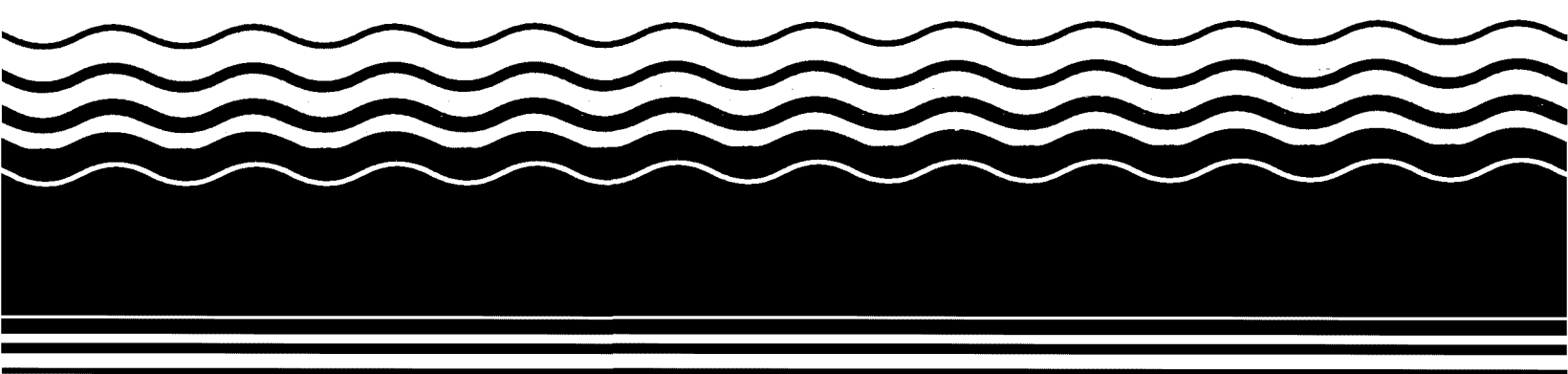




Superfund Record of Decision:

**Pacific Hide & Fur Recycling
(Amendment), ID**



NOTICE

The appendices listed in the index that are not found in this document have been removed at the request of the issuing agency. They contain material which supplement, but adds no further applicable information to the content of the document. All supplemental material is, however, contained in the administrative record for this site.

REPORT DOCUMENTATION PAGE	1. REPORT NO. EPA/ROD/R10-92/035	2.	3. Recipient's Accession No.
4. Title and Subtitle SUPERFUND RECORD OF DECISION Pacific Hide & Fur Recycling (Amendment), ID First Remedial Action			5. Report Date 04/29/92
7. Author(s)			6.
9. Performing Organization Name and Address			8. Performing Organization Rept. No.
			10. Project/Task/Work Unit No.
			11. Contract(C) or Grant(G) No. (C) (G)
12. Sponsoring Organization Name and Address U.S. Environmental Protection Agency 401 M Street, S.W. Washington, D.C. 20460			13. Type of Report & Period Covered 800/000
15. Supplementary Notes PB93-964602			14.
16. Abstract (Limit: 200 words) The 17-acre Pacific Hide and Fur Recycling site is located in Pocatello, Bannock County, Idaho. From the 1950's until 1979, McCarty's Inc. operated a recycling business which primarily accepted scrap metals, including batteries, transformers, and capacitors filled with PCB oils, which were stored on-site on the excavated pit floor. A 1988 ROD addressed source control using excavation and immobilization with a provision for onsite containment if the remedy proved unworkable. Prior to implementation of this remedy, a bench-scale treatability study determined that the remedy failed to meet several important performance criteria and tentatively identified the presence of lead above health-based levels. EPA planned to implement the alternate remedy, onsite containment; however, upon further review, EPA found that the design requirements of the alternate remedy, as documented in the ROD, did not comply with federal regulations and determined that construction of an on-site containment cell would not be feasible because this remedy could significantly interfere with future cleanup of on-site, lead-contaminated soils. In order to remediate the PCB-contaminated soils in a timely and protective manner, EPA evaluated other alternatives to the on-site containment remedy. This 1992 ROD amendment addresses remediation of the (See Attached Page)			
17. Document Analysis a. Descriptors Record of Decision - Pacific Hide & Fur Recycling (Amendment) First Remedial Action Contaminated Media: Soil Key Contaminants: Lead, PCBs b. Identifiers/Open-Ended Terms c. COSATI Field/Group			
18. Availability Statement		19. Security Class (This Report) None	21. No. of Pages 34
		20. Security Class (This Page) None	22. Price

Abstract (Continued)

PCB-contaminated areas, as well as areas contaminated with commingled lead and PCBs with a revised remedy. EPA is continuing to evaluate the nature and extent of lead, and possible other contaminants at the site and may specify additional clean-up activities, as necessary, under separate operable unit remedial actions. The primary contaminants of concern affecting the soil and debris are organics, including PCBs; and metals, including lead.

The amended remedial action for this site includes excavating, processing, transporting, and offsite disposal of approximately 8,200 cubic yards of PCB-contaminated and commingled PCB/lead-contaminated soil as follows: excavation and offsite disposal of approximately 6,500 cubic yards of untreated PCB-contaminated soil; treating approximately 900 cubic yards of contaminated soil commingled with over 25 mg/kg PCB and lead levels exceeding 5 mg/kg, using solidification, followed by disposal in a permitted, off-site hazardous waste facility; treating approximately 100 cubic yards of PCB-, lead-, and halogenated organic compound (HOC)-contaminated waste using offsite incineration, followed by solidifying and disposing of the ash offsite; decontaminating, stockpiling onsite, and covering approximately 700 cubic yards of debris for possible future salvage and recycling; and backfilling, grading, and restoring the surface drainage of the site. The estimated present worth cost for this action ranges from \$2,360,500 to \$2,429,000. There is no O&M cost associated with the remedial action.

PERFORMANCE STANDARDS OR GOALS: Chemical-specific soil excavation goals are based on RCRA hazardous waste and characterization regulations and TSCA PCB regulations, and include HOCs 1,000 mg/kg; lead 5 mg/kg (TCLP); and PCBs 25 mg/kg.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 SIXTH AVENUE
SEATTLE, WASHINGTON

AMENDED RECORD OF DECISION,
DECISION SUMMARY,
AND RESPONSIVENESS SUMMARY

FOR THE
POLYCHLORINATED BIPHENYL (PCB)-CONTAMINATED SOILS
OPERABLE UNIT REMEDIAL ACTION
MCCARTY'S/PACIFIC HIDE AND FUR
SUPERFUND SITE

Declaration for the
McCarty's/Pacific Hide and Fur
Superfund Site
Amended Record of Decision

Site

McCarty's/Pacific Hide and Fur
Pocatello, Bannock County, Idaho

Statement of Basis and Purpose

This decision document presents the Operable Unit Remedial Action for soils contaminated with polychlorinated biphenyls (PCBs) at the McCarty's/Pacific Hide and Fur site in Pocatello, Bannock County, Idaho. While the primary purpose of this Operable Unit Remedial Action is to remove PCB-contaminated soils from the site, where soils contaminated with PCBs are commingled with lead (Pb), the contaminated soil will be treated and disposed in compliance with all federal and state regulatory requirements for both PCBs and Pb. This Amended Record of Decision (Amended ROD) has been developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), 42 U.S.C. §9601 *et seq.*, and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300. This decision is based on the Administrative Record for this site, updated in January, 1992, to include new information generated since the original Record of Decision was signed on June 28, 1988. The attached index identifies the items which comprise the Administrative Record upon which the selection of the Operable Unit Remedial Action is based.

