paragraph 105.

f. "EPA" shall mean the United States Environmental Protection Agency and any successor departments, instrumentalities, or agencies of the United States.

g. "ESD" shall mean any Explanation of Significant Differences prepared for the Site by EPA.

h. "WDOE" or "Ecology" shall mean the Washington Department of Ecology and any successor departments or agencies of the State.

i. "Future Response Costs" shall mean 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 Consent Decree, verifying the Work, or otherwise implementing, overseeing, or enforcing this Consent Decree, including, but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Sections VII, IX (including, but not limited to, the cost of reasonable attorney time and any monies paid to secure access and/or to secure or implement institutional controls including, but not limited to, the amount of just compensation), XV, and Paragraph 88 of Section XXI. Future Response Costs shall also include all Interim Response Costs and all interest that has accrued on Past Response Costs pursuant to 42 U.S.C. § 9607(a) during the period from March 15, 2005 to the date of entry of this Consent Decree.

j. "Interim Response Costs" shall mean all costs including direct and indirect costs, (a) paid by the United States in connection with the Site between March 15, 2005, and the Effective Date, or (b) incurred by the United States in connection with the Site between March 15, 2005, and the Effective Date but paid after that date.

k. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507,

compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

l. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

m. "Operation and Maintenance" or "O & M" shall mean all activities required to maintain the effectiveness of the Remedial Action as required under the Operation and Maintenance Plan approved or developed by EPA pursuant to this Consent Decree and the Statement of Work (SOW).

n. "Paragraph" shall mean a portion of this Consent Decree identified by an arabic numeral or an upper case letter.

o. "Parties" shall mean the United States and the Settling Defendant.

p. "Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through March 15, 2005, plus Interest on all such costs which has accrued pursuant to 42 U.S.C. § 9607(a) through such date.

q. "Performance Standards" shall mean the cleanup standards and other measures of achievement of the goals of the Remedial Action, set forth in Section 10 of the ROD and Section III of the SOW, the Action Memorandum, and any modified standards established by EPA for reasons of technical impracticability pursuant to Paragraph 12.

r. "Plaintiff" shall mean the United States.

s. "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901 *et seq.* (also known as the Resource Conservation and Recovery Act).

t. "Record of Decision" or "ROD" shall mean the EPA Record of Decision relating to the Site signed on February 3, 2000, by the Regional Administrator, EPA Region 10, or his or her delegate, and all attachments and subsequent amendments thereto. The ROD is attached as Appendix B.

u. "Remedial Action" shall mean those activities, except for Operation and Maintenance, to be undertaken by the Settling Defendant pursuant to Paragraph 11 to implement the ROD and the Action Memorandum for OU-2, in accordance with the SOW and the final Remedial Design and Remedial Action Work Plans and other plans approved by EPA pursuant to this Consent Decree.

v. "Remedial Design" shall mean those activities to be undertaken by the Settling Defendant pursuant to Paragraph 11 to develop the final design including plans and specifications for the Remedial Action pursuant to the Remedial Design/Remedial Action Work Plan.

w. "Remedial Design/Remedial Action Work Plan" shall mean the document developed pursuant to Paragraph 11 of this Consent Decree and approved by EPA, and any amendments thereto.

x. "Section" shall mean a portion of this Consent Decree identified by a Roman numeral.

y. "Settling Defendant" shall mean The BOC Group, Inc., and its corporate successors, if any.

z. "Site" shall mean the Boomsnub/Airco Superfund Site, located near the intersection of NE 47th Avenue and NE 78th Street in Hazel Dell, Washington, which includes the Boomsnub facility and the Settling Defendant's facility and any adjacent areas where hazardous substances have come to be located. The Site is depicted generally on the map attached as Appendix C.

aa. "State" shall mean the State of Washington.

bb. "Statement of Work" or "SOW" shall mean the statement of work for implementation of the Remedial Design, Remedial Action, and Operation and Maintenance at the Site, as set forth in Appendix D to this Consent Decree and any modifications made in accordance with this Consent Decree.

cc. "Supervising Contractor" shall mean the principal contractor retained by the Settling Defendant pursuant to Paragraph 10 of this Consent Decree to supervise and direct the implementation of the Work under this Consent Decree.

dd. "United States" shall mean the United States of America.

ee. "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33), 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (4) any "hazardous material" under RCW Ch. 70.105.

ff. "Work" shall mean all activities Settling Defendant is required to perform under this Consent Decree, except those required by Section XV (Payment of Future Response Costs), Section XVII (Indemnification and Insurance), and XXV (Retention of Records).

V. GENERAL PROVISIONS

5. Objectives of the Parties. The objectives of the Parties in entering into this Consent Decree are to protect public health or welfare or the environment at the Site by the design and implementation of response actions at the Site by the Settling Defendant, to reimburse response costs of the Plaintiff, and to resolve the claims of Plaintiff against Settling Defendant as provided in this Consent Decree, and to provide the Settling Defendant with protection from claims and contribution actions as provided for by this Consent Decree.

6. Commitments by Settling Defendant. Settling Defendant shall finance and perform the Work in accordance with this Consent Decree, the ROD, the Action Memorandum, the SOW, and all work plans and other plans, standards, specifications, and schedules set forth herein or developed by Settling Defendant and approved by EPA pursuant to this Consent Decree. Settling Defendant shall also reimburse the United States for Past Response Costs and Future Response Costs as provided in this Consent Decree.

7. Compliance With Applicable Law. All activities undertaken by Settling Defendant pursuant to this Consent Decree shall be performed in accordance with the

requirements of all applicable federal and state laws and regulations. Settling Defendant must also comply with all applicable or relevant and appropriate requirements of all Federal and state environmental laws as set forth in the ROD and the SOW. The activities conducted pursuant to this Consent Decree, if approved by EPA, shall be considered to be consistent with the NCP.

8. Permits.

a. As provided in Section 121(e) of CERCLA and Section 300.400(e) of the NCP, no permit shall be required for any portion of the Work conducted entirely on Site (and within the areal extent of contamination from the Site or in suitable areas proximate to the contamination and necessary for implementation of the Work). Where any portion of the Work that is not on Site requires a federal or state permit or approval, Settling Defendant shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

b. The Settling Defendant may seek relief under the provisions of Section XVIII (Force Majeure) of this Consent Decree for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit required for the Work.

c. This Consent Decree is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

9. Notice to Successors-in-Title.

a. With respect to any property owned by the Settling Defendant that is located within the Site, within 30 days after the entry of this Consent Decree, the Settling Defendant shall submit to EPA for review and approval a notice to be filed with the Recorder's Office, Clark County, State of Washington, which shall provide notice to all successors-in-title that the property is part of the Site, that EPA selected a remedy for the Site on February 3, 2000, and that Settling Defendant has entered into a Consent Decree requiring implementation of the remedy. Such notice(s) shall identify the United States District Court in which the Consent Decree was filed, the name and civil action number of this case, and the date the Consent Decree was entered by the Court. The Settling Defendant shall record the notice(s) within 10 days of EPA's approval of the notice(s). The Settling Defendant shall provide EPA with a certified copy of the recorded notice(s) within 10 days of recording such notice(s).

b. At least 30 days prior to the Settling Defendant's conveyance of any interest in property which it owns and which is located within the Site including, but not limited to, fee interests, leasehold interests, and mortgage interests, the Settling Defendant shall give the grantee written notice of (i) this Consent Decree, (ii) any instrument by which an interest in real property has been conveyed that confers a right of access to such property (hereinafter referred to as "access easements") pursuant to Section IX (Access and Institutional Controls), and (iii) any instrument by which an interest in real property has been conveyed that confers a right to enforce restrictions on the use of such property (hereinafter referred to as "restrictive easements") pursuant to Section IX (Access and Institutional Controls). At least 30 days prior to such conveyance, the Settling Defendant shall also give written notice to EPA and the State of the proposed conveyance, including the name and address of the grantee, and the date on which notice of the Consent Decree, access easements, and/or restrictive easements was given to the grantee.

c. In the event of any such conveyance, the Settling Defendant's obligations under this Consent Decree, including, but not limited to, its obligation to provide or secure access and institutional controls, as well as to abide by such institutional controls, pursuant to Section IX (Access and Institutional Controls) of this Consent Decree, shall continue to be met by the Settling Defendant. In no event shall the conveyance release or otherwise affect the liability of the Settling Defendant to comply with all provisions of this Consent Decree, absent the prior written consent of EPA. If the United States approves, the grantee may perform some or all of the Work under this Consent Decree.

VI. PERFORMANCE OF THE WORK BY SETTLING DEFENDANT

10. Selection of Supervising Contractor.

a. All aspects of the Work to be performed by Settling Defendant pursuant to Sections VI (Performance of the Work by Settling Defendant), VII (Remedy Review), VIII (Quality Assurance, Sampling and Data Analysis), and XV (Emergency Response) of this Consent Decree shall be under the direction and supervision of the Supervising Contractor. The firm of EA Engineering, Science and Technology, Inc. shall be the Supervising Contractor. It has submitted its Quality Assurance Sampling Plan, which has been prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent. If at any time Settling Defendant proposes to change its Supervising Contractor, Settling Defendant shall give such notice to EPA and must obtain an authorization to proceed from EPA before the new Supervising Contractor performs, directs, or supervises any Work under this Consent Decree.

b. If EPA disapproves a proposed Supervising Contractor, EPA will notify Settling Defendant in writing. Settling Defendant shall submit to EPA a list of contractors, including the qualifications of each contractor, that would be acceptable to the Settling Defendant within 30 days of receipt of EPA's disapproval of the contractor previously proposed. EPA will provide written notice of the names of any contractor(s) on the list that it disapproves and an authorization to proceed with respect to any of the other contractors. Settling Defendant may select any contractor from that list that is not disapproved and shall notify EPA of the name of the contractor selected within 21 days of EPA's authorization to proceed.

c. If EPA fails to provide written notice of its authorization to proceed or disapproval as provided in this Paragraph and this failure prevents the Settling Defendant from meeting one or more deadlines in a plan approved by EPA pursuant to this Consent Decree, Settling Defendant may seek relief under the provisions of Section XVIII (Force Majeure) hereof.

11. Remedial Design/ Remedial Action Work Plan

a. Within 60 days after the Effective Date of this Consent Decree, Settling Defendant shall submit to EPA a work plan for the design, construction and implementation of the Remedial Action at the Site ("Remedial Design/Remedial Action Work Plan" or "RD/RA Work Plan"). The RD/RA Work Plan shall provide for design, construction and implementation of the remedy set forth in the ROD, in accordance with the SOW, and for achievement of the Performance Standards and other requirements set forth in the ROD, this Consent Decree, and/or the SOW. Upon its approval by EPA, the RD/RA Work Plan shall be incorporated into and become enforceable under this Consent Decree.

b. The RD/RA Work Plan shall include plans and schedules for implementation of all remaining remedial design and remedial action tasks identified in the SOW, including, but not limited to, (1) updates to existing Site-related documents (e.g., O&M Manual, Health and Safety Plan, Quality Assurance Sampling Plan, Construction Quality Assurance Plan), (2) Site Closure Plan, and (3) Long-Term Groundwater Monitoring Plan.

c. The RD/RA Work Plan shall include each and every element identified in the SOW.

d. Upon approval of the RD/RA Work Plan by EPA, and submittal of the Health and Safety Plan for all field activities to EPA, Settling Defendant shall implement the RD/RA Work Plan. The Settling Defendant shall submit to EPA all plans, submittals, and other deliverables required under the approved RD/RA Work Plan in accordance with the approved schedule for review and approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Unless otherwise directed by EPA, Settling Defendant shall not commence further Remedial Design activities at the Site prior to approval of the Remedial Design component of the RD/RA Work Plan. Such approval shall not be unreasonably withheld or delayed.

e. The Remedial Design for those work elements requiring design as identified in the approved RD/RA Work Plan shall include, as necessary, the following: (1) design criteria; (2) results of additional field sampling and pre-design work; (3) project delivery strategy; (4) preliminary plans, drawings and sketches; (5) required specifications in outline form; and (6) preliminary construction schedule.

f. The intermediate design submittal, if required by EPA or if independently submitted by the Settling Defendant, shall be a continuation and expansion of the preliminary design. Any value engineering proposals must be identified and evaluated during this review.

g. The pre-final/final design submittal shall include, at a minimum, the following: (1) final plans and specifications; (2) updates as necessary to the Site O&M Manual; (3) updates as necessary to the Construction Quality Assurance Project Plan ("CQAPP"); (4) updates as necessary to the Site Quality Assurance Sampling Plan, and (5) updates as necessary to the Site Contingency Plan. The CQAPP, which shall detail the approach to quality assurance during construction activities at the Site, shall specify a quality assurance official ("QA Official"), to conduct a quality assurance program during the construction phase of the project.

h. The Settling Defendant shall submit to EPA all plans, submittals, or other deliverables required under the approved RD/RA Work Plan in accordance with the approved schedule for review and approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Unless otherwise directed by EPA, Settling Defendant shall not commence physical Remedial Action activities at the Site prior to approval of the Remedial Action Work Plan. Such approval shall not be unreasonably withheld or delayed.

12. The Settling Defendant shall continue to implement the Remedial Action and O&M until the Performance Standards for VOCs are achieved and for so long thereafter as is otherwise required under this Consent Decree. Performance Standards include those that may be established pursuant to EPA's "Guidance for Evaluating Technical Impracticability of Ground-water Restoration."

13. Modification of the SOW or Related Work Plans.

a. If EPA determines that modification to the work specified in the SOW and/or in work plans developed pursuant to the SOW is necessary to achieve and maintain the Performance Standards or to carry out and maintain the effectiveness of the remedy set forth in the ROD and the Action Memorandum, EPA may require that such modification be incorporated in the SOW and/or such work plans, provided, however, that a modification may only be required pursuant to this Paragraph to the extent that it is consistent with the scope of the remedy selected for OU-3 in the ROD and for OU-2 in the Action Memorandum.

b. For the purposes of this Paragraph 13 and Paragraph 50 (Completion of Remedial Action) only, the "scope of the remedy selected for OU-3 in the ROD, the Action Memorandum and the SOW" is set forth in Section III.B. of the SOW (Appendix D).

c. If Settling Defendant objects to any modification determined by EPA to be necessary pursuant to this Paragraph, it may seek dispute resolution pursuant to Section XIX (Dispute Resolution), and Paragraph 68 (relating to record review). The SOW and/or related work plans shall be modified in accordance with final resolution of the dispute.

d. Settling Defendant shall implement any work required by any modifications incorporated in the SOW and/or in work plans developed pursuant to the SOW in accordance with this Paragraph.

e. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions for OU-2 and OU-3 as otherwise provided in this Consent Decree.

