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STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

In the Matter of Remedial)		
Action by:)	AGREED	ORDER
Cascade Pole Company, Inc. and)	No. DE	92HS-S146
McFarland Cascade Holdings, Inc.)		

TO: Mr. Corry McFarland
Cascade Pole Company, Inc.
McFarland Cascade Holdings, Inc.
1640 East Marc Street
Tacoma, WA 98401-2939

I.

<u>Jurisdiction</u>

This Order is issued pursuant to the authority of RCW 70.105D.050(1).

II.

Statement of Facts

Ecology makes the following Findings of Fact, without admission of such facts by McFarland Cascade Holdings, Inc. or Cascade Pole Company (Defendants).

- 1. McFarland Cascade Holdings, Inc. and Cascade Pole Company are the owner and operator, respectively, of Cascade Pole Company (hereinafter CPC) located at 1640 East Marc Street, Tacoma, Washington 98401-2939. The site is bordered on one side by the Puyallup River and is in an industrial area of the Tacoma tideflats. (See Attachment 1, Area Map).
- 2. CPC operates a wood treating and preserving facility at the site and has been in operation since 1975. CPC pressure treats logs and timbers with pentachlorophenol (PCP) and copper-chrome arsenate (CCA). Creosote and PCP are currently used for pole butt dipping. Treated wood is stored on-site for drying prior to sale.

- 3. In the past, CPC pressure treated logs and timbers with creosote but discontinued this practice in 1988. Two formulations of chemonite were used in the past to pressure treat wood. Both chemonite formulations contained differing levels of ammonia, copper, and arsenic. One of these formulations also contained zinc.
- Dangerous waste inspections conducted by Ecology at CPC on December 22, 1987, and June 7, 1989, confirmed that dangerous wastes and hazardous substances were being released at the site. Soil samples taken by Ecology on December 22, 1987, from the transfer table were analyzed for total metals, pentachlorophenol, and EP-Toxicity metals. Total metals analysis resulted in the following: arsenic ranged from 720-7,800 mg/kg, chromium ranged from 360-3,500 mg/kg, and copper ranged from 650-4,900 mg/kg. Two samples analyzed for EP-Toxicity Metals resulted in 16.6 mg/l and 13.8 mg/l of arsenic. Pentachlorophenol ranged from 92 to 72,000 ug/kg. Samples collected on June 7, 1989, were analyzed for EP-Toxicity, total PAHs, and pentachlorophenol. Analysis resulted in the following: EP-Toxicity metals for arsenic 21.8 mg/l, PAHs with more than 3 and less than 7 rings ranged from 2,450-10,820 mg/kg, and pentachlorophenol ranged from 410-9,700 mg/kg.
- 5. A preliminary investigation pursuant to Order No. DE 89-S123 of the transfer table, treated lumber storage yard and the pole butt dip area began in December 1989, and it indicated that contamination existed in the areas described below in paragraphs 6, 7, and 8 (Attachment 2, Site Map). This contamination was reported in the Interim Report, Cascade Pole Company, Site Investigation, ReTec (June 1991).
- 6. Soil samples collected from the transfer table during the preliminary investigation were analyzed for total metals, pentachlorophenol,

and semi-volatile organics. Analysis resulted in the following:

pentachlorophenol ranged from 1-17 mg/kg, total carcinogenic PAHs ranged from
4.2-14.48 mg/kg, arsenic ranged from 31-1800 mg/kg, chromium ranged from
4.3-990 mg/kg, copper ranged from 16-5900 mg/kg and hexavalent chromium ranged
from 3-5 mg/kg.

- 7. Groundwater sampled contained arsenic and/or chromium above the drinking water standard of 0.05 mg/l in the Ground Water Monitoring Wells Nos. MW-2, MW-3, MW-5, MW-6, MW-8, and MW-9. The sample from Monitoring Well No. MW-7 contained 0.011 mg/l pentachlorophenol.
- 8. Soil samples collected in the treated lumber storage yard were analyzed for total metals. Total arsenic ranged from 2.8-100 mg/kg, chromium ranged from 16-76 mg/kg, copper ranged 13-63 mg/kg and hexavalent chromium ranged 3-5 mg/kg.
- 9. Ecology directed CPC to not install drip pads or pave over areas which have been active and have not been fully investigated for contamination. To pave or cover these areas with drip pads would prevent or seriously hinder remediation of those areas required by this Order. It is recognized by both Ecology and EPA that the work required in this Order will make it impossible to meet the May 6, 1992, compliance date for the installation of the new drip pads required by the deadline set forth in the Federal Register, Vol 56, No. 114, at pages 27332 through 27336. Upon completion of the interim cleanup actions, CPC agrees to install the drip pads according to federal requirements.
- 10. CPC has an NPDES permit (WA-003795-3) for stormwater discharge to the Lincoln Avenue ditch. On February 19, 1992, a water quality inspection determined that CPC was out of compliance with its NPDES permit. Water