The State of Idaho concurs with the selected remedy.

Assessment of the Site

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the Operable Unit Remedial Action selected in this Amended ROD, may present an imminent and substantial threat to public health, welfare, or the environment.

Description of the Revised (Operable Unit) Remedy

This Amended ROD addresses remediation of those soils contaminated with PCBs, and with PCBs commingled with lead (Pb). The areas of the site subject to cleanup of PCB- and commingled PCB/Pb-contaminated soils are indicated in Figure 2 on page 14A of this Amended ROD.

The Operable Unit Remedial Action described below is the response action planned for the PCB- and commingled PCB/Pb-contaminated soils at the site. The Operable Unit Remedial Action addresses all threats associated with PCB-contaminated soils above PCB health-based levels through removal, off-site treatment (to the maximum extent practicable) and disposal of such soils.

With respect to the PCB contamination at this site, no groundwater remedial action is necessary at this time to ensure protection of human health and the environment. Results from sampling conducted of on-site groundwater monitoring wells have not indicated the presence of PCBs at harmful levels, therefore, groundwater cleanup is not a component of this Operable Unit. However, after further evaluation of all data, including additional data to be gathered in the future at this site, EPA may need to reconsider whether to remediate groundwater. If necessary, cleanup of groundwater will occur under a separate operable unit remedial action.

The major components of the selected Operable Unit Remedial Action for PCB- and commingled PCB/Pb-contaminated soils include:

- (1) Excavation, processing, transport and disposal of approximately 8,200 cubic yards of PCB-contaminated and commingled PCB/Pb-contaminated soils as follows:
 - (a) Approximately 6,500 cubic yards of untreated PCB-contaminated waste will be disposed in an approved, off-site Toxic Substances Control Act (TSCA) landfill.
 - (b) Approximately 900 cubic yards of commingled PCB/Pb-contaminated soils, designated as Resource Conservation and Recovery Act (RCRA) characteristic wastes, will be solidified and disposed in an approved, off-site hazardous waste landfill.
 - (c) Approximately 100 cubic yards of RCRA characteristic, commingled PCB/Pb-contaminated soils containing halogenated organic compounds in excess of 1,000 parts per million (California List Waste) will be transported to an off-site incinerator, incinerated and the ash will be solidified and disposed in an approved, off-site hazardous waste landfill.
 - (d) Approximately 700 cubic yards of debris (scrap material) will be decontaminated, stockpiled and placed under a protective cover on-site.

- (2) Backfilling, grading and restoration of surface drainage will be implemented to the extent that site restoration does not interfere with the on-going investigation and future remediation of other potential soil and groundwater operable units.

Consultation

A consultation with the Office of Waste Programs Enforcement, OSWER, regarding this Amended ROD has been conducted pursuant to the 22nd Remedy Delegation - FY91 memorandum (December 27, 1990).

Declaration

This Operable Unit Remedial Action is protective of human health and the environment, complies with Federal and State applicable or relevant and appropriate requirements, and is cost effective. This Operable Unit Remedial Action also utilizes treatment, where feasible and practicable. Subsequent actions will address other soil (and possibly groundwater) threats posed by conditions at this site.

The selected Operable Unit Remedial Action for addressing PCB- and commingled PCB/Pb-contaminated soils is excavation; treatment of the contaminated soils to the maximum extent practicable; and, off-site disposal in a permitted, hazardous waste landfill. While the selected remedy will not result in the total destruction of the PCBs and Pb, the most potentially hazardous component (i.e. contaminated soil exceeding the 5 parts per million [ppm] RCRA leachate test level and containing halogenated organic compounds in excess of 1,000 ppm) will be incinerated and the ash solidified prior to disposal. Soils which only fail the 5 ppm RCRA leachate test level will be solidified and disposed in a permitted, off-site hazardous waste landfill.

Treatment technologies considered during the initial screening of alternatives and presented in the operable unit focused feasibility study included off-site and on-site incineration, bioremediation, chemical dechlorination and lime treatment. These technologies were eliminated from further detailed analyses as operable unit remedial alternatives for the following reasons:


Incineration (off-site and on-site): The use of this treatment as the primary remedial technology is not feasible due to the significant material processing requirements for approximately 7,500 cubic yards of scrap metal intermixed with contaminated soil. In order to successfully implement this remedy, a stringent downstream soil contaminant size limitation must be attained prior to treatment. In

achieving the size limitation, considerable delays in implementation would result. The time required to obtain the use of an incinerator for either on- or off-site incineration could cause further delays in implementation of the remedy. This cleanup technology is also substantially greater in cost than the selected remedy. Finally, utilization of incineration as the primary treatment technology would not be necessary to comply with applicable or relevant and appropriate requirements (ARARs).

Bioremediation and Chemical Dechlorination: These treatment technologies also require significant material processing as described above under Incineration. Additionally, bioremediation and chemical dechlorination have not been demonstrated to be effective at reducing PCB contaminant levels to less than 25 parts per million in soils mixed with scrap metal. Further treatment is also likely to be necessary following either bioremediation or chemical dechlorination in order to comply with the TSCA or the RCRA regulations.

Lime treatment: Results from an EPA study of the lime treatment process' performance indicate that reductions in PCB concentrations in soil were attributable mainly to volatilization and not to the use of lime in treating the contaminated soils.

This Operable Unit Remedial Action will eliminate the source of PCB contamination at the site. While this Operable Unit Remedial Action will effectively and permanently remove PCB-contaminated soils from the site, other hazardous substances (i.e. Pb and other inorganic compounds) will remain on-site above health-based levels until EPA develops final remedial alternatives for the remainder of the site. Because this is an Operable Unit cleanup, review of this Operable Unit will continue during development of final remedial alternatives for the remaining contaminated areas of the site. Appropriate statutory and policy 5-year reviews will be conducted on both the Operable Unit Remedial Action and the final Remedial Action at this site to ensure that the remedies are providing adequate protection of human health and the environment.

for 
Dana A. Rasmussen
Regional Administrator
U.S. Environmental Protection Agency, Region 10