14. Disclaimer of Warranty. Settling Defendant acknowledges and agrees that nothing in this Consent Decree, the SOW, or the Remedial Design or Remedial Action Work Plans constitutes a warranty or representation of any kind by Plaintiff that compliance with the work requirements set forth in the SOW and the Work Plans will achieve the Performance Standards.

15. Off-Site Shipment.

a. Settling Defendant shall, prior to any off-Site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving facility's state and to the EPA Project Coordinator of such shipment of Waste Material. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

(1) The Settling Defendant shall include in the written notification the following information, where available: (1) the name and location of the facility to which the Waste Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. The Settling Defendant shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

(2) The identity of the receiving facility and state will be determined by the Settling Defendant following the award of the contract for Remedial Action construction. The Settling Defendant shall provide the information required by Paragraph 15.a. as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

b. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Settling Defendant shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3) and 40 C.F.R. 300.440. Settling Defendant shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulations cited in the preceding sentence.

VII. REMEDY REVIEW

16. Periodic Review. Settling Defendant shall conduct any studies and investigations as requested by EPA, in order to permit EPA to conduct reviews of whether the Remedial Action is protective of human health and the environment at least every five years as required by Section 121(c) of CERCLA and any applicable regulations.

17. EPA Selection of Further Response Actions. If EPA determines, at any time, that the Remedial Action is not protective of human health and the environment, EPA may select further response actions for the Site in accordance with the requirements of CERCLA and the NCP.

18. Opportunity To Comment. Settling Defendant and, if required by Sections 113(k)(2) or 117 of CERCLA, the public, will be provided with an opportunity to comment on any further response actions proposed by EPA as a result of the review conducted pursuant to Section 121(c) of CERCLA and to submit written comments for the record during the comment period.

19. Settling Defendant's Obligation To Perform Further Response Actions. If EPA selects further response actions for the Site, the Settling Defendant shall undertake such further response actions to the extent that the reopener conditions in Paragraph 84 or Paragraph 85 (United States' reservations of liability based on unknown conditions or new information) are satisfied. Settling Defendant may invoke the procedures set forth in Section XIX (Dispute Resolution) to dispute (1) EPA's determination that the reopener conditions of Paragraph 84 or Paragraph 85 are satisfied, (2) EPA's determination that the Remedial Action is not protective of human health and the environment, or (3) EPA's selection of the further response actions. Disputes pertaining to whether the Remedial Action is protective of human health or the environment, or to EPA's selection of further response actions, shall be resolved pursuant to Paragraph 68 (relating to record review).

20. Submissions of Plans. If Settling Defendant is required to perform the further response actions pursuant to Paragraph 19, it shall submit a plan for such work to EPA for approval in accordance with the procedures set forth in Section VI (Performance of the Work by Settling Defendant) and shall implement the plan approved by EPA in accordance with the provisions of this Decree.

VIII. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS

21. Settling Defendant shall use quality assurance, quality control, and chain of custody procedures for all treatability, design, compliance and monitoring samples in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R5)" (EPA/240/B-01/003, March 2001) "Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February 1998), and subsequent amendments to such guidelines upon notification by EPA to Settling Defendant of such amendment. Amended guidelines shall apply only to procedures conducted after such notification. Prior to the commencement of any monitoring project under this Consent Decree, Settling Defendant shall submit to EPA for approval an addendum to the previously-approved Quality Assurance Sampling Plan ("QASP") that is consistent with the SOW, the NCP and applicable guidance documents as necessary. If relevant to the proceeding, the Parties agree that validated sampling data generated in accordance with the QASP(s) and reviewed and approved by EPA shall be admissible as evidence, without objection, in any proceeding under this Decree. Settling Defendant shall ensure that EPA and State personnel and their authorized representatives are allowed access at reasonable times to all laboratories utilized by Settling Defendant in implementing this Consent Decree. In addition, Settling Defendant shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the QASP for quality assurance monitoring. Settling Defendant shall ensure that the laboratories it utilizes for the analysis of samples taken pursuant to this Decree perform all analyses according to accepted EPA methods. Accepted EPA methods consist of those methods which are documented in the "Contract Lab Program Statement of Work for Inorganic Analysis" and the "Contract Lab Program Statement of Work for Organic Analysis," dated February 1988, and any amendments made thereto during the course of the implementation of this Decree; however, upon approval by EPA, the Settling Defendant may use other analytical methods which are as stringent as or more stringent than the CLP- approved methods. Settling Defendant shall ensure that all laboratories it uses for analysis of samples taken pursuant to this Consent Decree participate in an EPA or EPA-equivalent QA/QC program. Settling Defendant shall only use laboratories that have a documented Quality System which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995), and "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP) as meeting the Quality System requirements. Settling Defendant shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Decree will be conducted in accordance with the procedures set forth in the QASP approved by EPA.

22. Upon request, the Settling Defendant shall allow split or duplicate samples to be taken by EPA or its authorized representatives and EPA agrees to provide Settling Defendant with a copy of any analytical results of those samples. Settling Defendant shall notify EPA not less than 28 days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow the Settling Defendant to take split or duplicate samples of any samples it takes as part of the Plaintiff's oversight of the Settling Defendant's implementation of the Work.

23. Settling Defendant shall submit to EPA three copies of the results of all sampling and/or tests or other data obtained or generated by or on behalf of Settling Defendant with respect to the Site and/or the implementation of this Consent Decree unless EPA agrees otherwise.

24. Notwithstanding any provision of this Consent Decree, the United States hereby retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA and any other applicable statutes or regulations.

IX. ACCESS AND INSTITUTIONAL CONTROLS

25. If the Site, or any other property where access and/or land/water use restrictions are needed to implement this Consent Decree, is owned by the Settling Defendant, the Settling Defendant shall upon reasonable prior notice:

a. commencing on the date of lodging of this Consent Decree, provide the United States, the State, and their representatives, including EPA and its contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Consent Decree including, but not limited to, the following activities:

(1) Monitoring the Work;

(2) Verifying any data or information submitted to the United States;

(3) Conducting investigations relating to contamination at or near the Site;

(4) Obtaining samples;

(5) Assessing the need for, planning, or implementing additional response actions at or near the Site;

(6) Assessing implementation of quality assurance and quality control practices as defined in the approved Quality Assurance Project Plans;

(7) Implementing the Work pursuant to the conditions set forth in Paragraph 88 of this Consent Decree;

(8) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Settling Defendant or their agents, consistent with Section XXIV (Access to Information);

(9) Assessing Settling Defendant's compliance with this Consent Decree; and

(10) Determining whether the Site or other such property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted, by or pursuant to this Consent Decree.

EPA and the Settling Defendant acknowledge that the property of Settling Defendant includes an operating business and that the right of access shall be executed in a reasonable way and in conformance with Settling Defendant's safety/safety training requirements and so as to minimize interference with business operations.

b. commencing on the date of lodging of this Consent Decree, refrain from using the Site, or any property that it owns, in any manner that would interfere with or adversely affect the implementation, integrity, or protectiveness of the remedial measures to be performed pursuant to this Consent Decree.

c. With respect to the property that is owned by Settling Defendant, Settling Defendant shall execute and record in the Recorder's Office of Clark County, State of Washington, an easement and/or restrictive covenant, running with the land, that (i) grants a right of access, if requested, for the purpose of conducting any activity related to this Consent Decree including, but not limited to, those activities listed in Paragraph 25.a. of this Consent Decree, and (ii) grants the right to enforce the land/water use restrictions listed in Paragraph 25.b. of this Consent Decree, or other restrictions that EPA determines are necessary to implement, ensure non-interference with, or ensure the protectiveness of the remedial measures to be performed pursuant to this Consent Decree. The Settling Defendant shall grant the access rights and the rights to enforce the land/water use restrictions to an appropriate grantee or grantees designated by EPA. The Settling Defendant shall, within 45 days of entry of this Consent Decree, submit to EPA for review and approval with respect to such property:

(1) A draft easement that is enforceable under the laws of the State of Washington, and

(2) a current title insurance commitment or some other evidence of title acceptable to EPA, such as a title search report, which shows title to the land described in the easement to be free and clear of all prior recorded liens and encumbrances (except when those liens or encumbrances are approved by EPA or when, despite best efforts, Settling Defendant is unable to obtain release or subordination of such prior liens or encumbrances). EPA shall endeavor in good faith to provide its response to Settling Defendant within 30 days.

Within 30 days of EPA's approval and acceptance of the easement and the title evidence, the Settling Defendant shall update the title search and, if it is determined that nothing has occurred since the effective date of the commitment or title search report to affect the title adversely, record the easement with the Recorder's Office of Clark County. Within 30 days of recording the easement, the Settling Defendant shall provide EPA with a final title insurance policy, or other final evidence of title acceptable to EPA, such as a final title search report, and a certified copy of the original recorded easement showing the clerk's recording stamps. If the easement is to be conveyed to the United States, the easement and title evidence (including final title evidence) shall be prepared in accordance with the U.S. Department of Justice Title Standards 2001, and approval of the sufficiency of title must be obtained as required by 40 U.S.C. § 255.

26. If any portion of the Site, or any other property where access and/or land/water use restrictions are needed to implement this Consent Decree, is owned or controlled by persons other than the Settling Defendant, or the Boomsnub Corporation, its successors, and assigns, the Settling Defendant shall use best efforts as defined by Paragraph 27 to secure from such persons:

a. an agreement to provide access thereto for Settling Defendant, as well as for the United States on behalf of EPA, and the State, as well as their representatives (including contractors), for the purpose of conducting any activity related to this Consent Decree including, but not limited to, those activities listed in Paragraph 25.a. of this Consent Decree. EPA and the

Settling Defendant acknowledge that the property subject to this requirement may include operating businesses and that the right of access shall be executed in a reasonable way so as to minimize interference with such businesses, including compliance with any applicable safety/safety training requirements;

b. an agreement, enforceable by the Settling Defendant and the United States, to refrain from using the Site, or such other property, in any manner that would interfere with or adversely affect the implementation, integrity, or protectiveness of the remedial measures to be performed pursuant to this Consent Decree; and

c. the execution and recordation in the Recorder's Office of Clark County, State of Washington, of an easement, running with the land, that (i) grants a right of access for the purpose of conducting any activity related to this Consent Decree including, but not limited to, those activities listed in Paragraph 25.a. of this Consent Decree, and (ii) grants the right to enforce the land/water use restrictions listed in Paragraph 25.b. of this Consent Decree, or other restrictions that EPA determines are necessary to implement, ensure non-interference with, or ensure the protectiveness of the remedial measures to be performed pursuant to this Consent Decree. The access rights and/or rights to enforce land/water use restrictions shall be granted to the Settling Defendant and its representatives, and/or other appropriate grantees designated by EPA. Within 90 days of entry of this Consent Decree, Settling Defendant shall submit to EPA for review and approval with respect to such property:

(1) A draft easement that is enforceable under the laws of the State of Washington, and

(2) a current title insurance commitment, or some other evidence of title acceptable to EPA, such as a title search report, which shows title to the land described in the easement to be free and clear of all prior recorded liens and encumbrances (except when those liens or encumbrances are approved by EPA or when, despite best efforts, Settling Defendant is unable to obtain release or subordination of such prior liens or encumbrances). EPA shall endeavor in good faith to provide its response to Settling Defendant within 30 days.

Within 30 days of EPA's approval and acceptance of the easement and the title evidence, Settling Defendant shall update the title search and, if it is determined that nothing has occurred since the effective date of the commitment or title search report to affect the title adversely, the easement shall be recorded with the Recorder's Office of Clark County. Within 30 days of the recording of the easement, Settling Defendant shall provide EPA with a final title insurance policy, or other final evidence of title acceptable to EPA, such as a final title search report, and a certified copy of the original recorded easement showing the clerk's recording stamps. If the easement is to be conveyed to the United States, the easement and title evidence (including final title evidence) shall be prepared in accordance with the U.S. Department of Justice Title Standards 2001, and approval of the sufficiency of title must be obtained as required by 40 U.S.C. § 255.

27. For purposes of Paragraphs 25 and 26 of this Consent Decree, "best efforts" includes the payment of reasonable sums of money in consideration of access, access easements, land/water use restrictions, restrictive easements, and/or an agreement to release or subordinate a prior lien or encumbrance. If (a) any access or land/water use restriction agreements required by Paragraphs 26.a. or 26.b. of this Consent Decree are not obtained within 90 days of the date of

entry of this Consent Decree, (b) any access easements or restrictive easements required by Paragraph 26.c. of this Consent Decree are not submitted to EPA in draft form within 90 days of the date of entry of this Consent Decree, or (c) Settling Defendant are unable to obtain an agreement pursuant to Paragraph 25.c.(1) or Paragraph 26.c.(1) from the holder of a prior lien or encumbrance to release or subordinate such lien or encumbrance to the easement being created pursuant to this consent decree within 90 days of the date of entry of this consent decree, Settling Defendant shall promptly notify the United States in writing, and shall include in that notification a summary of the steps that Settling Defendant has taken to attempt to comply with Paragraph 25 or 26 of this Consent Decree. The United States may, as it deems appropriate, assist Settling Defendant in obtaining access or land/water use restrictions, either in the form of contractual agreements or in the form of easements running with the land, or in obtaining the release or subordination of a prior lien or encumbrance. Settling Defendant shall reimburse the United States in accordance with the procedures in Section XVI (Reimbursement of Response Costs), for all costs incurred, direct or indirect, by the United States in obtaining such access, land/water use restrictions, and/or the release/subordination of prior liens or encumbrances including, but not limited to, the cost of attorney time and the amount of monetary consideration paid or just compensation.

28. If EPA determines that land/water use restrictions in the form of state or local laws, regulations, ordinances or other governmental controls are needed to implement the remedy selected in the ROD, ensure the integrity and protectiveness thereof, or ensure non-interference therewith, Settling Defendant shall cooperate with EPA's efforts to secure such governmental controls.

29. The infiltration gallery on the Settling Defendant's property may be used by the Settling Defendant, EPA, or the State for disposal of treated groundwater. Settling Defendant shall maintain the infiltration gallery until EPA certifies Completion of Remedial Action pursuant to Paragraph 50.b. After such Certification is made and during any period of subsequent use of the infiltration gallery by EPA or the State, the Settling Defendant shall not be required to maintain the infiltration gallery and it shall be made available on an "as is" basis. Settling Defendant shall provide access to EPA and the State at all reasonable times to the infiltration gallery. Such access shall be consistent with the provisions of Paragraph 25.a. with regard to conformance with Settling Defendant's safety/safety training requirements. During any period of subsequent use of the infiltration gallery by EPA or the State, if it becomes necessary for EPA or the State to make repairs or modifications, Settling Defendant shall provide access on reasonable terms and conditions.