samples taken from Outfall No. 001 were analyzed for total metals and resulted in the following: 578 ug/l arsenic and 430 ug/l chromium. A surface sample and a deep pipe water sample were taken from Outfall 002. Surface water samples were analyzed for total metals and resulted in the following:
657 ug/l arsenic and 475 ug/l chromium. Deep pipe water sample was analyzed for total metals and resulted in the following: 1,860 ug/l arsenic and 2,140 ug/l chromium.

11. On or before June 6, 1991, CPC excavated a portion of the treated pole storage yard. CPC took soil samples from underneath the excavation.

Soil Sample No. 51067, taken underneath the excavated soil, contained 110 ppm pentachlorophenol. This exceeds the state dangerous waste levels for persistent dangerous wastes, per Chapter 173-303 WAC, and may be a federally regulated F032 waste. The waste pile from soil excavation is currently being stored on-site. EPA is allowing CPC to demonstrate that the waste pile meets Health Based Risk Levels, using the Model Toxic Control Act as a standard. The regulatory status of the waste pile has yet to be determined.

III.

Ecology Determinations

Ecology makes the following determinations without admission of such determinations by the Defendants.

- 1. Chemicals present at the facility as described in Section II, paragraphs 4, 6, 7 and 8, above, are "hazardous substances" as defined at RCW 70.105D.020(5).
- 2. Based on the presence of these hazardous substances at the facility and all factors known to the Department, there is a release or

threatened release of hazardous substances from the facility, as defined by RCW 70.105D.020(10).

- 3. By certified letter dated November 7, 1991, Ecology notified CPC of its status as a "potentially liable person" under RCW 70.105D.040 after notice and opportunity for comment.
- 4. Pursuant to RCW 70.105D.030(1) and 70.105D.050, the Department may require potentially liable persons to investigate or conduct other remedial actions with respect to the release or threatened release of hazardous substances whenever it believes such action to be in the public interest.
- 5. CPC operations at the site are regulated by Chapter 70.105 RCW and Chapter 173-303 WAC. CPC is a large quantity generator of both Washington State dangerous wastes and federally regulated hazardous wastes.
- 6. Based on the foregoing facts, Ecology believes the remedial action required by this Order is in the public interest.
- 7. This Agreed Order includes two main phases: An Interim Action and a Remedial Investigation for the entire site. Additionally, the Order will address compliance, monitoring, and cleanup of the waste pile, if the waste pile does not meet Health Based Risk Levels, and the development of a compliance schedule for the federally-required drip pads.

IV.

Work to be Performed

Based on the foregoing Facts and Determinations, IT IS HEREBY AGREED that CPC conduct an Interim Action and a Remedial Investigation/Feasibility Study (RI/FS) at the site in accordance with WAC 173-340-350, WAC 173-340-400, and WAC 173-340-430. The specific tasks for this Order are described below in

summary fashion and in more detail in the Scope of Work attached as Exhibit A, hereby incorporated by reference as an enforceable part of this Agreed Order.

- Task I Interim Action Workplan for the Proposed Paving, Drip

 Pad and Transfer Table areas.
 - A. Develop an Interim Action Sampling and Analysis Plan to address areas to be paved or covered by drip pads.
 - B. Implement an Interim Action Sampling and Analysis Plan.
 - C. Develop an Interim Action Report.
 - D. Develop an Interim Action Design.
 - E. Implement the Interim Action.
- Task II Remedial Investigation/Feasibility Study (RI/FS)
 - A. Develop a workplan to investigate the contamination of the entire
 - B. Implement the RI/FS plan.
 - C. Develop a RI/FS Report.
- Task III Compliance and Monitoring of the Waste Pile.
- Task IV Drip Pad Construction Schedule.

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Terms and Conditions of Order

1. <u>Definitions</u>

Unless otherwise specified, the definitions set forth in Chapter 70.105D RCW and Chapter 173-340 WAC shall control the meanings of the terms used in this Order.

2. Public Notice

WAC 173-340-600(10)(c) requires a 30-day public comment period before this Agreed Order on a state RI/FS becomes effective. Ecology shall be responsible for providing such public notice and reserves the right to modify or withdraw any provisions of this Order should public comment disclose facts or considerations which indicate to Ecology that the Order is inadequate or improper in any respect.