4/29/92
Date

MCCARTY'S/PACIFIC HIDE AND FUR
SUPERFUND SITE

AMENDED RECORD OF DECISION
DECISION SUMMARY

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	7
REASONS FOR ISSUING AMENDED ROD	9
SITE HISTORY AND ENFORCEMENT ACTIVITIES	11
SCOPE AND ROLE OF OPERABLE UNIT REMEDIAL ACTION	12
SUMMARY OF SITE CHARACTERISTICS	13
SUMMARY OF SITE RISKS	14
DESCRIPTION OF NEW SOIL OPERABLE UNIT REMEDIAL ALTERNATIVES	15
SUMMARY OF COMPARATIVE ANALYSIS OF ALTERNATIVES	20
SELECTED OPERABLE UNIT REMEDIAL ACTION	24
STATUTORY DETERMINATIONS	26
DOCUMENTATION OF SIGNIFICANT CHANGES	30
Appendix A: THE RESPONSIVENESS SUMMARY	31
Appendix B: ADMINISTRATIVE RECORD	33

List of Figures

Figure 1	Site Location	7A
Figure 2	McCarty's/Pacific Hide & Fur Operable Unit Remedial Action Areas	14A
Table 1	Comparison of Soil Operable Unit Cleanup Alternatives	24A

MCCARTY'S/PACIFIC HIDE AND FUR
SUPERFUND SITE
AMENDED RECORD OF DECISION

Decision Summary

Introduction

Site Name and Location:

The McCarty's/Pacific Hide and Fur Superfund site consists of approximately seventeen (17) acres located in the southern half of Section 16, Township 6 South, Range 34 East of the Boise Meridian, Bannock County, Idaho. Eleven (11) of these acres are enclosed by a fence and are the focus of this Operable Unit Remedial Action. The site is situated at the northwestern edge of Pocatello, Idaho at 3500 U.S. Highway 30 West. A vicinity map is shown in Figure 1 on page 7A of this document.

Lead and Support Agencies:

EPA is the lead agency for this Superfund site, with the cooperation and support of the Idaho Division of Environmental Quality (IDEQ).

Date of the Original Record of Decision:

The original Record of Decision (ROD) was signed on June 28, 1988.

Administrative Record:

This Amended ROD will become part of the Administrative Record file for this site, in accordance with section 300.825(a)(2) of the NCP. The Administrative Record is available for review at the EPA Regional Office, 1200 Sixth Avenue, Seattle, Washington, 98101, and at the Pocatello Public Library, 812 East Clark Street, Pocatello, Idaho. An index of the Administrative Record is included with this Amended ROD.

Highlights of Community Participation:

Community Relations efforts prior to June 28, 1988, are described in the Community Relations section of the original ROD. The following community relations activities are relevant to this Amended ROD:

July 14, 1988

Fact sheet announcing signing of the Record of Decision.

October 7, 1988	Fact sheet announcing start-up of the pilot treatability study.
October 6, 1989	Fact sheet announcing the start of remedial action field work.
October 26, 1989	Press Opportunity to allow reporters to view cleanup activities in progress.
January 26, 1990	Fact sheet announcing the change in remedies selected for the site. Information provided in the fact sheet described the alternative remedy and the rationale for changing remedies. Citizens were asked to contact the EPA project manager to request an informational meeting about the change in remedy.
July 1990	Fact sheet announcing additional soil and groundwater sampling to be conducted.
September 28, 1990	Explanation of Significant Differences fact sheet explaining that neither the original remedy from the June 1988 ROD nor the contingent remedy selected in January 1990 were feasible.
May 9, 1991	Fact sheet describing the results of additional soil and groundwater sampling conducted in July 1990. Lead contamination was found on-site. This new information required EPA to halt construction of the remedy.
December 1991	Fact sheet describing in more detail the extent of the lead contamination found on-site and explaining that the site will be divided into operable units for purposes of cleanup.
January 24, 1992- February 24, 1992	Public comment period for Amended ROD. Proposed Plan released to public on January 23, 1992. Citizens were asked to contact the EPA project manager to request a public meeting to discuss the proposed changes to the current remedy.
January 24, 1992	Display ad was issued in the <u>Idaho State Journal</u> newspaper describing the Amended ROD and public comment period dates.
February 1992	EPA prepared the Responsiveness Summary.

One citizen responded during the public comment period, requesting a more detailed presentation, with supporting evidence, of current site risks and risks following cleanup. EPA's response to the citizen's comment can be found in the Responsiveness Summary on pages 31-32 of this Amended ROD.

REASONS FOR ISSUING THE AMENDED ROD

Circumstances Prompting Amended ROD:

EPA has determined that an Amended ROD is necessary for this site. The Amended ROD changes the remedy originally selected for the site. The new approach divides the site into operable units and this Amended ROD addresses remediation of those soils contaminated with PCBs and commingled PCBs and lead (Pb). The operable unit approach was made necessary by the discovery of widespread Pb contamination in on-site soils.

Background:

In 1988, a remedial investigation and feasibility study (RI/FS) of PCB contamination was completed for the site. Based on the results of the FS, EPA identified stabilization/consolidation of the PCB-contaminated soil and debris as the preferred treatment alternative. EPA proposed a cleanup plan for the PCB-contaminated soil and debris at the site and requested public comment on the proposed plan. Following consideration of the public comments, EPA decided on a site cleanup plan, which was described in the ROD issued in June 1988.

Remedy Selected in the 1988 ROD:

The major components of the remedy selected on June 28, 1988 included:

- (1) Determining which portions of the contaminated materials could practicably be excavated and processed (screened). Factors used in making this determination were worker and public health, and physical limitations of excavation and processing equipment.
- (2) Excavation of all highly contaminated materials which could practicably be excavated and processed.
- (3) Excavation of all low level contaminated soils to 25 ppm. Excavation would cease when those soils containing contaminants that exceeded the 10^{-4} to 10^{-7} cancer risk values had been removed. The 25 ppm PCB soil cleanup level corresponded to a risk range of 3×10^{-4} to 5×10^{-6} .

- (4) Immobilization of processed material in the fixation matrix.
- (5) Consolidation of remaining materials of concern.
- (6) Construction of a bottom liner, where necessary.
- (7) Construction of a cap over the entire unit.
- (8) Construction of groundwater monitoring wells.
- (9) Removal from service of existing groundwater monitoring wells which were no longer needed.

Subsequent Events and New Information:

A provision was made in the ROD for an alternative remedy, on-site containment, should the preferred remedy prove unworkable. A small scale study was performed to determine whether stabilization of PCB-contaminated soils could ensure long-term, permanent protection from PCBs leaching into the groundwater. The study results indicated the remedy failed to meet several important performance criteria. The small scale study also revealed the potential presence of lead (Pb) above recommended health-based levels. EPA has undertaken additional soil and groundwater sampling following review of the data from this study.

Based on the failure of several of the study's performance criteria, EPA decided to allow for implementation of the alternate remedy which was on-site containment. However, upon further review of the ROD description of the alternate remedy, EPA determined that the design requirements did not comply with federal regulations. The containment cell design described in the June 1988 ROD did not include a proper liner, cap or leachate collection system to meet both TSCA and RCRA chemical waste landfill regulatory requirements. On September 26, 1990, EPA published an Explanation of Significant Differences (ESD). The ESD clarified the design requirements of the on-site containment remedy necessary to meet the federal regulations.

Summary of EPA's Rationale for Changing the Alternate Remedy:

In October 1990, the results from EPA's August 1990 sampling of site soils (including the operating Pacific Steel Recycling facility and adjacent Union Pacific Railroad property) confirmed the presence of extensive lead (Pb) contamination above safe levels. EPA began to consider changing the alternate soils remedy following receipt of this new information.