30. Notwithstanding any provision of this Consent Decree, the United States retains all of its access authorities and rights, as well as all of its rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA and any other applicable statute or regulations.

X. REPORTING REQUIREMENTS

31. In addition to any other requirement of this Consent Decree, Settling Defendant shall submit to EPA three copies of written semi-annual progress reports that: (a) describe the actions which have been taken toward achieving compliance with this Consent Decree during the previous six months; (b) include a summary of all results of sampling and tests and all other data

received or generated by Settling Defendant or their contractors or agents in the previous six months; (c) identify all work plans, plans and other deliverables required by this Consent Decree completed and submitted during the previous six months; (d) describe all actions, including, but not limited to, data collection and implementation of work plans, which are scheduled for the next six months and provide other information relating to the progress of construction, including, but not limited to, critical path diagrams, Gantt charts and Pert charts as appropriate; (e) include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of the Work, and a description of efforts made to mitigate those delays or anticipated delays; (f) include any modifications to the work plans or other schedules that Settling Defendant has proposed to EPA or that have been approved by EPA; and (g) describe all activities undertaken in support of the Community Relations Plan during the previous six months and those to be undertaken in the next six months. Settling Defendant shall submit these progress reports to EPA by the twentieth day of the months of April and October following the lodging of this Consent Decree until EPA notifies the Settling Defendant pursuant to Paragraph 50.b. of Section XIV (Certification of Completion). If requested by EPA, Settling Defendant shall also provide briefings for EPA to discuss the progress of the Work. Notwithstanding the above, Settling Defendant may request that EPA approve a less frequent submission of progress reports if circumstances justify the same. It shall be at EPA's discretion to approve or disapprove of such requests.

32. The Settling Defendant shall notify EPA of any change in the schedule described in the semi-annual progress report for the performance of any activity, including, but not limited to, data collection and implementation of work plans, no later than seven days prior to the performance of the activity.

33. Upon the occurrence of any event during performance of the Work that Settling Defendant is required to report pursuant to Section 103 of CERCLA or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), Settling Defendant shall within 24 hours of the onset of such event orally notify the EPA Project Coordinator or, in the event that the EPA Project Coordinator is not available, the Emergency Response Section, Region 10, United States Environmental Protection Agency. These reporting requirements are in addition to the reporting required by CERCLA Section 103 or EPCRA Section 304.

34. Within 20 days of the onset of such an event, Settling Defendant shall furnish to Plaintiff a written report, signed by the Settling Defendant's Project Coordinator, setting forth the events which occurred and the measures taken, and to be taken, in response thereto. Within 30 days of the conclusion of such an event, Settling Defendant shall submit a report setting forth all actions taken in response thereto.

35. Settling Defendant shall submit three copies of all plans, reports, and data required by the SOW, the RD/RA Work Plan, or any other approved plans to EPA in accordance with the schedules set forth in such plans. Upon request by EPA Settling Defendant shall submit in electronic form all portions of any report or other deliverable Settling Defendant is required to submit pursuant to the provisions of this Consent Decree.

36. All reports and other documents submitted by Settling Defendant to EPA (other than the semi-annual progress reports referred in Paragraph 31) which purport to document

Settling Defendant's compliance with the terms of this Consent Decree shall be signed by an authorized representative of the Settling Defendant.

XI. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

37. After review of any plan, report or other item that is required to be submitted for approval pursuant to this Consent Decree, EPA, after reasonable opportunity for review and comment, shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that the Settling Defendant modify the submission; or (e) any combination of the above. EPA shall not, however, modify a submission without first providing Settling Defendant at least one written notice of deficiency and an opportunity to cure within 15 days of receipt of such notice, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects and the deficiencies in the submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

38. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 37(a), (b), or (c), Settling Defendant shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA subject only to its right to invoke the Dispute Resolution procedures set forth in Section XIX (Dispute Resolution) with respect to the modifications or conditions made by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Paragraph 37(c) and the submission has a material defect, EPA retains its right to seek stipulated penalties, as provided in Section XX (Stipulated Penalties).

39. Resubmission of Plans.

a. Upon receipt of a notice of disapproval pursuant to Paragraph 37(d), Settling Defendant shall, within 15 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval. Any stipulated penalties applicable to the submission, as provided in Section XX, shall accrue during the 15-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 40 and 41.

b. Notwithstanding the receipt of a notice of disapproval pursuant to Paragraph 37(d), Settling Defendant shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve Settling Defendant of any liability for stipulated penalties under Section XX (Stipulated Penalties).

40. In the event that a resubmitted plan, report or other item, or portion thereof, is disapproved by EPA, EPA may again require the Settling Defendant to correct the deficiencies, in accordance with the preceding Paragraphs. EPA also retains the right to modify or develop the plan, report or other item. Settling Defendant shall implement any such plan, report, or item as modified or developed by EPA, subject only to its right to invoke the procedures set forth in Section XIX (Dispute Resolution).

41. If upon resubmission, a plan, report, or item is disapproved or modified by EPA due to a material defect, Settling Defendant shall be deemed to have failed to submit such plan,

report, or item timely and adequately unless the Settling Defendant invokes the dispute resolution procedures set forth in Section XIX (Dispute Resolution) and EPA's action is overturned pursuant to that Section. The provisions of Section XIX (Dispute Resolution) and Section XX (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is upheld, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally disapproved.

42. All plans, reports, and other items required to be submitted to EPA under this Consent Decree shall, upon approval or modification by EPA, be enforceable under this Consent Decree. In the event EPA approves or modifies a portion of a plan, report, or other item required to be submitted to EPA under this Consent Decree, the approved or modified portion shall be enforceable under this Consent Decree.

XII. PROJECT COORDINATORS

43. The Project Coordinators shall be as follows:

For EPA:

Claire Hong
U.S. Environmental Protection Agency
1200 Sixth Avenue
Seattle, WA 98101

For Settling Defendant:

Joanmarie Eggert
Client Services Manager
EA Engineering, Science and Technology, Inc.
12011 NE 1st St.
Suite 100
Bellevue, WA 98005

If a Project Coordinator initially designated is changed, the identity of the successor will be given to the other Party at least five working days before the changes occur, unless impracticable, but in no event later than the actual day the change is made. Any changes to the Settling Defendant's Project Coordinator shall be subject to disapproval by EPA. The successor shall have the technical expertise sufficient to adequately oversee all aspects of the Work. The Settling Defendant's Project Coordinator shall not be an attorney for the Settling Defendant in this matter. He or she may assign other representatives, including other contractors, to serve as a Site representative for oversight of performance of daily operations during remedial activities.

44. Plaintiff may designate other representatives, including, but not limited to, EPA and State employees, and federal contractors and consultants, to observe and monitor the progress of any activity undertaken pursuant to this Consent Decree. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (RPM) and an On-Scene Coordinator (OSC) by the National Contingency Plan, 40 C.F.R. Part 300. In addition, EPA's Project Coordinator shall have authority, consistent with the National Contingency Plan, to halt any Work required by this Consent Decree and to take any necessary response action when he or

she determines that conditions at the Site constitute an emergency situation or may present an immediate threat to public health or welfare or the environment due to release or threatened release of Waste Material.

45. EPA's Project Coordinator and the Settling Defendant's Project Coordinator will meet or confer by phone on a regular basis as determined by EPA.

XIII. ASSURANCE OF ABILITY TO COMPLETE WORK

46. Within 45 days of entry of this Consent Decree, Settling Defendant shall establish and maintain financial security in the amount of ten million dollars ($10,000,000) in one or more of the following forms:

a. A surety bond guaranteeing performance of the Work;

b. One or more irrevocable letters of credit equaling the total estimated cost of the Work;

c. A trust fund;

d. A guarantee to perform the Work by one or more parent corporations or subsidiaries, or by one or more unrelated corporations that have a substantial business relationship with the Settling Defendant; or

e. A demonstration that the Settling Defendant satisfies the requirements of 40 C.F.R. Part 264.143(f).

47. If the Settling Defendant seeks to demonstrate the ability to complete the Work through a guarantee by a third party pursuant to Paragraph 46.d. of this Consent Decree, Settling Defendant shall demonstrate that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f). If Settling Defendant seeks to demonstrate its ability to complete the Work by means of the financial test or the corporate guarantee pursuant to Paragraph 46.d. or 46.e., it shall resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the Effective Date. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section are inadequate, Settling Defendant shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 46 of this Consent Decree. Settling Defendant's inability to demonstrate financial ability to complete the Work shall not excuse performance of any activities required under this Consent Decree.

48. If Settling Defendant can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 46 above after entry of this Consent Decree, Settling Defendant may, on any anniversary date of entry of this Consent Decree, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining work to be performed. Settling Defendant shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security upon approval by EPA. In the event of a dispute, Settling Defendant may reduce the amount of the security in accordance with the final administrative or judicial decision resolving the dispute.

49. Settling Defendant may change the form of financial assurance provided under this Section at any time, upon notice to and approval by EPA, provided that the new form of assurance meets the requirements of this Section. In the event of a dispute, Settling Defendant may change the form of the financial assurance only in accordance with the final administrative or judicial decision resolving the dispute.

XIV. CERTIFICATION OF COMPLETION

50. Completion of the Remedial Action.

a. Within 90 days after Settling Defendant concludes that the Remedial Action has been fully performed and the Performance Standards have been attained, Settling Defendant shall schedule and conduct a pre-certification inspection to be attended by Settling Defendant and EPA. If, after the pre-certification inspection, the Settling Defendant still believes that the Remedial Action has been fully performed and the Performance Standards have been attained, it shall submit a written report requesting certification to EPA for approval, pursuant to Section XI (EPA Approval of Plans and Other Submissions) within 30 days of the inspection. In the report, a registered professional engineer and the Settling Defendant's Project Coordinator shall state that, to the best of their knowledge, the Remedial Action has been completed in full satisfaction of the requirements of this Consent Decree. The written report shall include as-built drawings signed and stamped by a professional engineer. The report shall contain the following statement, signed by a responsible corporate official of the Settling Defendant or the Settling Defendant's Project Coordinator:

> To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission 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.

If, after completion of the pre-certification inspection and receipt and review of the written report, EPA, after reasonable opportunity to review and comment by the State, determines that the Remedial Action or any portion thereof has not been completed in accordance with this Consent Decree or that the Performance Standards have not been achieved, EPA will notify Settling Defendant in writing of the activities that must be undertaken by Settling Defendant pursuant to this Consent Decree to complete the Remedial Action and achieve the Performance Standards, provided, however, that EPA may only require Settling Defendant to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the remedy selected in the ROD and Action Memorandum," as those terms are defined in Paragraph 13.b. and as set forth in Section III.B of the SOW. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the SOW or require the Settling Defendant to submit a schedule to EPA for approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Settling Defendant shall perform all activities described in the notice in accordance with the specifications and schedules established pursuant to this Paragraph, subject to its right to invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution).

b. If EPA concludes, based on the initial or any subsequent report requesting Certification of Completion of Remedial Action and after a reasonable opportunity for review and comment by the State, that the Remedial Action has been performed in accordance with this Consent Decree and that the Performance Standards have been achieved, EPA will so certify in writing to Settling Defendant. This certification shall constitute the Certification of Completion of the Remedial Action for purposes of this Consent Decree, including, but not limited to, Section XXI (Covenants Not to Sue by Plaintiff[s]). Certification of Completion of the Remedial Action shall not affect Settling Defendant's obligations under this Consent Decree.

51. Completion of the Work.

a. Within 90 days after Settling Defendant concludes that all phases of the Work (including O & M), have been fully performed, Settling Defendant shall schedule and conduct a pre-certification inspection to be attended by Settling Defendant and EPA. If, after the pre-certification inspection, the Settling Defendant still believes that the Work has been fully performed, Settling Defendant shall submit a written report by a registered professional engineer stating that, to the best of his or her knowledge, the Work has been completed in full satisfaction of the requirements of this Consent Decree. The report shall contain the following statement, signed by a responsible corporate official of the Settling Defendant or the Settling Defendant's Project Coordinator:

> To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission 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.

If, after review of the written report, EPA, after reasonable opportunity to review and comment by the State, determines that any portion of the Work has not been completed in accordance with this Consent Decree, EPA will notify Settling Defendant in writing of the activities that must be undertaken by Settling Defendant pursuant to this Consent Decree to complete the Work, provided, however, that EPA may only require Settling Defendant to perform such activities pursuant to this Paragraph to the extent that such activities are consistent with the "scope of the remedy selected in the ROD and Action Memorandum," as that term is defined in Paragraph 13.b. and as set forth in Section III.B of the SOW. EPA will set forth in the notice a schedule for performance of such activities consistent with the Consent Decree and the SOW or require the Settling Defendant to submit a schedule to EPA for approval pursuant to Section XI (EPA Approval of Plans and Other Submissions). Settling Defendant shall perform all activities described in the notice in accordance with the specifications and schedules established therein, subject to its right to invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution).

b. If EPA concludes, based on the initial or any subsequent request for Certification of Completion of Work by Settling Defendant after a reasonable opportunity for review and comment by the State, that the Work has been performed in accordance with this Consent Decree, EPA will so notify the Settling Defendant in writing.

XV. EMERGENCY RESPONSE

52. In the event of any action or occurrence during the performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Settling Defendant shall, subject to Paragraph 53, immediately take all appropriate action to prevent, abate, or minimize such release or threat of release, and shall immediately notify the EPA's Project Coordinator. If EPA's Project Coordinator is not available, the Settling Defendant shall notify the EPA Region 10 Emergency Response Unit. Settling Defendant shall take such actions in consultation with EPA's Project Coordinator or other available authorized EPA officer and in accordance with all applicable provisions of the Health and Safety Plans, the Contingency Plans, and any other applicable plans or documents developed pursuant to the SOW. In the event that Settling Defendant fails to take appropriate response action as required by this Section, and EPA takes such action instead, Settling Defendant shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVI (Payments for Response Costs).

53. Nothing in the preceding Paragraph or in this Consent Decree shall be deemed to limit any authority of the United States or the State, a) to take all appropriate action to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, or b) to direct or order such action, or seek an order from the Court, to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, subject to Section XXI (Covenants Not to Sue by Plaintiff).