3. Remedial Action Costs

CPC shall pay, to Ecology, costs incurred by Ecology pursuant to this Order. These costs shall include: work performed by Ecology or its contractors for investigations, remedial actions, order preparation, oversight, and administration. Ecology costs shall include costs of direct activities; e.g., employee salary, laboratory costs, travel costs, contractor fees, and employee benefit packages and agency indirect costs of direct activities. CPC shall pay the required amount within 90 days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an identification of involved staff, and the amount of time spent by involved staff members on the project. A general description of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Failure to pay Ecology's costs within 90 days of receipt of the itemized statement of costs may result in interest charges. Disputes regarding recovery of remedial action costs shall be resolved according to Section V.9., Dispute Resolution.

4. <u>Designated Project Coordinators</u>

The project coordinator for Ecology is:

David Polivka Southwest Regional Office Washington Department of Ecology P.O. Box 47775 Olympia, WA 98504-7775

The name of the project coordinator for CPC will be sent to Ecology within fifteen (15) days of receipt of this Order. The project coordinator(s) shall be responsible for overseeing the implementation of this Order. To the maximum extent possible, communications between Ecology and CPC, and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order, shall be directed through the project coordinator(s). Should Ecology or CPC change project coordinator(s), written notification shall be provided to Ecology or CPC at least ten (10) calendar days prior to the change.

5. Performance

All work performed pursuant to this Order shall be under the direction and supervision, as necessary, of a professional engineer, a hydrogeologist, or similar expert, with appropriate training, experience, and expertise in hazardous waste site investigation and cleanup. CPC shall notify Ecology as to the identity of such engineer(s) or hydrogeologist(s) and of any contractors and subcontractors to be used in carrying out the terms of this Order in advance of their involvement at the site. CPC shall provide a copy of this Order to all agents, contractors, and subcontractors retained to perform work required by this Order and shall ensure that all work undertaken by such agents, contractors, and subcontractors will be in compliance with this Order.

Except when necessary to abate an emergency situation, CPC shall not perform any remedial actions at the site outside that required by this Order unless Ecology concurs, in writing, with such additional remedial actions.

6. Access

CPC shall obtain, in a timely fashion, such access to the Facility, and to any other premises where work under this Order is to be performed, as necessary for CPC to carry out the requirements of this Order. This Order does not convey any rights of access to CPC. Ecology or any Ecologyauthorized representative shall have the authority to enter and freely move about all property at the site at all reasonable times for the purposes of, inter alia: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Order; reviewing the progress in carrying out the terms of this Order; conducting such tests or collecting samples as Ecology or the project coordinator may deem necessary; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Order and verifying the data submitted to Ecology by CPC. By signing this Agreed Order, CPC agrees that this Order constitutes reasonable notice of access, and agrees to allow access to the site at all reasonable times for purposes of overseeing work performed under this Order. Ecology shall allow split or replicate samples to be taken by CPC during an inspection unless doing so would interfere with Ecology's sampling. CPC shall allow split or replicate samples to be taken by Ecology and shall provide Ecology seven (7) days notice before any sampling activity.

7. Public Participation

CPC shall prepare and/or update a public participation plan for the site. Ecology shall maintain the responsibility for public participation at

the site. CPC shall assist Ecology, when requested, to help coordinate and implement public participation for the site, which includes presence at public meetings/hearings to answer question or note comments.

8. Retention of Records

CPC shall preserve in a readily retrievable fashion, during the pendency of this Order and for ten (10) years from the date of completion of the work performed pursuant to this Order, all records, reports, documents, and underlying data in its possession relevant to this Order. Should any portion of the work performed hereunder be undertaken through contractors or agents of CPC, a record retention requirement meeting the terms of this paragraph shall be required of such contractors and/or agents. CPC shall make available to Ecology all previously mentioned records within seven (7) days after such record is requested or within seven (7) days after the requested record becomes available to CPC.

9. <u>Dispute Resolution</u>

CPC may request Ecology to resolve disputes which may arise during the implementation of this Order, including disputes regarding remedial action costs. Such requests shall be in writing and directed to the signatory, or his/her successor(s), to this Order. Ecology resolution of the dispute shall be binding and final. CPC is not relieved of any requirement of this Order during the pendency of the dispute and remains responsible for timely compliance with the terms of the Order unless otherwise provided by Ecology in writing. This provision does not limit Cascade Pole's rights under RCW 70.150D.060.

10. Reservation of Rights

This Agreed Order is not a settlement under Chapter 70.105D RCW. Ecology's signature on this Order in no way constitutes a covenant not to sue or a compromise of any Ecology rights or authority. Ecology will not, however, bring an action against CPC to recover remedial actions costs paid and received by Ecology under this Agreed Order. In addition, Ecology will not take additional enforcement actions against CPC to require those remedial actions required by this Agreed Order provided CPC complies with this Agreed Order.