EPA determined that construction of an on-site containment cell would not be feasible because this remedy could

significantly interfere with future cleanup of on-site, Pb-contaminated soils. In addition, since Pb had not been identified as a contaminant of concern in the RI completed in 1988, the on-site containment remedy would require either redesign of the containment cell or further treatment of the wastes to meet the requirements of the Resource Conservation and Recovery Act (RCRA). As a result, EPA halted all remedial activities at the site.

In order to remediate the PCB-contaminated soils in a timely and protective manner, EPA evaluated other alternatives to the on-site containment remedy. It was determined that an operable unit approach would considerably speed the cleanup of PCB-contaminated and commingled PCB/Pb-contaminated soils and other contaminated debris because: (1) the geographic extent of the PCB contamination is confined to specific areas on-site while the Pb contamination is widespread across the site, and (2) the RI/FS for the PCB contamination was completed in 1988, however, a comprehensive RI/FS evaluation associated with the Pb and possible other inorganic contamination has not yet been performed and will be required in order to remediate the remainder of the site.

EPA is continuing to evaluate the nature and extent of the Pb, and possible other compounds, which may be contaminating both the soil and groundwater on the site. Additional cleanup of the soil and groundwater, if necessary, will occur later under separate operable unit remedial actions.

SITE HISTORY AND ENFORCEMENT ACTIVITIES

In 1984, the site was added to the National Priorities List (NPL) under CERCLA. In 1988, after completion of a detailed study of the nature and extent of contamination and a detailed analysis of cleanup alternatives, a remedy for the site was selected and described in a ROD. Site history and enforcement activities prior to the original ROD are discussed in that section of the June 28, 1988 document, to which the reader is referred for details.

In July 1988, special notice letters were sent to Pacific Hide and Fur, Inc., McCarty's, Inc., members of the McCarty family and Idaho Power Company, who had been identified as potentially responsible parties (PRPs) believed to have contributed to the PCB contamination. The special notice letters initiated negotiations on a PRP-lead remedial design/remedial action (RD/RA). After a second invitation to participate in negotiations was sent to the identified PRPs in January 1989 following previous, unsuccessful attempts to negotiate a settlement, Idaho Power Company (IPCo) and EPA entered into a consent decree in which IPCo agreed to complete the RD, implement the RA, reimburse EPA for a portion of the past costs incurred by

the government, and fund three years of operation and maintenance. This consent decree became effective on September 25, 1989.

In an attempt to recover the remaining outstanding past government response costs, settlement negotiations with Pacific Hide and Fur, Inc., the individual McCartys, and McCarty's, Inc. were conducted by EPA in 1990. These negotiations focused on those costs associated with PCB contamination within the fenced portion of the McCarty owned property. Settlement with these parties has not been reached, and civil litigation is on-going in federal district court in Idaho whereby EPA is seeking to recover its costs from these parties. At the request of EPA, a trial date has been postponed in this matter to allow for the time necessary to determine the cleanup requirements for all contamination at the site.

An investigation to identify PRPs who are potential sources of the Pb contamination was completed by EPA in December 1991. Letters were sent to several identified PRPs to notify them of their potential liability for the site, to obtain additional information from these parties, and to seek their cooperation in undertaking and financing further investigation and cleanup related to lead and other compounds found in soil and groundwater.

SCOPE AND ROLE OF THE OPERABLE UNIT REMEDIAL ACTION

There are approximately 8,200 cubic yards of PCB-contaminated and commingled PCB/Pb-contaminated material which exceed 25 ppm PCBs and require cleanup. The 25 ppm cleanup level is based on property access limited to industrial activities and exposure risks to on-site workers within the acceptable risk range of 10^{-4} to 10^{-6} . Treatment will be required of the commingled PCB/Pb-contaminated soils (approximately 900 cubic yards), where the concentration of Pb contamination exceeds the 5 ppm RCRA toxicity characteristic leachate (TCLP) extraction test level. In addition, RCRA characteristic soils designated as California list waste (i.e. exceeding the 1,000 ppm halogenated organic compound level) must be treated as required by the RCRA land disposal restrictions. The selected Operable Unit Remedial Action will address the PCB- and commingled PCB/Pb-contaminated soil and debris at this site.

The selected Operable Unit Remedial Action involves the excavation and disposal of PCB- and commingled PCB/Pb-contaminated soils in an off-site, permitted, hazardous waste landfill. Testing of excavated soils will be conducted to determine the specific amount requiring special treatment prior to off-site disposal. If deemed necessary, treatment will include solidifying a portion of the soils which fail the RCRA

TCLP extraction test into a cement-like mass. Those soils failing TCLP and containing halogenated organic compounds in excess of 1,000 ppm will be incinerated and the ash solidified prior to placement in an off-site, hazardous waste landfill. Any material greater than 6 inches in diameter will be decontaminated, relocated and placed under protective cover on-site to prevent interference with on-going and future cleanup activities. Following cleanup of the contaminated soil, the site will undergo minor restoration in those areas which will not interfere with the on-going investigation and remediation of the remaining contamination. Restoration will include backfilling the excavated areas, and grading to restore surface drainage.

The NCP encourages and authorizes the use of operable units to speed cleanup of distinct hazardous substances or areas of a site. By using an operable unit approach, EPA will be able to maximize reductions in risks to human health and the environment from hazards associated with PCB-contaminated and commingled PCB/Pb-contaminated soils at the site consistent with the NCP. The PCBs and commingled PCBs and Pb are present at the site in discrete areas, while remaining areas of the site are contaminated with Pb and possibly other inorganic compounds at harmful levels.

Because the results from sampling conducted of on-site groundwater monitoring wells have not indicated the presence of PCBs at harmful levels, groundwater cleanup is not a component of this Operable Unit Remedial Action.

SUMMARY OF SITE CHARACTERISTICS

Site characteristics are described in detail in the Site Characteristics-Remedial Investigation section in the original June 28, 1988 ROD, to which the reader is referred. Information pertinent to changes in the remedial action at the site is presented below.

The RI/FS, conducted from 1986 to 1988, focused on PCB contamination of soils and groundwater. The RI/FS results documented that risks posed by the presence of PCBs in soils exceeding 25 ppm justified taking remedial action. PCBs were not found at harmful levels in groundwater.

Based on the ROD's preferred alternative of stabilization/consolidation, a treatability study was undertaken in 1989-1990 to determine an appropriate mix of record and to determine whether the remedy could meet stringent performance criteria. Soil samples, composited from four on-site areas and two off-site areas, were analyzed for lead in addition to PCBs. Lead concentrations from on-site soil samples ranged from 2,640 to 55,900 ppm. EPA determined that further evaluation of site soils was necessary to establish the extent of the lead contamination.