XVI. PAYMENTS FOR RESPONSE COSTS

54. Payments for Past Response Costs.

a. Within 30 days of the Effective Date, Settling Defendant shall pay to EPA $6.65 million ($6,650,000) in payment for Past Response Costs. Payment shall be made by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice account in accordance with current EFT procedures, referencing USAO File Number 2006V00108 , EPA Site/Spill ID Number 107Q, and DOJ Case Number 90-11-2-08733. Payment shall be made in accordance with instructions provided to the Settling Defendant by the Financial Litigation Unit of the United States Attorney's Office for the District of Washington following lodging of the Consent Decree. Any payments received by the Department of Justice after 4:00 p.m. (Eastern Time) will be credited on the next business day.

b. At the time of payment, Settling Defendant shall send notice that payment has been made to the United States and to EPA, in accordance with Section XXVI (Notices and Submissions).

c. The total amount to be paid by Setting Defendant pursuant to Subparagraph 54.a. shall be deposited in the Boomsnub/Airco Superfund Site Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

55. Payments for Future Response Costs.

a. Settling Defendant shall pay to EPA all Future Response Costs not inconsistent with the National Contingency Plan. On a periodic basis the United States will send Settling Defendant a bill requiring payment that includes a SCORPIOS Report or similar EPA-prepared cost summary report. Settling Defendant shall make all payments within 30 days of Settling Defendant's receipt of each bill requiring payment, except as otherwise provided in Paragraph 56. Settling Defendant shall make all payments required by this Paragraph by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party making the payment, EPA Site/Spill ID Number 107Q, and DOJ Case Number 90-11-2-08733. Settling Defendant shall send the check(s) to:

Mellon Bank
EPA Region 10 Superfund
P.O. Box 371099M
Pittsburgh, PA 15235

b. At the time of payment, Settling Defendant shall send notice that payment has been made to the United States and to EPA in accordance with Section XXVI (Notices and Submissions).

c. All amounts to be paid by Setting Defendants pursuant to Subparagraph 55.a. shall be deposited in the Boomsnub/Airco Superfund Site Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

56. Settling Defendant may contest payment of any Future Response Costs under Paragraph 55 if it determines that the United States has made an accounting error or if it alleges that a cost item that is included represents costs that are inconsistent with the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the United States and EPA pursuant to Section XXVI (Notices and Submissions). Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, the Settling Defendant shall within the 30-day period pay all uncontested Future Response Costs to the United States in the manner described in Paragraph 55. Simultaneously, the Settling Defendant shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State of Washington and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. The Settling Defendant shall send to the United States and EPA, as provided in Section XXVI (Notices and Submissions), a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, the Settling Defendant shall initiate the Dispute Resolution procedures in Section XIX (Dispute Resolution). If the United States prevails in the dispute, within 5 days of receiving notice of the resolution of the dispute, the Settling Defendant shall pay the sums due (with accrued interest) to the United

States in the manner described in Paragraph 55. If the Settling Defendant prevails concerning any aspect of the contested costs, the Settling Defendant shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to the United States in the manner described in Paragraph 55; Settling Defendant shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XIX (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding the Settling Defendant's obligation to reimburse the United States for its Future Response Costs.

57. In the event that the payments required by Paragraph 54.a. are not made within 30 days of the Effective Date or the payments required by Paragraph 55 are not made within 30 days of the Settling Defendant's receipt of the bill, Settling Defendant shall pay Interest on the unpaid balance. The Interest to be paid on Past Response Costs under this Paragraph shall begin to accrue on the Effective Date. The Interest on Future Response Costs shall begin to accrue on the date of the bill. The Interest shall accrue through the date of the Settling Defendant's payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to Plaintiff by virtue of Settling Defendant's failure to make timely payments under this Section including, but not limited to, payment of stipulated penalties pursuant to Paragraph 72. The Settling Defendant shall make all payments required by this Paragraph in the manner described in Paragraph 54.

XVII. INDEMNIFICATION AND INSURANCE

58. Settling Defendant's Indemnification of the United States

a. The United States does not assume any liability by entering into this agreement or by virtue of any designation of Settling Defendant as EPA's authorized representatives under Section 104(e) of CERCLA. Settling Defendant shall indemnify, save, and hold harmless the United States, and its officials, agents, employees, contractors, subcontractors, or representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Settling Defendant, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Consent Decree, including, but not limited to, any claims arising from any designation of Settling Defendant as EPA's authorized representatives under Section 104(e) of CERCLA. Further, the Settling Defendant agrees to pay the United States all costs it incurs including, but not limited to, attorneys fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Settling Defendant, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Consent Decree. The United States shall not be held out as a party to any contract entered into by or on behalf of Settling Defendant in carrying out activities pursuant to this Consent Decree. Neither the Settling Defendant nor any such contractor shall be considered an agent of the United States.

b. The United States shall give Settling Defendant written notice of any claim for which the United States plans to seek indemnification pursuant to Paragraph 58, and shall consult with Settling Defendant prior to settling such claim.

59. Settling Defendant waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States arising from or on account of any contract, agreement, or arrangement between Settling Defendant and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Settling Defendant shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Settling Defendant and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

60. No later than 15 days before commencing any on-site Work, Settling Defendant shall secure and shall maintain until the first anniversary of EPA's Certification of Completion of the Remedial Action pursuant to Paragraph 50.b. of Section XIV (Certification of Completion) comprehensive general liability insurance with limits of $5 million dollars, combined single limit, and automobile liability insurance with limits of $5 million dollars, combined single limit, naming the United States as an additional insured. In addition, for the duration of this Consent Decree, Settling Defendant shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Settling Defendant in furtherance of this Consent Decree. Prior to commencement of the Work under this Consent Decree, Settling Defendant shall provide to EPA certificates of such insurance and a copy of each insurance policy. Settling Defendant shall resubmit such certificates and copies of policies each year on the anniversary of the Effective Date. If Settling Defendant demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to that contractor or subcontractor, Settling Defendant need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

XVIII. FORCE MAJEURE

61. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of the Settling Defendant, of any entity controlled by Settling Defendant, or of Settling Defendant's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Settling Defendant's best efforts to fulfill the obligation. The requirement that the Settling Defendant exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (1) as it is occurring and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent possible. "Force Majeure" does not include financial inability to complete the Work or a failure to attain the Performance Standards.

62. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, the Settling Defendant shall notify orally EPA's Project Coordinator or, in his or her absence, the Director of the Office of Environmental Cleanup, EPA Region 10, within 48 hours of when Settling Defendant first knew that the event might cause a delay. Within 7 days thereafter, Settling Defendant shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or

minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; the Settling Defendant's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of the Settling Defendant, such event may cause or contribute to an endangerment to public health, welfare, or the environment. The Settling Defendant shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Settling Defendant from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Settling Defendant shall be deemed to know of any circumstance of which Settling Defendant, any entity controlled by Settling Defendant, or Settling Defendant's contractors knew or should have known.

63. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify the Settling Defendant in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify the Settling Defendant in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

64. If the Settling Defendant elects to invoke the dispute resolution procedures set forth in Section XIX (Dispute Resolution) with respect to a force majeure event, it shall do so no later than 15 days after receipt of EPA's notice of its decision pursuant to Paragraph 63. In any such proceeding, Settling Defendant shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Settling Defendant complied with the requirements of Paragraphs 61 and 62 above. If Settling Defendant carries this burden, the delay at issue shall be deemed not to be a violation by Settling Defendant of any affected obligation of this Consent Decree identified to EPA and the Court and Settling Defendant shall not be liable for stipulated penalties.

XIX. DISPUTE RESOLUTION

65. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. The procedures set forth in this Section, however, shall not apply to actions by the United States to enforce obligations of the Settling Defendant that have not been disputed in accordance with this Section.

66. Any dispute that arises under or with respect to this Consent Decree shall in the first instance be the subject of informal negotiations between the parties to the dispute. The period for informal negotiations shall not exceed 20 days from the time the dispute arises, unless a longer period of time is mutually agreed to by written agreement of the parties to the dispute.

The dispute shall be considered to have arisen when one party sends the other party a written Notice of Dispute.

67. Statements of Position.

a. In the event that the parties cannot resolve a dispute by informal negotiations under Paragraph 66, then the position advanced by EPA shall be considered binding unless, within 30 days after the conclusion of the informal negotiation period, Settling Defendant invokes the formal dispute resolution procedures of this Section by serving on the United States a written Statement of Position on the matter in dispute, including, but not limited to, any factual data, analysis or opinion supporting that position and any supporting documentation relied upon by the Settling Defendant. The Statement of Position shall specify the Settling Defendant's position as to whether formal dispute resolution should proceed under Paragraph 68 or Paragraph 69.

b. Within 30 days after receipt of Settling Defendant's Statement of Position, EPA will serve on Settling Defendant its Statement of Position, including, but not limited to, any factual data, analysis, or opinion supporting that position and all supporting documentation relied upon by EPA. EPA's Statement of Position shall include a statement as to whether formal dispute resolution should proceed under Paragraphs 68 or 69. Within 21 days after receipt of EPA's Statement of Position, Settling Defendant may submit a Reply.

c. If there is disagreement between EPA and the Settling Defendant as to whether dispute resolution should proceed under Paragraphs 68 or 69, the parties shall follow the procedures set forth in the paragraph determined by EPA to be applicable. However, if the Settling Defendant ultimately appeals to the Court to resolve the dispute, the Court shall determine which paragraph is applicable in accordance with the standards of applicability set forth in Paragraphs 68 and 69.

68. Formal dispute resolution for disputes pertaining to the selection or adequacy of any response action and all other disputes that are accorded review on the administrative record under applicable principles of administrative law shall be conducted pursuant to the procedures set forth in this Paragraph. For purposes of this Paragraph, the adequacy of any response action includes, without limitation: (1) the adequacy or appropriateness of plans, procedures to implement plans, or any other items requiring approval by EPA under this Consent Decree; and (2) the adequacy of the performance of response actions taken pursuant to this Consent Decree. Nothing in this Consent Decree shall be construed to allow any dispute by Settling Defendant regarding the validity of the ROD's provisions.

a. An administrative record of the dispute shall be maintained by EPA and shall contain all statements of position, including supporting documentation, submitted pursuant to this Section. Where appropriate, EPA may allow submission of supplemental statements of position by the Settling Defendant.

b. The Director of the Office of Environmental Cleanup, EPA Region 10, will issue a final administrative decision resolving the dispute based on the administrative record described in Paragraph 68.a. This decision shall be binding upon the Settling Defendant, subject only to the right to seek judicial review pursuant to Paragraphs 68.c. and d.

c. Any administrative decision made by EPA pursuant to Paragraph 68.b. shall be reviewable by this Court, provided that a motion for judicial review of the decision is filed by the Settling Defendant with the Court and served on EPA within 10 days of Settling Defendant's receipt of EPA's decision. The motion shall include a description of the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of this Consent Decree. The United States may file a response to Settling Defendant's motion within 30 days of receipt of a copy of the Settling Defendant's motion for judicial review.

d. In proceedings on any dispute governed by this Paragraph, Settling Defendant shall have the burden of demonstrating that the decision of the Director of the Office of Environmental Cleanup is arbitrary and capricious or otherwise not in accordance with law. Judicial review of EPA's decision shall be on the administrative record compiled pursuant to Paragraph 68.a.

69. Formal dispute resolution for disputes that neither pertain to the selection or adequacy of any response action nor are otherwise accorded review on the administrative record under applicable principles of administrative law, shall be governed by this Paragraph.

a. Following receipt of Settling Defendant's Statement of Position submitted pursuant to Paragraph 67, the Director of the Office of Environmental Cleanup, EPA Region 10, will issue a final decision resolving the dispute. The Waste Management Division Director's decision shall be binding on the Settling Defendant unless, within 10 days of receipt of the decision, the Settling Defendant files with the Court and serves on EPA a motion for judicial review of the decision setting forth the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of the Consent Decree. The United States may file a response to Settling Defendant's motion within 30 days of its receipt.

b. Judicial review of any dispute governed by this Paragraph shall be governed by applicable principles of law.

70. The invocation of formal dispute resolution procedures under this Section shall not extend, postpone, or affect in any way any obligation of the Settling Defendant under this Consent Decree, not directly in dispute, unless EPA or the Court agrees otherwise. Stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the dispute as provided in Paragraph 79. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Consent Decree. In the event that the Settling Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XX (Stipulated Penalties).

XX. STIPULATED PENALTIES

71. Settling Defendant shall be liable for stipulated penalties in the amounts set forth in Paragraphs 72 and 73 to the United States for failure to comply with the requirements of this Consent Decree specified below, unless excused under Section XVIII (Force Majeure). "Compliance" by Settling Defendant shall include completion of the activities under this Consent Decree or any work plan or other plan approved under this Consent Decree identified below in

accordance with all applicable requirements of law, this Consent Decree, the SOW, and any plans or other documents approved by EPA pursuant to this Consent Decree and within the specified time schedules established by and approved under this Consent Decree.

72. Stipulated Penalty Amounts - Work. The following stipulated penalties shall accrue per violation per day for any noncompliance, except the failure to submit timely or adequate reports:

Penalty Per Violation Per Day	Period of Noncompliance
$500	1st through 14th day
$1000	15th through 30th day
$2000	31st day and beyond

73. Stipulated Penalty Amounts - Reports. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports or other written documents required by the SOW:

Penalty Per Violation Per Day	Period of Noncompliance
$250	1st through 14th day
$500	15th through 30th day
$1000	31st day and beyond

74. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 88 of Section XXI (Covenants Not to Sue by Plaintiff), Settling Defendant shall be liable for a stipulated penalty in the amount of one million dollars ($1,000,000.00).

75. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (1) with respect to a deficient submission under Section XI (EPA Approval of Plans and Other Submissions), during any period, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Settling Defendant of any deficiency; (2) with respect to a decision by the Director of the Office of Environmental Cleanup, EPA Region 10, under Paragraph 68.b. or 69 of Section XIX (Dispute Resolution), during the period, if any, beginning on the 21st day after the date that Settling Defendant's reply to EPA's Statement of Position is received until the date that the Director issues a final decision regarding such dispute; or (3) with respect to judicial review by this Court of any dispute under Section XIX (Dispute Resolution), during the period, if any, beginning on the 31st day after the Court's receipt of the final submission regarding the dispute until the date that the Court issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Decree.

76. Following EPA's determination that Settling Defendant has failed to comply with a requirement of this Consent Decree, EPA shall give Settling Defendant written notification of the same and describe the noncompliance. EPA shall send the Settling Defendant a written

demand for the payment of the penalties. Penalties shall accrue, however, as provided in the preceding Paragraph regardless of when EPA has notified the Settling Defendant of a violation.

77. All penalties accruing under this Section shall be due and payable to the United States within 30 days of the Settling Defendant's receipt from EPA of a demand for payment of the penalties, unless Settling Defendant invokes the Dispute Resolution procedures under Section XIX (Dispute Resolution). All payments to the United States under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to the address provided in Paragraph 55.a., shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID Number 107Q, the DOJ Case Number 90-11-2-08733, and the name and address of the party making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), shall be sent to the United States and EPA as provided in Section XXVI (Notices and Submissions).

78. The payment of penalties shall not alter in any way Settling Defendant's obligation to complete the performance of the Work required under this Consent Decree.