Ecology reserves the right, however, to require additional remedial actions at the Site should it deem such actions necessary.

Ecology also reserves the rights regarding the injury to, destruction of, or loss of natural resources resulting from the releases or the threatened releases of hazardous substances from the site. In the event Ecology determines that the conditions at the site are creating or have the potential to create a danger to the health or welfare of the people on the site or in the surrounding area or to the environment, Ecology may order CPC to stop further implementation of this Order for such period of time as needed to abate the danger.

11. Transference of Property

No voluntary or involuntary conveyance or relinquishment of title, easement, leasehold or other interest in any portion of the site shall be consummated by CPC without provision for continued implementation of all requirements of this Order and implementation of any remedial actions found to be necessary as a result of this Order.

Prior to transfer of any legal or equitable interest CPC may have in the site or any portions thereof, CPC shall serve a copy of this Order upon any

prospective purchaser, lessee, transferee, assignee, or other successor in such interest. At least thirty (30) days prior to finalization of any transfer, CPC shall notify Ecology of the contemplated transfer.

12. Compliance With Other Applicable Laws

All actions carried out by CPC pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements.

VI.

Satisfaction of this Order

The provisions of this Order shall be deemed satisfied upon CPC's receipt of written notification, from Ecology, that CPC has completed the remedial activity required by this Order, as amended by any modifications, and that all other provisions of this Agreed Order have been complied with.

VII.

Enforcement

Pursuant to RCW 70.105D.050, this Order may be enforced as follows:

- A. The Attorney General may bring an action to enforce this Order in a state or federal court.
- B. The Attorney General may seek, by filing an action if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the site.
- C. In the event <u>CPC</u> refuses, without sufficient cause, to comply with term of this Order, <u>CPC</u> will be liable for:

- (1) up to three times the amount of any costs incurred by the State of Washington as a result of its refusal to comply; and
- (2) civil penalties of up to \$25,000 per day for each day it refuses to comply.
- D. This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under RCW 70.105D.060.

Effective date of this Order: June 7, 1993

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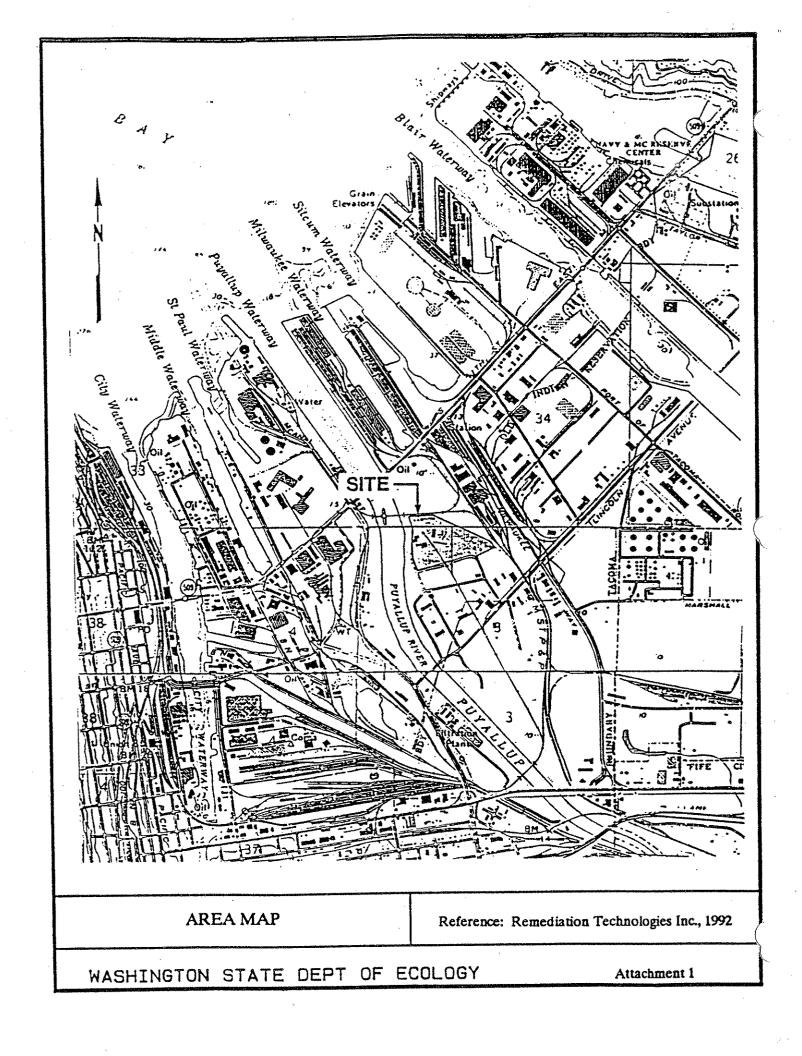
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Acting Section Supervisor Solid and Hazardous Waste

Corry McFarland.