Sampling conducted by EPA in August 1990 and May 1991 indicates that there is widespread Pb contamination across the entire site. Concentrations range from 67.4 ppm to 64,700 ppm and are commingled with PCBs where PCBs occur on-site. Figure 2 on page 14A of this document identifies those on-site areas contaminated with PCBs and commingled Pb which will be remediated by this Operable Unit Remedial Action. One additional location on-site which had not been previously identified as a PCB hot spot will be remediated as a result of additional data collected by Idaho Power Company.

Preliminary data from additional groundwater studies recently conducted by EPA indicate that Pb has been found in on-site groundwater monitoring wells at levels which may require remediation. EPA will determine the need to remediate groundwater following a thorough, quality-assured review of all appropriate data. Cleanup of the remaining soils, and groundwater, if necessary, will occur under future operable unit remedial actions.

SUMMARY OF SITE RISKS

The results of the risk assessment performed for this site are described in the Summary of Site Risks section of the June 28, 1988 ROD, to which the reader is referred for details. The following is a discussion of the basis for taking action to remediate PCB- and commingled PCB/Pb-contaminated soils by this Operable Unit Remedial Action.

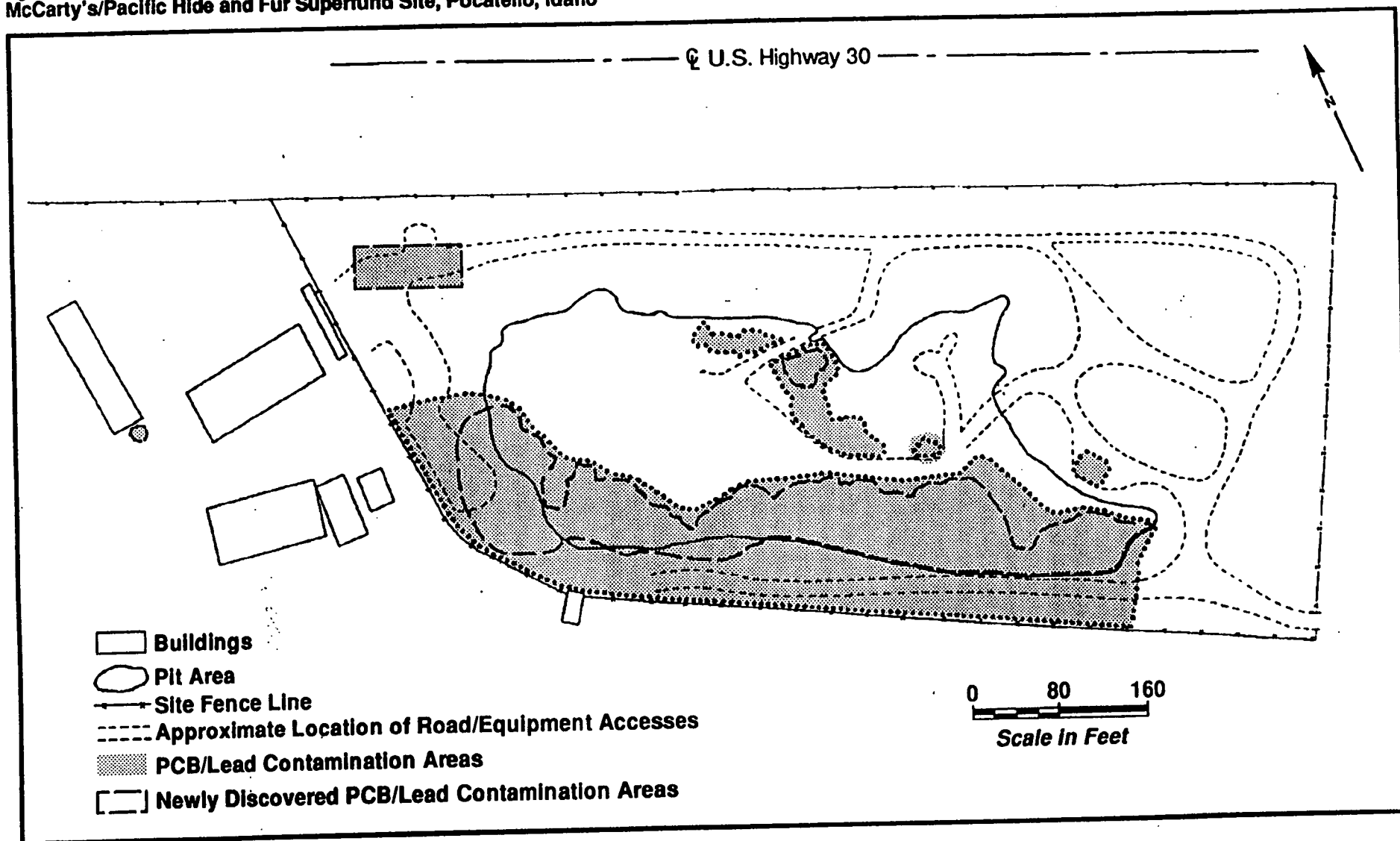
Basis for Taking Action to Remediate Soils:

PCBs are the contaminants of concern in this operable unit cleanup. PCBs have been shown to produce a variety of non-cancer health effects, including liver and thyroid diseases. Several studies have shown that PCBs can cause cancer in laboratory animals, and that PCBs may cause cancer in humans as well. The portion of the Pb contamination which is commingled with the PCBs at the site, will also be remediated as part of this operable unit. Pb is known to cause damage to the central nervous system and is especially harmful to fetuses and children during the developmental stages.

An assessment of the risk posed to human health and the environment by PCB contamination was conducted in 1988. Site risk for total exposure to PCBs was estimated to be 2.1×10^{-3} which lies outside of EPA's acceptable risk range of 1×10^{-4} to 1×10^{-6} . Direct contact with the contaminated soils was determined to be the only route of exposure for PCBs at this site.

Figure 2
McCarty's/Pacific Hide and Fur Superfund Site, Pocatello, Idaho

14A



In 1988, EPA's PCB Spill Cleanup Policy was used to establish a cleanup level for the site. For restricted access areas which would include this site, the PCB cleanup policy called for contaminated soil to be remediated to 25 ppm. A cancer risk range was then calculated for unprotected, PCB-contaminated soils remaining on-site at the 25 ppm cleanup level.

The risk estimated for this cleanup level ranged from 5 in 1,000,000 (5×10^{-6}) to 3 in 10,000 (3×10^{-4}) which EPA has determined to be an acceptable risk. The first example means that if a group of 1,000,000 people were exposed to these conditions over a 70-year lifetime, an additional 5 people would be expected to develop cancer beyond the 25,000 cancer events expected from other causes. Current cancer statistics indicate 1 in 4 people in the U.S. will develop cancer in their lifetime.

Although Pb poses a risk to human health and the environment, a risk-based cleanup level associated with the Pb, and possible other inorganic contamination in site soils and groundwater has not yet been determined. These risks will be calculated later as part of separate operable unit evaluations.

Based on the increased risk of cancer and other diseases and the requirements of CERCLA, EPA has determined that remediation of PCB- and commingled PCB/Pb-contaminated soil is necessary.