79. Penalties shall continue to accrue as provided in Paragraph 75 during any dispute resolution period, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA that is not appealed to this Court, accrued penalties determined to be owing shall be paid to EPA within 15 days of the agreement or the receipt of EPA's decision or order;

b. If the dispute is appealed to this Court and the United States prevails in whole or in part, Settling Defendant shall pay all accrued penalties determined by the Court to be owed to EPA within 60 days of receipt of the Court's decision or order, except as provided in Subparagraph (c) below;

c. If the District Court's decision is appealed by Settling Defendant, it shall pay all accrued penalties determined by the District Court to be owing to the United States into an interest-bearing escrow account within 60 days of receipt of the District Court's decision or order. Penalties shall be paid into this account as they continue to accrue, at least every 60 days. Within 15 days of receipt of the final appellate court decision, the escrow agent shall pay the balance of the account to EPA or to Settling Defendant to the extent that they prevail.

80. If Settling Defendant fails to pay stipulated penalties when due, the United States may institute proceedings to collect the penalties, as well as interest. Settling Defendant shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 77.

81. Nothing in this Consent Decree shall be construed as prohibiting, altering, or in any way limiting the ability of the United States to seek any other remedies or sanctions available by virtue of Settling Defendant's violation of this Decree or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA, provided, however, that the United States shall not seek civil penalties pursuant to Section 122(l) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of the Consent Decree.

82. Notwithstanding any other provision of this Section, the United States may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Consent Decree.

XXI. COVENANTS NOT TO SUE BY PLAINTIFF

83. In consideration of the actions that will be performed and the payments that will be made by the Settling Defendant under the terms of the Consent Decree, and except as specifically provided in Paragraphs 84, 85, and 87 of this Section, the United States covenants not to sue or to take administrative action against Settling Defendant pursuant to Sections 106 and 107(a) of CERCLA and Section 7003 of RCRA relating to the Site. Except with respect to future liability, these covenants not to sue shall take effect upon the receipt by EPA of the payments required by Paragraph 54.a. of Section XVI (Payments for Response Costs). With respect to future liability, these covenants not to sue shall take effect upon Certification of Completion of Remedial Action by EPA pursuant to Paragraph 51.b. of Section XIV (Certification of Completion). These covenants not to sue are conditioned upon the satisfactory performance by Settling Defendant of its obligations under this Consent Decree. These covenants not to sue extend only to the Settling Defendant and its corporate successors, if any, but not to any other person.

84. United States' Pre-certification Reservations. Notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order seeking to compel Settling Defendant

a. to perform further response actions relating to the Site, or

b. to reimburse the United States for additional costs of response if, prior to Certification of Completion of the Remedial Action:

(1) conditions at the Site, previously unknown to EPA, are discovered, or

(2) information, previously unknown to EPA, is received, in whole or in part,

and EPA determines that these previously unknown conditions or information together with any other relevant information indicates that the Remedial Action is not protective of human health or the environment.

85. United States' Post-certification Reservations. Notwithstanding any other provision of this Consent Decree, the United States reserves, and this Consent Decree is without prejudice to, the right to institute proceedings in this action or in a new action, or to issue an administrative order seeking to compel Settling Defendant

a. to perform further response actions relating to the Site, or

b. to reimburse the United States for additional costs of response if, subsequent to Certification of Completion of the Remedial Action:

(1) conditions at the Site, previously unknown to EPA, are discovered, or

(2) information, previously unknown to EPA, is received, in whole or in part,

and EPA determines that these previously unknown conditions or this information together with other relevant information indicate that the Remedial Action is not protective of human health or the environment.

86. For purposes of Paragraph 84, the information and the conditions known to EPA shall include only that information and those conditions known to EPA as of the date the ROD was signed and set forth in the ROD for the Site and the administrative record supporting the ROD, as well as that information and those conditions described in an ESD, if any have been prepared. For purposes of Paragraph 85, the information and the conditions known to EPA shall include only that information and those conditions known to EPA as of the date of Certification of Completion of the Remedial Action and set forth in the Record of Decision, the administrative record supporting the ROD, the post-ROD administrative record, including any ESD, or in any information received by EPA pursuant to the requirements of this Consent Decree prior to Certification of Completion of the Remedial Action.

87. General reservations of rights. The United States reserves, and this Consent Decree is without prejudice to, all rights against Settling Defendant with respect to all matters not expressly included within Plaintiff's covenant not to sue. Notwithstanding any other provision of this Consent Decree, the United States reserves all rights against Settling Defendant with respect to:

a. claims based on a failure by Settling Defendant to meet a requirement of this Consent Decree;

b. liability arising from the past, present, or future disposal, release, or threat of release of Waste Material outside of the Site;

c. liability based upon the Settling Defendant's ownership or operation of the Site, or upon the Settling Defendant's transportation, treatment, storage, or disposal, or the arrangement for the transportation, treatment, storage, or disposal of Waste Material at or in connection with the Site, other than as provided in the ROD, the Action Memorandum, the Statement of Work, or otherwise ordered by EPA, after signature of this Consent Decree by the Settling Defendant;

d. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

e. criminal liability;

f. liability for violations of federal or state law which occur during or after implementation of the Remedial Action; and

g. liability, prior to Certification of Completion of the Remedial Action, for additional response actions that EPA determines are necessary to achieve Performance Standards, but that cannot be required pursuant to Paragraph 13 (Modification of the SOW or Related Work Plans);]

h. liability for costs that the United States will incur related to the Site but are not within the definition of Future Response Costs;

i. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

88. Work Takeover. In the event EPA determines that Settling Defendant has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portions of the Work as EPA determines necessary. Settling Defendant may invoke the procedures set forth in Section XIX (Dispute Resolution), Paragraph 68, to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by the United States in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Settling Defendant shall pay pursuant to Section XVI (Payment for Response Costs).

89. Notwithstanding any other provision of this Consent Decree, the United States retains all authority and reserves all rights to take any and all response actions authorized by law.

XXII. COVENANTS BY SETTLING DEFENDANT

90. Covenant Not to Sue. Subject to the reservations in Paragraph 91, Settling Defendant hereby covenants not to sue and agrees not to assert any claims or causes of action against the United States with respect to the Site and Past and Future Response Costs as defined herein or this Consent Decree, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through CERCLA Sections 106(b)(2), 107, 111, 112, 113 or any other provision of law;

b. any claims against the United States, including any department, agency or instrumentality of the United States under CERCLA Sections 107 or 113 related to the Site, or

c. any claims arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Washington Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law.

These covenants not to sue shall not apply in the event that the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 84, 85, or 87, but only to the extent that Settling Defendant' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

91. The Settling Defendant reserves, and this Consent Decree is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. Any such claim, however, shall not include a claim for any

damages caused, in whole or in part, by the act or omission of any person, including any contractor, who is not a federal employee as that term is defined in 28 U.S.C. § 2671; nor shall any such claim include a claim based on EPA's selection of response actions, or the oversight or approval of the Settling Defendant' plans or activities. The foregoing applies only to claims that are brought pursuant to any statute other than CERCLA and for which the waiver of sovereign immunity is found in a statute other than CERCLA.

92. Nothing in this Consent Decree shall be deemed to constitute preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXIII. EFFECT OF SETTLEMENT; CONTRIBUTION PROTECTION

93. Nothing in this Consent Decree shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Consent Decree. The preceding sentence shall not be construed to waive or nullify any rights that any person not a signatory to this decree may have under applicable law. Each of the Parties expressly reserves any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto.

94. The Parties agree, and by entering this Consent Decree this Court finds, that the Settling Defendant is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2) for matters addressed in this Consent Decree. "Matters addressed" in this Consent Decree shall be all response actions taken or to be taken by the United States or any other person or entity as well as response costs (past or future) incurred or to be incurred by the United States or any person or entity with respect to the Site. "Matters addressed" does not include any claims under any private contractual obligations.

95. The Settling Defendant agrees that with respect to any suit or claim for contribution brought by it for matters related to this Consent Decree it will notify the United States in writing no later than 60 days prior to the initiation of such suit or claim.

96. The Settling Defendant also agrees that with respect to any suit or claim for contribution brought against it for matters related to this Consent Decree it will notify in writing the United States within 10 days of service of the complaint on it. In addition, Settling Defendant shall notify the United States within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial.

97. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, Settling Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenants not to sue set forth in Section XXI (Covenants Not to Sue by Plaintiff).

XXIV. ACCESS TO INFORMATION

98. Settling Defendant shall provide to EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Consent Decree, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Settling Defendant shall also make available to EPA, upon reasonable prior notice, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

99. Business Confidential and Privileged Documents.

a. Settling Defendant may assert business confidentiality claims covering part or all of the documents or information submitted to Plaintiff under this Consent Decree to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA or if EPA has notified Settling Defendant that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Settling Defendant.

b. The Settling Defendant may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Settling Defendant asserts such a privilege in lieu of providing documents, it shall provide the Plaintiff with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the contents of the document, record, or information: and (6) the privilege asserted by Settling Defendant. However, no documents, reports or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

100. 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, or any other documents or information evidencing conditions at or around the Site.

XXV. RETENTION OF RECORDS

101. Until 10 years after the Settling Defendant's receipt of EPA's notification pursuant to Paragraph 51.b. of Section XIV (Certification of Completion of the Work), Settling Defendant shall preserve and retain at least one copy of all records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate to its liability under CERCLA with respect to the Site. Copies of such records may be retained in either electronic form or in hard copy. The Settling Defendant must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above at least one copy of the last draft or final version of any documents or records

(including documents or records in electronic form) now in its possession or control or which come into its possession or control that relate to the performance of the Work. Settling Defendant (and its contractors and agents) must also retain, in addition, at least one copy of all data generated during the performance of the Work and not contained in the aforementioned documents required to be retained. Copies of such records may be retained in either electronic form or in hard copy. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

102. At the conclusion of this document retention period, Settling Defendant shall notify the United States at least 90 days prior to the destruction of any such records or documents, and, upon request by the United States, Settling Defendant shall deliver any such records or documents to EPA. The Settling Defendant may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Settling Defendant asserts such a privilege, it shall provide the Plaintiffs with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Settling Defendant. However, no documents, reports or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

103. The Settling Defendant hereby certifies that, to the best of its knowledge and belief, after reasonable inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by the United States or the State or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Section 104(e) and 122(e) of CERCLA, 42 U.S.C. 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. 6927.

XXVI. NOTICES AND SUBMISSIONS

104. Whenever, under the terms of this Consent Decree, written notice is required to be given or a report or other document is required to be sent by one Party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Parties in writing. All notices and submissions shall be considered effective upon receipt, unless otherwise provided. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of the Consent Decree with respect to the United States, EPA, and the Settling Defendant, respectively.

As to the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
Re: DJ # 90-11-2-08733

As to EPA:

Claire Hong
EPA Project Coordinator
United States Environmental Protection Agency
Region 10
1200 Sixth Ave
Seattle, WA 98101

and

Director, Office of Environmental Cleanup
United States Environmental Protection Agency
Region 10
1200 Sixth Ave
Seattle, WA 98101

As to the Settling Defendant:

Michael Resh
Manager, Environmental Remediation
The BOC Group Inc.
575 Mountain Avenue
Murray Hill, NJ 07974

XXVII. EFFECTIVE DATE

105. The effective date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court, except as otherwise provided herein.

XXVIII. RETENTION OF JURISDICTION

106. This Court retains jurisdiction over both the subject matter of this Consent Decree and the Settling Defendant for the duration of the performance of the terms and provisions of this Consent Decree for the purpose of enabling any of the Parties to apply to the Court at any time for such further order, direction, and relief as may be necessary or appropriate for the construction or modification of this Consent Decree, or to effectuate or enforce compliance with its terms, or to resolve disputes in accordance with Section XIX (Dispute Resolution) hereof.

XXIX. APPENDICES

107. The following appendices are attached to and incorporated into this Consent Decree:

"Appendix A" is the Action Memorandum.

"Appendix B" is the ROD.

"Appendix C" is the description and/or map of the Site.

"Appendix D" is the SOW.

XXX. COMMUNITY RELATIONS

108. Settling Defendant shall propose to EPA its participation in the community relations plan to be developed by EPA. EPA will determine the appropriate role for the Settling Defendant under the Plan. Settling Defendant shall also cooperate with EPA in providing information regarding the Work to the public. As requested by EPA, Settling Defendant shall participate in the preparation of such information for dissemination to the public and in public meetings which may be held or sponsored by EPA to explain activities at or relating to the Site.

XXXI. MODIFICATION

109. Schedules specified in this Consent Decree or in the SOW for completion of the Work may be modified by agreement of EPA and the Settling Defendant. All such modifications shall be made in writing.

110. Except as provided in Paragraph 13 (Modification of the SOW or Related Work Plans), no material modifications shall be made to the SOW without written notification to and written approval of the United States, Settling Defendant, and the Court, if such modifications fundamentally alter the basic features of the selected remedy within the meaning of 40 C.F.R. 300.435(c)(2)(B)(ii). Prior to providing its approval to any modification, the United States will provide the State with a reasonable opportunity to review and comment on the proposed modification. Modifications to the SOW that do not materially alter that document, or material modifications to the SOW that do not fundamentally alter the basic features of the selected remedy within the meaning of 40 C.F.R.300.435(c)(2)(B)(ii), may be made by written agreement between EPA, after providing the State with a reasonable opportunity to review and comment on the proposed modification, and the Settling Defendant.

111. Nothing in this Decree shall be deemed to alter the Court's power to enforce, supervise or approve modifications to this Consent Decree.

XXXII. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

112. This Consent Decree shall be lodged with the Court for a period of not less than 30 days for public notice and comment in accordance with Section 122(d)(2) of CERCLA, 42 U.S.C. § 9622(d)(2), and 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. Settling Defendant consents to the entry of this Consent Decree without further notice.

113. If for any reason the Court should decline to approve this Consent Decree in the form presented, this agreement is voidable at the sole discretion of any Party and the terms of the agreement may not be used as evidence in any litigation between the Parties.

XXXIII. SIGNATORIES/SERVICE

114. The undersigned representative of the Settling Defendant and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice each certify that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such Party to this document.

115. The Settling Defendant hereby agrees not to oppose entry of this Consent Decree by this Court or to challenge any provision of this Consent Decree unless the United States has notified the Settling Defendant in writing that it no longer supports entry of the Consent Decree.

116. The Settling Defendant shall identify, on the attached signature page, the name, address and telephone number of an agent who is authorized to accept service of process by mail on behalf of that Party with respect to all matters arising under or relating to this Consent Decree. Settling Defendant hereby agrees to accept service in that manner and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including, but not limited to, service of a summons. The parties agree that Settling Defendant need not file an answer to the complaint in this action unless or until the court expressly declines to enter this Consent Decree.