President

MaFerland Cascade Holdings Cascade Pole Company, Inc.



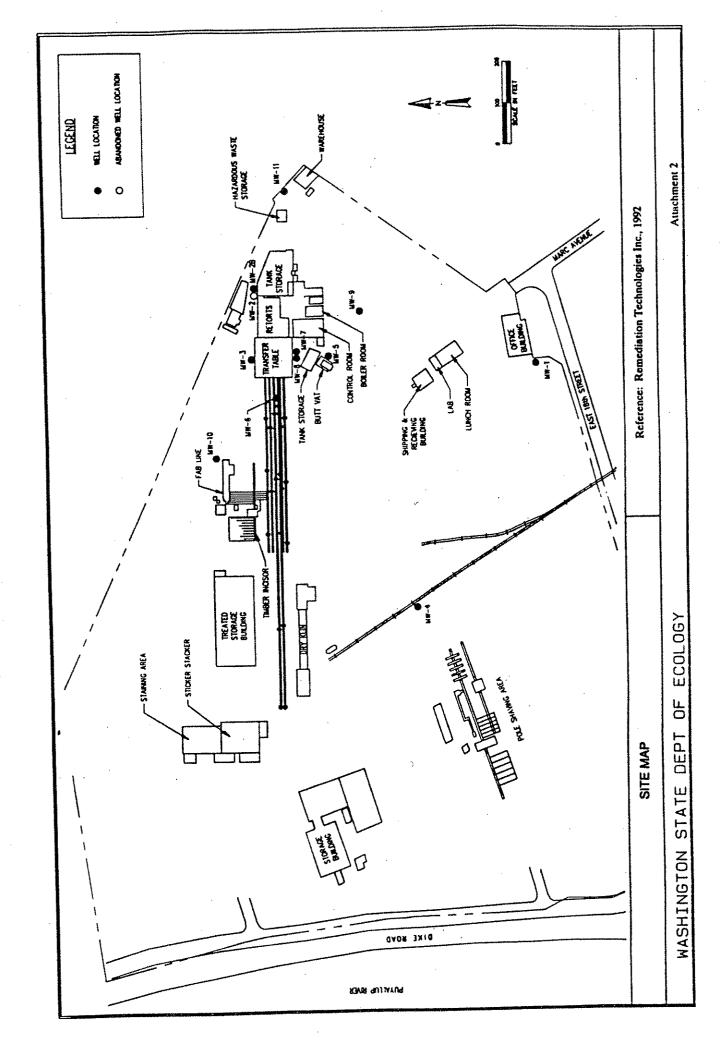


Exhibit A Scope of Work

Task I Interim Action Workplan for Proposed Paving, Drip Pad, and Transfer Table Areas

Schedule: Within thirty (30) days of the effective date of this Order, submit to Ecology for review a draft Interim Action workplan for the proposed paving and drip pad areas. Within thirty (30) days of receiving Ecology's comments to the draft, incorporate Ecology's comments into the final workplan. The workplan shall include the following sampling and analysis methods and procedures:

The Interim Action workplan shall contain methods to characterize the nature and extent of contamination in the interim action areas, identify cleanup levels for constituents of concern, evaluate cleanup alternatives, implement appropriate interim actions, and evaluate the effectiveness of cleanup actions.

- A. Develop Interim Action Sampling and Analysis Plan.
 - 1. CCA drip pad (195 feet by 24 feet):

The CCA drip pad area is the location of a proposed new RCRA subpart W pad which will be used for management of CCA drippage. The location of the proposed pad coincides with the area of historic CCA Drippage. Construction of the new pad will require that the upper three feet of soil be excavated to allow for the placement of a liner, leak detection system and concrete pad.

Removal of the upper 3 feet of soil will generate about 520 cubic yards of soil which will be disposed of at an off-site location. Soil sampling results will be used to determine the appropriate disposal location. Subsurface soil (i.e., those at and, perhaps below the three foot excavation depth) will be sampled to characterize the potential impact of the historic drippage.

The area shall be divided into twenty (20) equal portions approximately 12 feet by 20 feet. Sample locations shall be randomly chosen from the twenty (20) portions. One sampling location shall be sampled in duplicate. For each 12 x 20 foot area chosen, a numbered grid shall be used with 24 numbered nodes. A random numbering system shall be chosen and sample locations identified. The number of samples to be taken is shown in the Scope of Work, Attachment 1.