DESCRIPTION OF THE NEW SOIL OPERABLE UNIT CLEANUP ALTERNATIVES

Explanations of the two final candidate remedies which EPA considered for remediation of the PCB-contaminated and commingled PCB/Pb-contaminated soils operable unit are provided below. These alternatives were developed by reviewing the focused operable unit feasibility study, original RI/FS, ROD, treatability study, results of the soil sampling conducted by EPA in August 1990 and May 1991, and the quarterly groundwater monitoring which EPA commenced in July 1990.

Remedial actions must comply with all legally applicable or relevant and appropriate federal and state requirements (ARARs). ARARs were determined at the time of the 1988 ROD, but since that ROD is being amended, ARARs have been re-evaluated and are discussed below in relation to the final candidate alternatives.

RCRA requirements pertaining to defining, characterizing and listing hazardous waste, land disposal restrictions, and generator and transporter requirements were not listed as an ARAR in the original 1988 ROD. However, the presence of lead commingled with the PCBs requires consideration of these RCRA requirements for cleanup under this Operable Unit Remedial Action. For those soils failing TCLP, off-site treatment and disposal must meet RCRA land disposal restrictions. In addition,

those soils failing TCLP and exceeding the 1,000 ppm RCRA regulatory level for halogenated organic compounds must meet RCRA treatment and disposal requirements for California list waste.

The Department of Transportation's Hazardous Materials Regulations which address shipment of any hazardous material off-site are also a new ARAR. This Operable Unit Remedial Action requires contaminated material be transported off-site for treatment and disposal.

Idaho State Solid Waste Management Regulations and Standards and additional standards for protection of state groundwater under the Idaho Administrative Procedures Act have been added as new ARARs.

Key features of the remedy and ARARs that are common to the two alternatives are as follows:

- PCBs are the principal contaminant of concern of this Operable Unit Remedial Action. The applicable action- and chemical-specific federal cleanup requirements for PCBs are described in the Toxics Substances Control Act (TSCA) PCB regulations for storage and disposal of PCB-contaminated media (40 C.F.R. Part 761).
- Lead (Pb) commingled with the PCBs will be remediated as part of this Operable Unit Remedial Action. Therefore, the applicable action- and chemical-specific federal cleanup requirements described in the Resource Conservation and Recovery Act (RCRA) regulations and the corresponding State of Idaho requirements must be attained for RCRA characteristic and California list waste resulting from the Pb and PCB contamination found on-site.
- Both alternatives include excavation of contaminated soils on-site by conventional and protective methods. During these activities, air monitoring will be conducted and dust suppressive measures will be utilized to control the release of dust and particulates. These measures will comply with the applicable federal Clean Air Act requirements (42 USC 7409, 7412) and the Idaho Rules and Regulations for the Control of Air Pollution in Idaho (Citation Section 16.01.1011-1012, 16.01.1251-1253, and 16.01.1501-1504). Pocatello is a federal, nonattainment area for particulate matter (PM₁₀). Dust control measures must be implemented to prevent remedial activities at the site from causing or contributing to a violation of the national ambient air quality (NAAQS) or the state total suspended particulate matter (TSP) standards.

- Transportation of materials from the site to disposal facilities will be done in accordance with Department of Transportation Hazardous Materials Regulations which address shipment of any hazardous material off-site (49 CFR, Parts 171, 172, 173 Subparts A, B, J and N, and 177, 178 and 180, and Subchapter C), the Idaho Code Sections 67-2929, 2930 (Supplement 1988) and 49-2201 through 2212, and the Idaho Hazardous Waste Management Regulations (IHWMR) Section 16.01.5500.
- Occupational Safety and Health Act (OSHA) requirements (29 CFR Part 1910 and 1926) pertain to workers engaged in response or other hazardous waste operations. Excavation of the PCB- and commingled PCB/Pb-contaminated soils is considered a hazardous waste operation at this site.
- Section 121(d)(2)(A) of CERCLA, 42 U.S.C. §9621(d)(2)(A), requires on-site CERCLA remedies to attain and maintain standards or levels of control (i.e. maximum contaminant concentrations [MCLs] and maximum contaminant concentration goals [MCLGs]) established under the Safe Drinking Water Act (SDWA) (42 USC 300). According to the NCP (55 FR 8848), where MCLGs are set at zero, the remedial actions shall attain and maintain MCLs for ground or surface water that are current or potential sources of drinking water. The PCB MCL of 0.5 parts per billion (ppb) shall be maintained and used as the groundwater standard for the site. Under the Clean Water Act (CWA) (33 USC 1251, 40 CFR Part 230, 231), State Antidegradation Requirements/Use Classification require every state to classify all the waters within its boundaries according to intended use. There are two aquifers (Upper and Lower) beneath the site. EPA has designated the Upper Aquifer as Class IIB since it is potentially available for drinking water, agriculture or other beneficial uses. The Lower Aquifer is Class I (i.e. drinking water) as it is the primary drinking water source for the community. CWA (40 CFR Part 122) addresses storm water runoff from site operations.
- The various Idaho state standards primarily address solid waste management Idaho Solid Waste Management Regulations and Standards Manual (Section 16.01.6005,01, 16.01.6008,07), and protection of state groundwater (Idaho Administrative Procedures Act [IDAPA] Section 16.01.2050,02, 16.01.2020,06, 16.01.2051, 16.01.2200, and 16.01.01.2800) against unreasonable contamination or deterioration. These standards are designed to control and regulate the

public drinking water system in order to protect the health of consumers.

Operable Unit Alternative 1: On-site Containment and Capping

This alternative would involve the construction of a hazardous waste landfill cell including a liner and leachate collection system which meet TSCA requirements, and excavation and disposal of approximately 8,200 cubic yards of PCB-contaminated and commingled PCB/Pb-contaminated soils as described below.

Because of the elevated levels of Pb found commingled with PCBs in approximately 900 cubic yards of soils, additional leachate testing required by RCRA would be conducted. Soils failing this test would be solidified prior to disposal in the on-site TSCA hazardous waste landfill cell as required by RCRA.

On July 8, 1987, EPA enacted a second phase of the RCRA land disposal restriction program to restrict the land disposal of California list wastes. Soils containing halogenated organic compounds (HOCs) in excess of the RCRA regulatory level of 1,000 ppm are designated as California list waste. There are approximately 100 cubic yards of HOC-contaminated soils which would be transported by truck to an off-site incinerator and the ash solidified prior to disposal in an off-site, permitted, hazardous waste landfill. HOCs, compounds which contain a carbon-halogen chemical bond, are commonly found in many PCB compounds.

The approximate remaining 6,500 cubic yards of PCB-contaminated and commingled PCB/Pb-contaminated soil which did not fail the leachate test or did not contain HOCs in excess of 1,000 ppm and the 700 cubic yards of debris (scrap material) would be placed untreated into an on-site, TSCA containment cell.

Following remedial activities, the TSCA landfill cell would be capped to meet RCRA requirements. Minor restoration would occur such that it did not interfere with the on-going investigation and remediation of future operable units.

Administrative and institutional controls such as groundwater monitoring, deed restrictions, leachate collection system inspection, and ensuring site security would also be implemented as described in the 1988 ROD.