XXXIV. FINAL JUDGMENT

117. This Consent Decree and its appendices constitute the final, complete, and exclusive agreement and understanding among the parties with respect to the settlement embodied in the Consent Decree. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Consent Decree.

118. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between and among the United States and the Settling Defendant. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

119. Upon approval and entry of this Consent Decree, the following administrative orders shall be considered to be terminated and replaced and superseded by this Consent Decree: CERCLA 10-2001-0014 and CERCLA 10-2002-0052.

SO ORDERED THIS __ DAY OF _____, 20__.

_____

United States District Judge

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. The BOC Group, Inc., relating to the Boomsnub/Airco Superfund Site.

FOR THE UNITED STATES OF AMERICA

MATTHEW J. McKEOWN
Acting Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice
Washington, D.C. 20530

SEAN CARMAN
Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611

JOHN McKAY
United States Attorney
Western District of Washington

BRIAN KIPNIS
Assistant United States Attorney
Western District of Washington
U.S. Department of Justice
700 Stewart Street, Suite 5220
Seattle, WA 98101

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. The BOC Group, Inc., relating to the Boomsnub/Airco Superfund Site.

_____
Date

_____
Regional Administrator, Region 10
U.S. Environmental Protection Agency
1200 Sixth Ave.
Seattle, WA 98144

_____
Date

_____
Jennifer Byrne
Assistant Regional Counsel
U.S. Environmental Protection Agency
Region 10
1200 Sixth Ave.
Seattle, WA 98144

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. The BOC Group, Inc., relating to the Boomsnub/Airco Superfund Site.

FOR THE BOC GROUP, INC.

_____
Date

Signature: _____
Name (print): _____
Title: _____
Address: _____
_____
_____
_____

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name (print): _____
Title: _____
Address: _____
_____
_____
Ph. Number: _____

STATEMENT OF WORK FOR
THE REMEDIAL DESIGN AND REMEDIAL ACTION
BOOMSNUB/AIRCO SUPERFUND SITE
CLARK COUNTY, WASHINGTON

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LIST OF ACRONYMS AND ABBREVIATIONS

1,1-DCE	1,1-Dichloroethene
ARAR	Applicable or Relevant and Appropriate Requirements
BOC	The BOC Group, Inc.
Boomsnub	Boomsnub Corporation
CERCLA	Comprehensive Environmental Response Compensation and Liability Act (Superfund)
COC	Chemicals of Concern
CQAP	Construction Quality Assurance Plan
cy	cubic yards
Ecology	Washington State Department of Ecology
E&E	Ecology & Environment
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
gpm	gallons per minute
HASP	Health and Safety Plan
IWS	In-well stripping
ILTMSS	Interim Long-Term Monitoring Sampling Schedule
LTGMP	Long-Term Groundwater Monitoring Plan
MCL	Maximum Contaminant Level
MTCA	Washington State's Model Toxics Control Act
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PCE	Tetrachloroethene
POTW	Publicly Owned Treatment Works
QASP	Quality Assurance and Sampling Plan
RA	Remedial Action
RAO	Remedial Action Objective

RD	Remedial Design
ROD	Record of Decision
Site	Boomsnub/Airco Superfund Site
SOW	Statement of Work
SVE	Soil vapor extraction
TCE	Trichloroethene
URSG	URS Greiner Corporation
VOC	Volatile organic compound

STATEMENT OF WORK FOR
THE REMEDIAL DESIGN AND REMEDIAL ACTION
BOOMSNUB/AIRCO SUPERFUND SITE
CLARK COUNTY, WASHINGTON

I. BACKGROUND

The Boomsnub/Airco Superfund Site (Site) consists primarily of the former facility of the Boomsnub Corporation (Boomsnub) located at 7608 NE 47th Avenue, the current facility of The BOC Group, Inc. (BOC or Settling Defendant) located at 4715 NE 78th Street, and a plume of contaminated groundwater that at one time extended approximately 4,400 feet west/northwest from the properties (Figure 1). The Boomsnub property, a former industrial chrome-plating facility, and the BOC property, an active gas separation facility, are source areas for groundwater contaminants.

Boomsnub and its predecessor company, Pioneer Plating, conducted chrome-plating operations on the Boomsnub property from 1967 until 1994, when Boomsnub moved its business to a new location. Leaks and spills from plating activities contaminated groundwater and soil on the Boomsnub property and three adjacent properties. BOC, formerly known as Airco, owns and operates an 11-acre facility that manufactures compressed and liquefied gas products including nitrogen, oxygen, and argon. The BOC plant has been in operation since 1964. Volatile organic compounds (VOCs) leaked or spilled onto the ground or into dry wells on BOC property and have contaminated groundwater.

Chromium was detected in groundwater in 1987, and VOCs were detected in 1990. In 1994, the U.S. Environmental Protection Agency (EPA) took lead responsibility at the Site from Washington Department of Ecology (Ecology). EPA removed 6000 tons of chromium-contaminated soil, expanded the previously-installed extraction network another 1000 feet, and upgraded the ion-exchange portion of the treatment system, which removes chromium from groundwater. In 1991, BOC began to investigate the VOCs on its property. In 1994, BOC took over operation and maintenance of the VOC portion of the treatment system. In 2000, BOC upgraded the air-stripping portion of the treatment system, which removes VOCs from groundwater. In 2001, EPA conducted another soil removal at Boomsnub pursuant to a Record of Decision (ROD) issued by EPA in February 2000. EPA removed approximately 2500 cubic yards of chromium- and lead-contaminated soil from the Boomsnub property and three adjacent properties. Also in 2001, EPA issued an Action Memorandum selecting in-well stripping (IWS) and soil vapor extraction (SVE) as remedial technologies for the VOC source area on the BOC property. In 2002, BOC constructed a new sewer line at the Site for disposal of the treated groundwater. Also in 2002, to reduce operating costs, BOC assumed lead responsibility for operation and maintenance of the groundwater extraction and treatment systems. In 2004, BOC began operating the VOC source area treatment system.

The Site was proposed for inclusion on the National Priorities List (NPL) in January 1994 and listed on the NPL in April 1995 (60 FR 20330). EPA divided the Site into three operable units (OUs) to manage cleanup activities:

- Boomsnub Soil - OU-1
- BOC Soil - OU-2
- Site-Wide Groundwater - OU-3

The remedies for OU-1 and OU-3 were selected in the February 2000 ROD. The remedy for OU-2 was selected in the September 2001 Action Memorandum. This Statement of Work (SOW) addresses remedial actions to be performed by Settling Defendant at OU-2 and OU-3 until VOC concentrations in the alluvial aquifer achieve Remedial Action Objectives (RAOs).

II. PURPOSE

The purpose of this SOW is to set forth the Settling Defendant's requirements for implementation of the remedial action set forth in the ROD for OU-3, signed by the Regional Administrator of the EPA Region 10 in February 2000, and the removal action set forth in the Action Memorandum for OU-2, signed by EPA in September 2001. This SOW incorporates work that is currently being performed by the Settling Defendant under Docket No. CERCLA 10-2002-0052 and Docket No. CERCLA 10-2001-0114, which terminate upon entry of the Consent Decree. The Settling Defendant shall follow the ROD for OU-3 until VOC concentrations in the alluvial aquifer achieve RAOs, the Action Memorandum for OU-2, this SOW, the approved Work Plans developed under this SOW, EPA Superfund Remedial Design and Remedial Action Guidance, and additional applicable guidance provided by EPA in submitting deliverables for designing and implementing the remedial action at the Boomsnub/Airco Superfund Site.

III. DESCRIPTION OF THE REMEDIAL ACTION/PERFORMANCE STANDARDS

The Settling Defendant shall design and implement the Remedial Actions described in Section III.B of this SOW, to meet the performance standards and specifications set forth in the ROD (EPA 2000) and any amending documents, the Action Memorandum (EPA 2001), and this SOW. Performance standards shall include cleanup standards, standards of control, quality criteria, and other substantive requirements, criteria, or limitations, including Applicable or Relevant and Appropriate Requirements (ARARs) set forth in the ROD, Action Memorandum, SOW, and/or Consent Decree.

A. Remedial Action Objectives

As defined in the ROD and the Action Memorandum, the RAOs for the Boomsnub/Airco Site under current and future use scenarios are presented in the following sections.

1. Site-Wide Groundwater (OU-3)

Groundwater chemicals of concern (COCs) are primarily hexavalent chromium and trichloroethene (TCE). These contaminants exceed federal drinking water standards and the more stringent Model Toxics Control Act (MTCA) cleanup standards. Of the other COCs that have been detected sporadically during monitoring at the Site, 1,1-dichloroethene (1,1-DCE) and

tetrachloroethene (PCE) are two of the more frequently detected contaminants exceeding a cleanup standard that also contribute to the overall risk at the Site. Other groundwater COCs exceed cleanup standards but do not represent a significant percentage of the overall risk. All groundwater COCs from the Site exceeding a cleanup standard are subject to this remedial action and must meet the applicable standards. A list of COCs and cleanup levels are provided in Table 1.

a) RAOs

In the ROD, EPA established the following RAOs for groundwater:

- Prevent further impacts to the alluvial aquifer.
- Restore impacted groundwater to drinking water standards (Maximum Contaminant Levels (MCLs) or MTCA Method B standards).
- Prevent ingestion of contaminated groundwater above federal and state drinking water standards.
- Prevent impacts to the Upper Troutdale Aquifer and the public drinking water supply by reducing contamination in the alluvial aquifer.

b) Actions to Achieve RAOs

The following remedial actions were identified in the ROD and updated in the Explanation of Significant Differences (ESD), as those necessary to achieve the RAOs:

- Continue O&M of the upgraded ion-exchange system and air stripper at a maximum flow rate of 160 gpm for *ex situ* groundwater treatment.
- Maintain the treatment building and other structural facilities to minimize wear and tear on the treatment system.
- Continue pumping from the existing extraction wells or some combination of these wells, adding new wells as needed to optimize the removal and treatment of contaminants.
- Conduct long-term compliance monitoring biannually in the alluvial and Upper Troutdale aquifers using existing monitoring wells and new wells as necessary to determine the effectiveness of the selected remedy in achieving the remedial action objectives. The frequency of compliance monitoring for the area of attainment and points of compliance may be modified by EPA as appropriate. Cleanup levels for all VOCs and metals detected in 1997 at the Site above cleanup standards are listed in Table 1.
- Provide institutional controls to protect the remedy and to prevent exposure to contaminated groundwater by obtaining easements from property owners whose properties are affected by remedy implementation.

- Discharge treated water to the BOC infiltration gallery. Maintain the City of Vancouver discharge permit #2004-04 (or its equivalent). EPA may evaluate discharging treated groundwater to the existing infiltration gallery on the Boomsnub property after source control actions upgradient at the BOC property are completed.

- Wastes from ion exchange resin will be disposed at an appropriate RCRA Subtitle D or C landfill, and wastes from the granular activated carbon will be sent off-site for treatment/regeneration.

- Evaluate the effectiveness of the *ex situ* groundwater treatment system no less than every five years until monitoring demonstrates that remedial action objectives have been achieved. At each five-year review, the EPA will reevaluate available literature on the permeable reactive barrier technology to see if it has proven to be a reliable long-term technology at other similar sites.

- Develop as part of remedial design an extended in-well stripping treatability test for a 12- to 18-month duration for potential use throughout the plume, either for VOCs alone or for VOCs and chromium, as appropriate depending on treatability results.

c) Area of Attainment

According to the ROD, the area of attainment for the groundwater COCs at the Site is the entire groundwater plume in the alluvial aquifer. The area of attainment in the Upper Troutdale aquifer shall be the existing monitoring wells, including AMW-24, MW-33, and other monitoring wells impacted at the Site at which MCLs or MTCA B groundwater cleanup standards must be achieved.

The remedy included groundwater treatment for an estimated 30 years from the time the ROD was signed, during which time the system's performance is to be carefully monitored and optimized on a regular basis and adjusted as warranted by the performance data collected during operation. Modifications are to be implemented in a way that accommodates changing land uses and other types of activity. Post-construction modifications to the selected remedy, with approval from EPA, may include any or all of the following:

- At individual wells where cleanup goals have been attained, pumping may be discontinued.

- Alternating pumping at wells to eliminate stagnation points.

- Pulse pumping to allow aquifer equilibration and encourage adsorbed contaminants to partition into groundwater.

- Installation of additional extraction wells to facilitate or accelerate cleanup of the contaminant plume.

2. BOC Soil (OU-2)

TCE is the primary COC on the BOC property. Other COCs have been detected sporadically during monitoring at the Site including 1,1-DCE and PCE.

a) RAOs

The Action Memorandum established the following RAOs at OU-2:

- Removing from the vadose zone VOCs that may be acting as the source to groundwater.
- Removing VOCs from groundwater on the western portion of the BOC property.
- Halting the off-property migration of VOCs in groundwater.

b) Actions to Achieve RAOs

The following actions were identified in the Action Memorandum as those necessary to achieve the RAOs:

- Install and operate an IWS system for treatment of contaminated groundwater until groundwater cleanup standards identified (for VOCs) in Table 1 have been achieved.
- Install and operate a SVE system to remove VOCs from the vadose zone.
- Implement long-term groundwater monitoring to monitor the effectiveness of the treatment system and assure that cleanup levels have been achieved.

c) Area of Attainment

The following monitoring wells shall be used to determine attainment of groundwater cleanup standards: AMW-12A, AMW-1A, AMW-1B, AMW-1C, AMW-2A, AMW-2B, RAMW-2C, AMW-56A, AMW-56C, AMW-19A, AMW-19B, AMW-13, and AMW-3.

As RAOs are achieved in individual wells or as other conditions warrant, Settling Defendant shall consult and comply with the Site Closure Plan in determining whether and to what extent portions of the SVE and the IWS systems will be shut down.

B. Remedial Actions

Settling Defendant shall implement the following Remedial Actions to meet the applicable RAOs set forth in this SOW. Most of the actions to be implemented are already underway. Modifications or additions to current operations or substitute actions will almost certainly be necessary to maximize the efficiency of the cleanup actions. Preference will be given to maximizing VOC remediation as long as it does not jeopardize the overall effectiveness of the remedial action.

1. Site Security

The Settling Defendant shall maintain the existing fencing and other physical barriers at the Boomsnub property to prevent access and vandalism to Site facilities. The access gate shall be maintained to allow access for facility operation and maintenance.

An informational sign shall be maintained at the entrance to the Boomsnub property indicating the Site name and contact numbers.

Warning signs indicating the presence of underground utilities shall be maintained along the route of the groundwater extraction and discharge pipelines. The Settling Defendant shall continue its registration with a utility call notification center so as to receive alerts of pending construction activities in the vicinity of the pipelines and remediation-related structures.