2. Pentachlorophenol drip pad (110 feet by 12 feet):

The pentachlorophenol drip pad is to be constructed similarly to the CCA drip pad and has been located over the area of historic pentachlorophenol drippage. The major difference between these two areas is that the upper three feet, or approximately 150 cubic yards, of soil from the pentachlorophenol drip pad will be disposed of at a hazardous waste facility.

The area shall be divided into twenty (20) equal portions approximately 6 feet by 11 feet. Sample locations shall be randomly chosen from the twenty (20) portions. One sampling location shall be sampled in duplicate. For each 6 x 11 foot area chosen, a numbered grid shall be constructed with 20 numbered nodes. A random number system shall be chosen and sample locations identified. The number of samples to be taken is shown in Attachment 1.

3. Depth of Samples and Methodology for removing existing paving.

At selected sample locations identified in 1 and 2 above, soil sample shall be collected at the surface immediately beneath any existing paving and at a depth of three feet below the ground surface. Depending on the results of the samples obtained, Ecology may determine that samples from immediately above the water table (approximately 5 feet) may be required. The existing paving shall be removed in a manner that shall not disturb the underlying soil.

The soil borings shall be advanced using either a hand auger or a drilling rig. If advanced by hand auger, samples shall be taken from the specified depth either directly from the boring or from the hand auger with a clean stainless steel spoon and placed into clean sample containers supplied by CPC's contract analytical laboratory. If the borings are advanced using a drill rig, then the samples shall be taken using a clean split spoon sampler and transferred to clean sample containers supplied by the analytical laboratory.

4. Methodology for field sampling.

Field notes shall include, but not be limited to the following;

- description of sample location,
- b. time and date of sampling,
- c. name of sampler(s),
- d. sample number and analyses to be performed,
- e. presence, absence of groundwater or indications of past high water levels,
- f. different and unusual observations, such as odor or color to soils,
- g. field monitoring equipment levels which are above established ambient levels, and
- h. all field note pages shall be signed and dated.

5. Parameters and Analytical Procedures

Soil samples shall be analyzed to characterize soil for off-site disposal purposes and to assess the potential impact of historic drippage. The parameters and analytical procedures to be used, as shown in Attachment 1, are described below:

TCLP Metals: Toxic Characteristic Leaching Procedure in accordance with Federal Register, June 29, 1990, and subsequent Federal Register updates or corrections to the procedure. TCLP metals analyses will be used to designate the CCA drip pad excavation. If the total metals analyses are below TCLP regulatory limits, CPC may elect not to use TCLP metals analyses.

Hexavalent Chromium: Coprecipitation Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846 (hereinafter SW-846), most recent edition, Method 7195 and ICP SW-846 Method 6010. Hexavalent chromium will be used to characterize the potential impact of historic drippage in the CCA and pentachlorophenol drip pad areas.

Total Chromium, Copper and Zinc: SW-846 Analysis Method 6010, using Method 3050 for sample preparation. Total chromium, copper and zinc will be used to assist in designating the CCA drip pad soil and to characterize the potential impact of historic drippage in the CCA and pentachlorophenol drip pad areas.

Total Arsenic: SW-846 Analysis Method 7060, using Method 3050 for sample preparation. Total arsenic will be used to assist in designating the CCA soil and to characterize the potential impact of historic drippage in the CCA and pentachlorophenol drip pad areas.

Pentachlorophenol and Polycyclic Aromatic Hydrocarbons: SW-846 Analysis Method 8270, using Extraction Method 3540, Soxhlet Extraction. This analysis will be conducted to examine the excavated GCA soils for potential pentachlorophenol contamination. Subsurface soils from the historic pentachlorophenol drip area and, possibly, from the historic CCA drip area to characterize the potential impact of the historic drippage.

Fish Bioassay (WAC 173-303-110(3)(b)). The most recent update on the dangerous waste fish toxicity test must be performed only if no regulated levels of (pursuant to Chapter 173-303, WAC) pentachlorophenol, TCLP metals, or Polycyclic Aromatic Hydrocarbons are detected in the upper 3 feet of soils which are to be excavated from the CCA drip pad area. If CPC elects to not perform bioassay analysis immediately upon sampling, the sample(s) shall be archived according to chain-of-custody procedures in an environment held at or below 40 degrees Fahrenheit. These samples shall be held, until a determination can be made by Ecology that such analysis is unnecessary.

The analytical laboratory shall follow the Quality Assurance and Quality Control Methodologies as outlined in SW-846, Chapter 1.