Cost estimate: \$4,350,000

Operable Unit Alternative 2: Off-site Treatment and Disposal

This alternative would remove all PCB-contaminated and commingled PCB/Pb-contaminated soil from the site. Treatment and

disposal of the waste in an approved, off-site, hazardous waste landfill facility would be determined based on leachate and HOC testing as described in Alternative 1. The most highly contaminated and hazardous soils which fail either the leachate or HOC testing will be solidified or incinerated and the ash solidified prior to placement in an off-site, hazardous waste landfill as required by RCRA. Those soils which do not fail the RCRA TCLP test will be transported by truck to an approved, off-site TSCA landfill for disposal. All material removed from the site will be transported by truck to the off-site treatment/disposal facility. PCB-contaminated scrap and debris too large for treatment and/or disposal in an off-site, hazardous waste landfill would be decontaminated and stockpiled on-site for possible future salvaging or recycling.

Following cleanup of the contaminated soil, the site would undergo minor restoration in those areas which would not interfere with the on-going investigation and remediation of future operable units. Restoration would include backfilling the excavated areas and grading to restore surface drainage. A protective cover, such as a tarp, would be placed over the decontaminated, stockpiled scrap.

This operable unit alternative would not include administrative and institutional controls such as groundwater monitoring, leachate collection system inspections, or deed restrictions since all PCB-contaminated soil would be removed from the site property and PCBs have not been detected in groundwater above maximum contaminant levels (MCLs). An existing fence surrounds the site and is sufficiently secure to prevent unwarranted access during on-going cleanup activities at the site. Future administrative and institutional controls may be required when the final remedial action has been completed and the site is entirely cleaned up.

Cost estimate: \$2,360,500-\$2,429,000

Other Operable Unit Treatment Technologies Considered:

The following list of additional alternatives, considered during the initial screening of appropriate technologies and process options, were eliminated from further detailed analyses as operable unit remedial alternatives.

Incineration (off-site and on-site): The use of this treatment as the primary remedial technology was eliminated from further consideration because of the: (1) significant material processing requirements for approximately 7,500 cubic yards of scrap intermixed with soil. In order to successfully implement this remedy, a stringent downstream soil contaminant size limitation must be attained prior to treatment. Achieving the size limitation could result in

potentially significant delays; (2) time required to obtain the use of an incinerator for either on-or off-site incineration; (3) substantially greater cost of the cleanup; and, (4) utilization of incineration as the primary treatment technology is not necessary to comply with ARARs.

Bioremediation and Chemical Dechlorination: These treatment technologies also require significant material processing as described under Incineration above. Additionally, bioremediation and chemical dechlorination have not been demonstrated to be effective at reducing PCB contaminant levels to less than 25 ppm in soils mixed with scrap metal. Further treatment is likely to be necessary following either bioremediation or chemical dechlorination in order to comply with the TSCA and RCRA regulations. For these reasons, bioremediation and chemical dechlorination were eliminated from further consideration as potential treatment technologies.

Lime treatment: Results from an EPA study of the lime treatment process' performance indicate that reductions in PCB concentrations in soil were attributable mainly to volatilization and not the use of lime in treating the contaminated soils. These results cast sufficient doubt on the efficacy of the lime treatment process to remove it from further consideration as a treatment alternative.

Table 1 provides a summary of the relative performance of these treatment technologies compared to the final two operable unit alternatives.

SUMMARY OF COMPARATIVE ANALYSIS OF ALTERNATIVES

For the purpose of operable unit remedy selection, the relative performance of each remedial alternative was evaluated in relation to three categories of criteria: (1) threshold criteria [a required level of performance]; (2) primary balancing criteria; and, (3) modifying criteria. The nine evaluation criteria and the results of the evaluation are discussed below. A summary of relative performance of the alternatives based on these criteria is included in Table 1 on page 24A of this document.

A. Threshold Criteria

The operable unit remedial alternatives were first evaluated in relation to the threshold criteria: overall protection of human health and the environment, and compliance with ARARs. The threshold criteria are statutory requirements and must be met by all alternatives that remain for final consideration as operable unit remedies for the site.

1. Overall Protection of Human Health and the Environment: This criteria addresses whether or not a remedial alternative provides adequate protection and describes how risks are eliminated, reduced, or controlled through treatment and engineering or institutional controls.

Alternatives 1 and 2 are equally protective of human health and the environment since both address the source of PCB contamination at the site. Risks posed by both PCB- and commingled PCB/Pb-contaminated soils are eliminated since these soils will be treated to the extent practicable and either disposed in an approved on-site, hazardous waste landfill cell or removed from the site and disposed in a permitted, off-site hazardous waste landfill.

2. Compliance with Applicable or Relevant and Appropriate Requirements (ARARs): This criteria addresses whether or not a remedial alternative will meet all of the applicable or relevant and appropriate requirements or provide grounds for invoking a waiver.

Both Alternatives 1 and 2 met the applicable or relevant and appropriate requirements (ARARs) at the time the ROD was signed in 1988 and still do. Alternatives 1 and 2 also meet all new ARARs. An Explanation of Significant Differences was written in September 1990 for Alternative 1 to clarify design requirements necessary to meet federal regulatory requirements.

Alternative 1 (On-site Containment) does not trigger RCRA land disposal requirements while Alternative 2 (Off-site Disposal) does.

B. Primary Balancing Criteria

Once an operable unit remedial alternative satisfied the threshold criteria, five primary balancing criteria were used to evaluate the technical and engineering aspects of the operable unit remedial alternatives.

3. Long-term Effectiveness and Permanence: This criteria refers to the ability of a remedial alternative to maintain reliable protection of human health and the environment once remediation goals have been achieved. The magnitude of the residual risk is considered as well as the adequacy and reliability of controls.

Alternative 2 best satisfies this criteria because all of the PCB- and commingled PCB/Pb-contaminated soil will be removed from the site thereby eliminating the source of the on-site PCB contamination. Alternative 1 satisfies this criteria as long as the cap over the containment cell is not disturbed and the bottom liner remains intact.

Because approximately 6,500 cubic yards of PCB-contaminated soils would not be treated prior to disposal, remedial activities associated with these alternatives do not entirely meet the stated preference of the Superfund law which calls for utilization of permanent solutions and treatment to the maximum extent practicable. However, the most hazardous component of the soils would be treated as discussed below under Criteria 4.

4. Reduction of Toxicity, Mobility or Volume Through Treatment: This criteria refers to the anticipated performance of treatment technologies which will be used in the various remedial alternatives, such as solidification and incineration, for example.

Both Alternatives 1 and 2 achieve the same degree of reduction of toxicity, mobility or volume through treatment since they both employ methods to: (1) solidify the waste component containing leachable Pb exceeding the RCRA regulatory level of 5 ppm (toxicity characteristic level); (2) and, utilize incineration and solidification to treat wastes containing halogenated organic compounds above 1,000 ppm.

While neither alternative results in the total destruction of the PCBs and Pb, the most potentially hazardous component would be incinerated, and contaminated soil exceeding the 5 ppm RCRA leachate test level would be solidified to prevent the likelihood of movement of leachable Pb. Therefore, both alternatives reduce mobility, by solidifying a portion of the contaminated soils, and, to some extent volume, by incineration. However, Pb remaining in the resulting ash will be in a more concentrated form.