2. Restrictive Easements

Settling Defendant shall implement Restrictive Easements in accordance with Section IX in the Consent Decree.

3. Institutional Controls

Settling Defendant shall implement Institutional Controls in accordance with Section IX in the Consent Decree.

4. Access Easements

The Settling Defendant shall use its best efforts to obtain and maintain necessary access easements in accordance with Section IX of the Consent Decree.

5. Operation, Maintenance (O&M) and Upgrades of Existing Groundwater Extraction and Ion Exchange Treatment Systems

Settling Defendant shall continue to operate and maintain the existing groundwater extraction and *ex situ* ion-exchange treatment systems and shall conduct system monitoring. In addition to O&M of the extraction and treatment systems, Settling Defendant shall continue to operate and maintain the Site data logging/control system, the former machine shop building used for storage of Site materials, equipment, and supplies, and the office trailer. This activity includes, but is not limited to, providing phone, sewer, electrical, and garbage service at the Site and routine maintenance of the buildings.

Settling Defendant shall operate the extraction and treatment systems in such a manner that the system is operational at least 90 percent of the time. Periodic downtime associated with scheduled maintenance of the extraction and treatment system shall not be included in the calculation of operational availability; unscheduled downtime shall be included in this calculation. Operational availability shall be measured on a half-yearly basis.

Settling Defendant shall also conduct tasks that support O&M activities. These tasks include, but are not limited to, the following:

- Providing "call before you dig" responses as needed for private or public construction, maintenance, or repair work in the vicinity of the groundwater extraction, treatment, and monitoring systems.

- Responding to prospective purchaser inquiries regarding potential groundwater contamination at or near the property contemplated for purchase and providing data as needed.

- Providing EPA with Site information as needed to support community relations activities (e.g., fact sheets, public meetings).

- Maintaining a database of the data collected at the Site.

a) Extraction System

Settling Defendant shall operate the groundwater extraction system to capture and contain contaminated groundwater exceeding Site cleanup standards within the area of the contaminated groundwater (Figure 2). The Settling Defendant shall continue O&M until VOC concentrations in the alluvial aquifer achieve RAOs.

The existing extraction system includes twenty-three permanent extraction wells and one temporary extraction well. The current nominal extraction rate of 160 gpm shall be maintained as the specified flow rate for the extraction system until such time as the reduction in the plume size permits a lower extraction rate. Settling Defendant shall maintain a current valid discharge permit with the City of Vancouver to provide for an alternative disposal system in the event the infiltration gallery(s) are unable to accept the treated water discharge.

The Settling Defendant may modify the extraction system to enhance VOC remediation, provided that such enhancements do not have adverse impacts on chromium removal. Initially, up to three extraction/monitoring wells may be installed or modified. A description of and schedule for performing this work will be included in the Remedial Design/Remedial Action (RD/RA) Work Plan.

Revisions to the extraction system may also be made on a case-by-case basis to accommodate land use by property owners above the plume. When such revisions are advisable, Settling Defendant will prepare a Work Plan describing proposed revisions for review and approval by EPA. Settling Defendant shall not be required to install any extraction wells within the Boomsnub property boundaries or elsewhere on the Site where chromium extraction is the primary goal, or to maintain containment due to discharges from the Boomsnub infiltration gallery.

b) Ion Exchange Treatment System

The Settling Defendant shall operate the treatment system in accordance with the O&M Manual. System operations shall comply with the Site monitoring and reporting requirements and shall meet effluent guidelines specified in the current City of Vancouver wastewater discharge permit or, following startup of each infiltration gallery, revised groundwater discharge limits. Resins used in the ion exchange process shall be monitored in accordance with the O&M Manual to check for contaminant breakthrough. Spent resins and other system-related wastes shall be characterized as described in the O&M Manual and disposed in accordance with applicable federal, state, and local waste disposal requirements.

The Settling Defendant shall be responsible for purchasing new resin and for manifesting and transporting for off-site disposal the spent resins generated by the ion exchange system during the period the extraction and treatment system is being operated for VOC remediation.

c) System Monitoring

System monitoring shall be completed in accordance with this SOW (Section III.B.11) and the protocols outlined in the *Site Quality Assurance and Sampling Plan for the Groundwater Treatment System Operation and Maintenance—Revision 1* (QASP) (EA 2004a). Treatment system monitoring shall include collection and analysis of monthly influent and effluent samples to determine the effectiveness of the treatment system and to confirm compliance with the discharge permit limits and other established limits.

Settling Defendant shall also comply with the Washington State Department of Ecology requirements for submitting the Dangerous Waste Annual Report for the granulated activated carbon generated in the Site air emission control systems and for the spent ion-exchange resin.

d) Data Management

Settling Defendant shall continue to maintain a database of the analytical results of the monitoring. Data shall be submitted to EPA in the format specified by EPA.

Settling Defendant shall provide copies of monitoring data to EPA, Clark Public Utilities, the City of Vancouver, and to the property owners on whose property the sampled monitoring and extraction wells are located (for wells on their property only). Copies of data shall also be provided to the general public upon request.

6. Operation of Air Stripper

Settling Defendant shall continue O&M of the existing air stripper, including related off-gas treatment components as needed, for treatment of VOCs, in conjunction with the operation of the existing groundwater extraction system and ion-exchange treatment system (Section III.B.5). The treatment system flow-through rate for water shall remain at its current nominal rate of 160 gpm until less flow is needed.

Air stripper off-gases shall be treated with activated carbon prior to discharge to the atmosphere. Air emissions monitoring shall be conducted to meet the substantive requirements of the Southwest Washington Clean Air Agency. Spent carbon shall be characterized and disposed or regenerated in accordance with applicable federal, state, and local waste disposal requirements.

The air stripper shall be operated until the long-term groundwater cleanup standards for VOCs shown in Table 1 are achieved. Operation of the air stripper shall comply with requirements to meet effluent and emissions ARARs and guidelines specified in the Site operating permit with the City of Vancouver, the revised groundwater discharge limits during infiltration gallery operation, and the policies of the Southwest Washington Clean Air Agency.

7. Operation of OU-2 Treatment System

Settling Defendant shall continue to operate the OU-2 treatment system in compliance with the OU-2 O&M Manual (EA2004b) developed specifically for this system. Treatment system off-gases shall be treated with activated carbon prior to discharge to the atmosphere. Air emissions shall be monitored in accordance with the O&M Manual to assess the operation of the carbon treatment system. Spent carbon shall be characterized and disposed or regenerated in accordance with applicable federal, state, and local waste disposal requirements.

Groundwater monitoring shall be conducted in accordance with the O&M Manual developed for OU-2 to evaluate system effectiveness.

8. Design, Construction, and Operation of Infiltration Galleries

With EPA's approval, Settling Defendant designed and constructed an infiltration gallery on the BOC property for disposing treated groundwater. Settling Defendant also designed and constructed a connection from the existing treatment system to the existing infiltration gallery on the Boomsnub property. Water flow into the Boomsnub Gallery will be limited until operations at OU-2 are completed so as not to disrupt ongoing remediation. After the OU-2 remediation is completed, flows can be increased as long as it does not disrupt the existing capture zone. Modeling and monitoring of existing wells will be used to assess the amount of water that can be discharged in the Boomsnub Gallery without negatively impacting the plume footprint or existing extraction system capability to capture the plume. Settling Defendant shall amend the existing O&M Manual to include O&M of the infiltration galleries and shall operate the infiltration galleries in accordance with the amended O&M Manual. Settling Defendant shall maintain a valid discharge permit with the City of Vancouver to provide for an alternative treated water disposal system should one be needed.

9. Additional Well Installation and Data Collection

The Settling Defendant shall install up to two new monitoring wells in the Upper Troutdale aquifer. A description of this work shall be provided in the RD/RA Work Plan (if the work has not already been completed prior to issuing the plan). Baseline groundwater samples shall be collected from the new well(s) following installation and well development. Following baseline sampling, the well(s) shall be sampled in accordance with the Site groundwater monitoring

program. Additional data gaps were not identified at the time this SOW was prepared.

10. Evaluation of Alternate Treatment Methodologies

Settling Defendant may prepare an assessment of alternative *in situ* treatment technologies and monitored natural attenuation for groundwater remediation consistent with the Groundwater Contingency Remedy discussed in Section 10.2.1. of the ROD. If the results of such an assessment so indicate, Settling Defendant may conduct a pilot study of the proposed *in situ* technology that may augment or potentially replace the existing groundwater extraction and treatment system. The in-well stripping system installed for OU-2 meets the requirement of conducting an in-well stripping treatability test for the Site.(Section III A.1.b.).

11. Installation and Operation of Monitoring Program for Remedial Action

Settling Defendant shall implement monitoring program(s) to evaluate and ensure that the construction and implementation of the remedial action complies with approved plans, design documents and performance standards. Settling Defendant shall provide a schedule for amending the existing monitoring programs as part of the RD/RA Work Plan (Section IV.A.1.).- Monitoring programs shall address each component of the remedial action. Monitoring programs may reference the Site QASP and Construction Quality Assurance Plan (CQAP) as appropriate. Monitoring programs are subject to review and approval by EPA.

Settling Defendant shall provide EPA with an Annual Status Report documenting the cleanup status at the Site. This report shall document the effectiveness of the cleanup during the past year including operational availability, trends in extraction and monitoring wells, changes made to the system, gallons treated and disposed, pounds of contaminants removed, and recommendations for the upcoming year. An executive summary for this document, suitable for distribution to the general public, shall be included in the Annual Status Report.

a) Groundwater Monitoring

The current groundwater monitoring program is consistent with the Site QASP (EA 2004a), the Interim Long-Term Monitoring Sampling Schedule (ILTMSS) (EA 2004d) and the O& M Manual. Settling Defendant shall develop and submit a Long-Term Groundwater Monitoring Plan (LTGMP), which may be modeled on the ILTMSS, for EPA review and approval. The LTGMP shall define both the qualitative and quantitative aspects of groundwater monitoring for this remedial action. The ILTMSS shall be followed until the LTGMP is approved by EPA. Settling Defendant shall sample the monitoring and extraction wells on a periodic basis as defined in the ILTMSS or the LTGMP. Samples shall be analyzed for the parameters listed in Table 1, with the exception of hexavalent chromium (samples are analyzed for total chromium). Settling Defendant may modify the sampling program after review and approval by EPA.

Settling Defendant shall submit a QASP addendum for EPA review and approval 60 days prior to each biennial sampling event. This addendum shall be in letter format indicating only changes to the Site QASP and ILTMSS or LTGMP. It shall also include a table indicating wells to be

sampled and location of QA samples. Settling Defendant shall submit a report documenting the results of each sampling event. The report shall include: a summary of field activities, problems encountered (if any) and their resolution, results of water level measurements if taken, a summary of analytical results, and a discussion of data quality. Data validation shall be conducted on one Sample Delivery Group for VOCs and one Sampling Delivery Group for chromium for the fall biennial event only. If a new analytical laboratory is used, Settling Defendant shall provide a new data validation schedule for EPA's review and approval.

b) Air Monitoring

Air monitoring shall be conducted in accordance with the requirements in emission policies of the Southwest Washington Clean Air Agency. Residuals from air emissions control processes shall be treated and/or disposed in accordance with ARARs.

c) Treatment System Monitoring

Treatment system monitoring shall be conducted in accordance with the requirements in the O&M Manual. If modifications to the treatment system warrant a change in the system monitoring program, an addendum to the O&M Manual shall be prepared and submitted to EPA for review and approval prior to implementation.

12. Site Closure

As part of the RD/RA Work Plan, the Settling Defendant shall provide a schedule for preparing and submitting the Site Closure Plan for the termination of RA at the Site, decommissioning of facilities, and final closure of the Site. The plan shall be consistent with this SOW and shall document the procedures for measuring compliance with performance standards and activities required for decommissioning and closing the Site. The closure plan for OU-2 (EA 2003) as finally approved shall be incorporated into the Site Closure Plan as appropriate.

As part of this plan, the Settling Defendant shall use the conceptual site model, which includes the Site investigation data, remedial performance monitoring data, the groundwater model, statistical analyses, and other information as needed to develop a strategy and set of criteria for termination of remedial action and Site closure once RAOs have been achieved. This approach will take into account site-specific conditions, risk receptors, institutional controls, and land use to provide the framework and specific elements in developing closure criteria. The Site Closure Plan shall also provide for partial termination of extraction or treatment or monitoring systems where some, but not all, RAOs have been achieved. This includes the situation in which VOC concentrations have achieved RAOs but chromium concentrations have not.

13. Decommissioning

The Settling Defendant shall decommission, dismantle, and/or dispose of the groundwater extraction and treatment systems once performance standards have met closure criteria as stipulated in the Site Closure Plan. This work shall include the IX and caustic buildings, paved surfaces, and approximately 500 cy subsurface soil under the buildings and paved areas as

identified in the 2003 Soil Characterization Study (URSG 2003). The only soil to be addressed under this task is soil on the Boomsnub property that is within 15 feet of the ground surface and has chromium concentrations greater than 400 mg/kg. Plans for facility decommissioning shall be developed in accordance with Section IV of the Statement of Work.

IV. SCOPE OF REMEDIAL DESIGN AND REMEDIAL ACTION

A. Tasks

The RD/RA shall consist of the following nine tasks:

Task 1. RD/RA Work Plan

Task 2. Remedial Design Phases (as needed)

a. Preliminary Design (35%)
b. Prefinal Design (95%)/Final Design (100%)

Task 3. Remedial Action/Construction (as needed)

a. Preconstruction Meeting
b. RA Progress Meetings
c. Prefinal Inspection
d. Final Inspection
e. Reports
   i. Remedial Action Construction Report
   ii. Remedial Action Completion Report (required)

Task 4. Operation and Maintenance

Task 5. Long-Term Groundwater Monitoring Program (LTGMP)

Task 6. Performance Monitoring

Task 7. Decommissioning

Task 8. Additional Work

Task 9. 5-Year Review

1. Task 1. RD/RA Work Plan

The Settling Defendant shall submit a Work Plan, which shall document the overall management strategy for planning and performing the design, construction, operation, maintenance, and monitoring of remaining remedial activities at the Site. The plan shall identify the responsibility and authority of all organizations and key personnel involved with the implementation and shall

include a description of qualifications of key personnel including contractor personnel. The Work Plan shall contain a schedule of remedial activities and milestones and a summary of deliverables. The Settling Defendant shall submit the RD/RA Work Plan in accordance with Section VI of the Consent Decree.

Remedial design activities may require pre-design studies to provide information necessary to fully implement the remedial design and remedial action. If necessary, the Work Plan shall include a QASP addendum to complete the pre-design studies.