Transfer table soils are included in the Interim Action area; however, the investigation of those soils has been completed pursuant to Order DE 89-S123, <u>Interim Report, Cascade Pole Company Site Investigation</u>. ReTec (June 1991). The remediation of the transfer table soils shall be addressed in the Interim Action Design.

B. Implement Interim Action Sampling and Analysis Plan.

Schedule: Within 30 days of receipt of the Final Interim Action Sampling and Analysis Plan, begin implementation.

C. Develop Interim Action Report.

Schedule: Within thirty (30) days of receiving analytical data, submit to Ecology for review and approval a Draft Interim Action Report. Within thirty (30) days of receiving Ecology's comments to the draft, submit a Final Interim Action Report which incorporates Ecology's comments.

The Interim Action Report shall be submitted which presents the data collected from the field investigation required in Task I above. The report shall be prepared in accordance with the applicable portions of WAC 173-340-430. In addition, the report shall include an evaluation of the interim cleanup action alternatives for the areas investigated. Specific information which shall be included in the report is outlined below.

- 1. Interpret and present all data collected.
- 2. Identify cleanup levels for constituents of concern in the Interim Action areas using the method specified in Chapter 173-340 WAC.
- 3. Identify and evaluate all cleanup alternatives for the Interim Action areas.
- 4. The report shall present, with a conceptual design, the interim action(s) which are proposed to be implemented in the interim action areas and a schedule for implementation for each action evaluated.

D. Develop Interim Action Design

Schedule: Within thirty (30) days of receiving Ecology's comments on the draft Interim Action Report, submit to Ecology for review a draft Engineering Design Report for each interim action proposed to be implemented. Within thirty (30) days of receiving Ecology's comments, submit a Final Engineering Design Report that incorporates Ecology's comments.

The Engineering Design Report shall be submitted in accordance with the applicable portions of WAC 173-340-400 and WAC 173-340-430. These reports shall include a detailed schedule for implementation.

E. Implement the Interim Action.

Schedule: Within thirty (30) days of the Interim Action Design Criteria becoming final, implement the Interim Action.

Task II Remedial Investigation/Feasibility Study

A. Workplan

Schedule Within forty-five (45) days of the effective date of this Order, submit to Ecology for review and approval a draft workplan for the Remedial Investigation/Feasibility Study. Ecology's comments to the draft workplan shall be incorporated into the final workplan within thirty (30) days of receiving Ecology's comments.

The Remedial Investigation workplan shall be prepared in accordance with WAC 173-340-350. The workplan shall be of sufficient detail to:

Characterize the nature, the vertical and areal extent, the potential to migrate and the rate of migration of known releases and potential releases of hazardous waste or hazardous constituents to the soil, ground water, air, and surface water at the site. This characterization shall include:

- 1. Releases to the soil, including the migration and any potential migration of hazardous wastes or hazardous constituents within the soil:
- 2. Releases or threats of releases to the upper most aquifer, including the migration and any potential migration of hazardous wastes or hazardous constituents including any dense non-aqueous phase liquids and/or light non-aqueous phase liquids to and within the uppermost aquifer;
- 3. Any releases or threats of releases to the lower aquifer, including the migration and any potential for migration of hazardous wastes or hazardous constituents to and within the lower aquifer, including potential dense non-aqueous phase liquids and light non-aqueous phase liquids (DNAPL's and LNAPL's); and
- 4. Any release or threats of releases to and from surface water and surface water sediments, including; the migration and any potential migration of hazardous wastes or hazardous constituents within these systems; recharge of contaminated surface waters to ground water; and discharge of contaminated ground water to surface waters.

The workplan shall include the following:

- 1. For all groundwater monitoring wells constructed pursuant to Order DE 89-S123 and pursuant to this Order, quarterly monitoring shall be performed as specified in the November 1990 Sampling Plan For A Site Investigation at the Cascade Pole Company Plant., or as modified by Ecology.
- 2. Wells shall be placed in locations that will most likely have non-aqueous phase liquids (NAPLs) present. To the extent practicable, all wells shall be screened to intercept the top and bottom of the aquifer. Multiple well installation may be necessary to prevent cross-contamination within the aquifer.
- 3. All plans shall adhere to the RCRA Groundwater Monitoring Technical Enforcement Guidance Document (TEGD) or other guidance as deemed appropriate by Ecology. This plan shall include: provisions for measuring water levels at all wells at the site on a monthly basis, criteria for the proposed location and design of additional wells on-site and off-site as needed to meet the objectives of this Order, and the location and depths of additional ground water monitoring wells. (All wells shall be constructed in accordance with Chapter 173-160 WAC and practices recommended by the TEGD, unless a waiver is requested and obtained.)
- 4. A project management plan.
- A data collection QA/QC plan.
- 6. A data management plan.
- 7. A schedule for implementation.
- 8. A health and safety plan.