The RD/RA Work Plan shall address the scheduling for the following RA components:

- Preparation of Site Closure Plan
- Modification to the Extraction System
- Installation of Upper Troutdale Aquifer Monitoring Well
- Preparation of LTGMP

The Work Plan shall also indicate which RA components will require the Remedial Design process described in Task 2 and which may be addressed through technical memoranda or Work Plans.

2. Task 2. Remedial Design Phases

If necessary, Settling Defendant shall prepare a design including construction plans and specifications for major new *design* efforts required to comply with this SOW. Major new design activities are items that go beyond modifications to the existing system. Potential major design activities shall be identified in the RD/RA Work Plan. Detailed design documents shall be submitted in accordance with the schedule set forth in Section V of this SOW.

Subject to agreement by EPA, Settling Defendant may submit more than one set of design submittals reflecting different components of the remedial action. As appropriate, design documents shall be developed in accordance with EPA's Superfund Remedial Design and Remedial Action Guidance (OSWER Directive No. 9355.0-4A) and shall demonstrate that the remedial action shall comply with the objectives of the ROD, Consent Decree, Action Memorandum, and this SOW, including applicable performance standards. Settling Defendant shall meet regularly with EPA during the remedial design to discuss design issues.

a) Preliminary Design Report (35%)

As needed, Settling Defendant shall prepare and submit a Preliminary Design Report after pre-design data collection has been completed. The Preliminary Design Report shall include or discuss, at a minimum, the following:

- Preliminary plans, drawings, and sketches, including design calculations;

- Results of pre-design studies, additional field sampling, and hydrogeologic analysis;

- Design assumptions and parameters, including design restrictions and limitations, process performance criteria and other information required to justify the proposed design concepts;

- Proposed cleanup verification methods, including compliance with ARARs;

- Real estate, easement, and permit requirements; and

- Preliminary schedule for completion of remedial design and remedial action activities.

b) Prefinal and Final Designs (95% and 100%)

As needed, Settling Defendant shall submit a Prefinal Design when the design effort for any discrete remedial action is 95 percent complete. The Prefinal Design shall fully address the comments made to the preceding design submittal. The Final Design shall be submitted when design efforts are 100 percent complete and shall fully address the comments made to the Prefinal Design and shall include drawings and specifications. The Prefinal Design shall serve as the Final Design if EPA has no further comments and issues a written approval.

The Prefinal and Final Design submittals shall include those elements listed for the Preliminary design, as well as the following as needed:

- Final Amendments to CQAP if necessary;
- Final Amendments to QASP and Health & Safety Plan, if necessary;
- Draft Amendments to O&M Manual, if necessary;
- Final project schedule for the construction and implementation of the remedial action that identifies timing for initiation and completion of the critical path tasks. The final project schedule submitted as part of the Final Design shall include specific dates for completion of major milestones and construction.

3. Task 3. Remedial Action Construction

Settling Defendant shall implement the remedial action as detailed in the approved Final Design. The following activities shall be completed in constructing the remedial action:

a) Preconstruction Meeting

Settling Defendant shall participate with EPA and other stakeholders in a preconstruction meeting to:

- Review methods for documenting and reporting inspection/construction QA data;
- Review methods for distributing and storing documents and report;
- Review work area security and safety protocol;

- Discuss any appropriate modifications of the CQAP to ensure that site-specific considerations are addressed; and
- Conduct a Site walk-about to verify that the design criteria, plans, and specifications are appropriate and understood, and to review material and equipment storage locations.

Settling Defendant shall document the preconstruction meeting with minutes that shall be transmitted to participating parties.

b) RA Progress Meetings

Settling Defendant shall conduct RA progress meetings on a regular basis throughout RA construction. The meetings shall be held at least monthly unless EPA and other stakeholders agree to a less frequent schedule. At a minimum, Settling Defendant shall address the following at progress meetings:

- General progress of construction with respect to RA schedule;
- Problems encountered and associated action items;
- Pending design, personnel or schedule changes requiring EPA approval;
- Results of any RA verification sampling and associated decisions and action items.

c) Prefinal Inspection

Within ten days after Settling Defendant makes a preliminary determination that construction is substantially complete, Settling Defendant shall notify EPA for the purposes of conducting a prefinal inspection. The prefinal inspection shall consist of a walk-through inspection with EPA and Settling Defendant. The inspection is to determine whether the project is substantially complete and consistent with the contract documents and the remedial design. Any outstanding construction items discovered during the inspection shall be identified, noted, and rectified. Additionally, Settling Defendant shall test the operation of treatment equipment. Settling Defendant shall certify that the equipment has performed to meet the purpose and intent of the specifications. Retesting shall be completed where deficiencies are revealed and rectified. The Prefinal Inspection Report shall outline the outstanding construction items, actions required to resolve items, completion date for these items, and a proposed date for final inspection.

d) Final Inspection

Within ten days after completion of any work identified in the prefinal inspection report, Settling Defendant shall notify EPA for the purposes of conducting a final inspection. The final inspection shall consist of a walk-through inspection by EPA and Settling Defendant. The prefinal inspection report shall be used as a checklist with the final inspection focusing on the outstanding construction items identified in the prefinal inspection. Confirmation shall be made that outstanding items have been resolved.

e) Reports

Settling Defendant shall follow U.S. EPA guidance for preparing Remedial Action Reports described in "Close Out Procedures for National Priorities List Sites", EPA 540-R-98-016, OSWER Directive 9320.2-09A-P, PB98-963223, January 2000, in submitting the following reports.

1) Completion of Remedial Action Report

The Settling Defendant shall submit a Remedial Action Completion Report for the Remedial Actions undertaken at the Site in accordance with the requirements of Section XIV of the Consent Decree.

2) Completion of Work Report

The Settling Defendant shall submit a Completion of Work Report in accordance with the requirements of Section XIV of the Consent Decree.

4. Task 4. Operation and Maintenance (O&M)

Settling Defendant shall operate and maintain the existing extraction and treatment systems in accordance with the O&M Manual and as discussed in Section III of this SOW. Operations and maintenance activities may be modified as additional components of the RA are completed. The manual shall be composed of the elements shown in Exhibit 1.

5. Task 5. Long-Term Groundwater Monitoring Program

An LTGMP shall be prepared and submitted to replace the existing ILTMSS. The schedule for preparing the LTGMP shall be presented in the RD/RA Work Plan. Once approved by EPA, Settling Defendant shall implement the LTGMP. The LGTMP shall be modified as necessary to accommodate changes of conditions at the Site or changes to Site operations.

6. Task 6. Performance Monitoring

The purpose of the performance monitoring is to provide a mechanism to ensure that both short-term and long-term performance standards for the remedial action are met. Settling Defendant shall prepare, update, or amend, as necessary, the following documents to ensure that performance standards are met:

- QASP
- CQAP
- O&M Manual
- ILTMSS/LTGMP
- Site Closure Plan

7. Task 7. Decommissioning

The Settling Defendant shall decommission, dismantle, and/or dispose of the groundwater extraction system and treatment systems once performance standards have met closure criteria as described and approved in the Site Closure Plan.

8. Task 8. Additional Work

If reasonable progress is not being made toward achieving RAOs within a reasonable time period, or if the remedy is otherwise not protective of the environment with respect to VOCs, a variety of responses may be appropriate. Possible responses include (but are not limited to) performing additional remedial actions, collecting additional data to determine the cause of the failure to achieve progress, establishing institutional controls on activities at the Site, and extending the monitoring period. If further action is determined by EPA to be necessary to be protective of the environment with respect to VOCs, the appropriate type of action shall be determined based on the nature and severity of the failure, and an analysis of alternatives. EPA shall determine whether additional response actions must be conducted, and if additional work by Settling Defendant for VOCs is determined to be necessary, such work shall not be implemented without prior approval of EPA.

9. Task 9. Five-Year Review

Settling Defendant shall provide support to EPA in preparation of the five-year review. Such support includes writing summary reports of studies, investigations, and data analyses associated with evaluating the effectiveness and protectiveness of the remedial actions in achieving remedial action goals. If available, site-specific studies of alternative technologies that have the potential to augment or replace the existing extraction and treatment system for the removal of chromium and VOCs shall also be provided to EPA.

B. Document Contents

The documents listed in this section (the QASP, the Health and Safety Plan, and the CQAP) are documents that must be updated as needed and submitted as outlined in Section IV of this SOW. The following section describes the required contents of each of these supporting plans.

1. Quality Assurance Sampling Plan

As needed, Settling Defendant shall update the Site QASP (EA 2004a), covering sample collection, analysis, and data handling for samples collected in all phases of future Site work, based upon the Consent Decree and guidance provided by EPA. Sampling activities shall be outlined in accordance with "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," October 1988.

The QASP updates shall be consistent with the requirements of the EPA Contract Lab Program (CLP) for laboratories proposed outside the CLP and EPA QA/R5 requirements, and organized as shown in Exhibit 2.

2. Health and Safety Plan

As needed, Settling Defendant shall update the existing Health and Safety Plan (EA 2004c), which is designed to protect on-site personnel and area residents from physical, chemical, and all other hazards posed by this remedial action. The safety plan shall follow EPA guidance and all OSHA requirements as outlined in 29 C.F.R. 1910.120 and 1926 and organized as shown in Exhibit 3.

3. O&M Manual

Settling Defendant shall prepare amendments, as necessary, to the existing O&M Manual to cover both implementation and long-term maintenance of the remedial actions. Final amendments to the existing O&M Manual for each new remedial action shall be submitted prior to the pre-final construction inspection, in accordance with the approved construction schedule. Amendments to the O&M Manual shall contain the elements shown in Exhibit 1 as appropriate.

4. Construction Quality Assurance Plan

As needed, Settling Defendant shall update the Site CQAP as appropriate to implement the remedial action. The CQAP shall describe the specific components of the quality assurance program to ensure that the completed project meets or exceeds all design criteria, plans, and specifications. A draft CQAP addendum shall be submitted with the Prefinal Design documents for the specific task, and the final CQAP shall be submitted with the Final Design documents. The CQAP shall contain, at a minimum, the following elements:

1. Identification of roles and responsibilities for organizations and key personnel involved in the construction and QA monitoring of the remedial action.

2. Qualifications of the Quality Assurance Official(s) demonstrating the individual has the training and experience necessary to fulfill the identified responsibilities.

3. Protocols for sampling and testing used to monitor construction.

4. Identification of proposed quality assurance sampling activities, including testing frequency, acceptance and rejection criteria, problem identification and corrective measures procedures, equipment and materials acceptance criteria, and testing documentation procedures.

5. Reporting requirements for CQA activities shall be described in the CQAP. Reports shall include daily construction reports, field testing logs, material and equipment acceptance sheets, problem identification and corrective measures reports, field modification reports, and other documentation, as necessary to present construction activities and the QA process.

6. Recordkeeping requirements shall be described in the CQAP. A description of

the provisions for final storage of all records consistent with the requirements of the Consent Decree shall be included.

V. SUMMARY OF MAJOR DELIVERABLES/SCHEDULE

Submittal	Due Date
RD/RA Work Plan	60 days after Notice of Authorization to Proceed with RD
LTGMP	TBD (in RD/RA Workplan)
Preliminary Design Report	Report due 120 days after completion of predesign fieldwork associated with Preliminary Design.
Prefinal Design (95 percent)	90 days after resolution of EPA's comments on the Preliminary Design Report
Final Design (100 percent)	30 days after resolution of EPA's comments on the Prefinal Design
Award RA Contract(s)	90 days after EPA approval of Final Design
Pre-Construction Meeting	15 days after award of RA Contract(s)
Initiate Construction of RA	15 days after Pre-Construction meeting
Completion of Construction	As approved by EPA in the RA construction schedule
Prefinal Inspection	15 days after completion of construction
Prefinal Inspection Report	15 days after completion of prefinal inspection
Final Inspection	15 days after completion of work identified in Prefinal Inspection Report
Final O&M Plan	30 days after Final Inspection
Completion of Remedial Action Report	TBD (in RD/RA Workplan)
Completion of Work Report	TBD (in RD/RA Workplan)
Annual Status Reports	April 1
Semiannual Progress Reports	April 20th, October 20th
Groundwater Monitoring Reports	120 days after field event
Groundwater Monitoring Sampling Event Addendum	60 days prior to field event
Property Owner Notification	14 days prior to field event

VI. REFERENCES AND SELECTED BIBLIOGRAPHY

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EA. 2000c. Engineering Evaluation/Cost Analysis. BOC Gases, Vancouver, Washington. August.

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EA. 2004c. Health and Safety Plan. Boomsnub/Airco Superfund Site, Hazel Dell, Washington. September.

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Table 1
Cleanup Levels for Groundwater Chemicals of Concern

Media: Groundwater
Site Area: Site-wide Groundwater OU
Available Use: Residential
Controls to Ensure Restricted Use (if applicable): Public Water Supplies Previously Provided to Impacted Property Owners

Chemical of Concern	CAS Number	MTCA B (µg/L or ppb)	MCL (µg/L or ppb)	Is MCL sufficiently protective?	Basis	Practical[1] Quantitation Limit (µg/L or ppb)	Cleanup[2] Level (µg/L or ppb)	Risk At Cleanup Level[3]
Hexavalent Chromium	18540-29-9	80	No MCL	NA	MTCA B	5	80	HQ = 1
Chromium (Total)	7440-47-3	No MTCA B	100	Yes	MCL	5	100	NC
Bromodichloromethane	75-27-4	0.706	100	No	MTCA B	1	1	NC
Carbon Tetrachloride	56-23-5	0.337	5	No	MTCA B	1	1	1.49×10^{-5}
Dibromochloromethane	124-48-1	0.521	100	NC	MTCA B	1	1	NC
1,2-Dichloroethane	107-06-2	0.481	5	Yes	MCL	1	5	1.04×10^{-5}
1,1-Dichlorothene	75-35-4	0.0729	7	No	MTCA B	1	1	NC
Tetrachloroethene	127-18-4	0.858	5	Yes	MCL	1	5	5.83×10^{-6}
1,1,1-Trichloroethane	71-55-6	7,200	200	Yes	MCL	1	200	HQ = 0.0278
Trichloroethene	79-01-6	3.98	5	Yes	MCL	1	5	1.26×10^{-6}

CAS – Chemical Abstract Service
HQ – hazard quotient
MCL – maximum contaminant level
MTCA- Model Toxics Control Act
NA – not applicable
NC – not calculated
PQL- Practical Quantitation Limits
Ppb -parts per billion
WAC- Washington Administrative Code
µg/L- parts per billion

Notes:
[1]Ecology Implementation Memo #3 of November 1993
[2]Cleanup level established as the higher of the regulatory level or the PQL; see WAC 173-340-700(6) and Ecology

Implementation Memo #3 of November 24, 1993
[3]Where cleanup criteria is MTCA B, risk at cleanup level is calculated using MTCA assumptions