This investigation shall provide a statistically valid and representative sampling of the areas of concern in accordance with EPA guidance documents, including Methods for Evaluating the Attainment of Cleanup Standards, Volume I, Soil and Solid Media, EPA 230/02-89-042 and Test Methods for Evaluating Solid Waste, SW-846, Volume 2, Chapter 9.

B. Implement the Remedial Investigation/ Feasibility Study Workplan.

<u>Schedule:</u> The implementation of the Remedial Investigation/Feasibility Study workplan shall be in accordance with the schedule approved in the Final Remedial Investigation/Feasibility Study workplan.

C. Develop a Remedial Investigation/Feasibility Study Report.

Schedule: Within ninety (90) days of receiving analytical data, submit to Ecology for review a Draft Remedial Investigation/Feasibility Study Report. Identify in the report, cleanup levels for constituents of concern in soils, ground water, air, surface water, and sediments using the method specified in Chapter 173-340 WAC. Identify in the report additional cleanup action alternatives. Cascade Pole agrees that a ground water containment and treatment system will be part of the final remedy for the site. Within thirty (30) days of receipt, incorporate Ecology's comments into the Final Remedial Investigation/Feasibility Study Report. The RI/FS shall be prepared in accordance with the applicable portions of WAC 173-340-350 and WAC 173-340-360. Include in the report draft design criteria for cleanup action alternatives.

Task III. Compliance and Monitoring of the Waste Pile

Schedule: Within thirty (30) days of EPA designation of the waste pile as hazardous or non-hazardous, submit to Ecology, for review and comment, a draft plan including an implementation schedule for managing the waste pile soil, either through off-site disposal or through reuse as on-site fill material in areas of proposed paving. Within thirty (30) days of receipt of Ecology's comments, incorporate those comments into the final Waste Pile workplan.

Until a decision is made by EPA, CPC shall maintain:

- 1. A temporary system to prevent the soil from wind dispersal.
- A temporary system to control run-on and run-off to and from the waste pile.

Task IV. Drip Pad Construction Schedule

Schedule: Within fifteen (15) days of completion of remediation in the Interim Action areas, submit a schedule for the timely construction of the drip pads required by Federal Register, Volume 55, No. 235 and Federal Register, Volume 56, No. 126 (Technical Corrections) and any other subsequent updates. The pads will be constructed sequentially to allow the plant to continue operations during pad construction. Prior to the completion of the drip pad construction, CPC shall make best efforts to minimize drippage from treated wood and cleanup any drippage that may occur despite such best efforts.

Task V. Progress Reports.

CPC shall prepare and submit a bi-monthly (every other month) progress report to Ecology concerning all activities relating to the implementation of this Order. Progress reports shall include reasonably detailed description of:

(1) all activities at the facility related to this Order during the past

period, (2) all actions related to this Order scheduled for the next period, (3) any problems or other information related to CPC's implementation of this Order which may arise and the steps taken or to be taken to correct such problems, and (4) all sampling data test results and evaluations of such data and results generated pursuant to the workplans. These reports shall be submitted by the 10th day following the end of each reporting period. During the period of actual implementation of the interim action, monthly reports will be submitted. Progress reports shall begin one month after approval of the final Interim Action workplan in Task 1 and continue until CPC is notified in writing that the Order has been satisfied.

ATTACHMENT 1 SCOPE OF WORK CASCADE POLE FACILITY INTERIM ACTION SAMPLING PLAN

	Number of Samples for Laboratory Analysis (a)					
	CPA Pad at		PCP Pad at		T	
Parameter	0-2'	3-4'	0-2'	3-4"	Transfer Table	
Total Metals	5	20	0	7	0	
TCLP Metals (b)	5	0	(e)	. 0	0	
Hex. Chrome	0	10	0	2	0	
PCP and PAH	5	(d)	(e)	14	0	
Bioassay	(c)	0	0	. 0	. 0	

- (a) The 0-2' Samples may be composites of several subsamples. The 3-4' Samples will be discrete samples.
- (b) The number of samples analyzed will depend on the results of the total metals analyses. If total metals are below TCLP regulatory limits, then CPC may elect not to run TCLP metals. Alternatively, if the total metals are above TCLP regulatory limits, CPC may elect to use the total metals analyses as TCLP results.
- (c) Sample number will depend on the results of the TCLP, PCP and PAH analyses.
- (d) Sample number will depend upon results of 0-2' PCP results
- (e) Sample number will depend upon disposal facility requirements

DP:km