5. Short-term Effectiveness: This criteria refers to the period of time needed to achieve protection, and any adverse impacts on human health and the environment, specifically site workers and community residents, that may be posed during the construction and implementation period until cleanup goals are achieved.

Alternatives 1 and 2 could create some short-term risk during excavation. Truck transport of soils for off-site treatment and disposal would increase short-term risks, primarily in Alternative 2.

The off-site disposal remedy (Alternative 2) is estimated to take 24 weeks to implement, while the on-site containment remedy (Alternative 1) is estimated to take 30 weeks. Therefore, Alternative 2 would provide protection in a shorter timeframe than Alternative 1.

6. Implementability: This criteria refers to the technical and administrative feasibility of a remedial alternative, including the availability of goods and services needed to implement the selected remedy.

Even though both Alternatives 1 and 2 can meet the 25 ppm cleanup goal, off-site disposal (Alternative 2) would be substantially easier to implement than on-site containment (Alternative 1). Alternative 1 requires the construction of a landfill cell on the site property which complies with TSCA requirements. In addition, construction of a containment cell on the site requires the implementation of a long-term groundwater monitoring program, leachate collection system and the requirement for operation and maintenance of the facility for approximately 30 years. Under Alternative 2 (the off-site disposal alternative), both of these conditions are already met at existing, permitted, hazardous waste landfills.

Commingled PCB/Pb-contaminated wastes that fail RCRA leachate tests require solidification prior to disposal in either the on-site or the off-site, hazardous waste landfill cell. Under both alternatives, incineration of HOC-contaminated soil would take place at an approved, off-site incinerator and disposal of the solidified ash in an off-site, hazardous waste landfill.

Services and materials for implementing the on-site containment remedy are expected to be available within the state of Idaho. In-state and out-of-state hazardous waste landfills with the capacity for handling the off-site disposal of excavated soils have been identified.

7. Cost: This criteria refers to the cost of implementing a remedial alternative, including operation and maintenance (O&M) costs. Since this cleanup is an operable unit remedial action, to be followed by a final remedial action, O&M costs were not considered.

Total cleanup costs for off-site disposal (Alternative 2, the selected operable unit alternative) are estimated at \$2,429,000 while costs for on-site containment (Alternative 1) are \$4,350,000. In the original 1988 ROD, cost projections for the on-site containment remedy were approximately \$1,200,000. The predicted, higher cost of this alternative is a result of cell construction requirements, RCRA treatment requirements including solidification of soils that fail leachate tests, and incineration and solidification of the ash from HOC-contaminated soils, which were not identified in the 1988 ROD.

C. Modifying Criteria

Modifying criteria were used in the final evaluation of the operable unit remedial alternatives after the formal comment period, and may have been used to modify the preferred alternative that was discussed in the proposed plan.

8. State Acceptance: This criteria refers to whether the state agrees with the preferred operable unit remedial alternative.

The State of Idaho Division of Environmental Quality (IDEQ) concurs with the selection of the preferred operable unit remedial alternative. IDEQ has been involved with the development and review of the operable unit focused feasibility study, the Proposed Plan, and this amended ROD.

9. Community Acceptance: This criteria refers to the public support of a given remedial alternative.

One written comment was received during the public comment period. The commenter did not express a preference for a particular operable unit alternative, nor was opposition encountered to the EPA preferred operable unit alternative. Community response is presented in the Responsiveness Summary, which addresses the comment received during the public comment period.

THE SELECTED OPERABLE UNIT REMEDIAL ACTION

The selected Operable Unit Remedial Action for soils is Alternative 2, off-site disposal. This Operable Unit Remedial Action is selected because it best satisfies the nine criteria identified above, and it will not interfere with the on-going investigation and future remedial activities associated with the widespread Pb contamination. It is protective of human health and the environment, complies with all applicable environmental regulations, and offers a reasonable likelihood of complete removal of harmful levels of PCBs from the site.

In detail, the selected Operable Unit Remedial Action includes:

- (a) Excavation, processing, transport and disposal of approximately 8,200 cubic yards of PCB-contaminated and commingled PCB/Pb-contaminated soil and debris as follows:

- Approximately 6,500 cubic yards of untreated PCB-contaminated waste disposed in an approved, off-site TSCA landfill.

Table 1
McCarty's/Pacific Hide and Fur - Comparison of Operable Unit Cleanup Alternatives

Evaluation Criteria:	Alternative 1	Alternative 2	On/Offsite Incineration	Bioremediation/Chemical Dechlorination	Lime Treatment Process
	On-site TSCA Containment >25ppm PCBs; solidify RCRA waste >5ppm; incin. HOCs >1,000ppm Deed Restrictions.	Off-site Disposal >25ppm PCBs; solidify RCRA waste >5ppm; incin. HOCs >1,000ppm.	On- or Off-site Incin. of soils >25ppm PCBs; Off-Site Landfill (LF) of solidified ash from incineration.	On-site Biorem. or Chem. Dechlor. of soils >25ppm PCBs; solidify RCRA waste >5 ppm; incin. HOCs >1,000 ppm	On-site Lime Treatment of soils >25ppm PCBs; Off-site incin. of HOCs >1,000ppm; solidified ash placed in off-site LF.
Overall Protection of Public Health & the Environment	Protective. Incin. destroys HOCs >1,000ppm; solidif. immobilizes RCRA waste >5ppm & ash resulting from incin.; cell to meet TSCA reqmts. Potential pathways/risks reduced; some potential for air releases from excavation & transport. PCB source to GW significantly reduced.	Protective. Incin. destroys HOCs >1,000ppm; solidif. immobilizes RCRA waste >5ppm & ash resulting from incin. Potential pathways/risks eliminated; potential for airborne releases from excavation and transport. PCB source to GW eliminated. Risk transferred to LF.	Very Protective. Incin. permanently destroys PCBs >25ppm. Solidification of ash and placement in off-site LF eliminates risks and hazardous materials at site and to GW. Some potential transport risk and some risk transferred to LF.	Protective. If effective, Biorem. or Chem. Dechlor. destroys PCBs >25ppm. Incin. destroys HOCs >1,000 ppm; solidif. immobilizes RCRA waste >5 ppm and ash resulting from incin. Eliminates risks & hazardous materials at site & source to GW. Risk during excavation and treatment, and some risk transferred to LF.	Not Protective. Technology has not proven effective. PCB reductions in soil attributable mainly to volatilization, not lime treatment process.
Compliance w/ARARs	Met all ARARs at time ROD signed; ESD (1990) clarified TSCA/RCRA design reqmts.	Met all ARARs at time ROD was signed; still meets ARARs.	Met all ARARs at time ROD was signed; still meets ARARs. Tech. not necessary to comply w/ARARs.	Unknown. Unlikely able to meet 25ppm cleanup goal without additional treatment.	Will not meet ARARs.
Long-term Effectiveness	Fair. Risks of direct contact reduced; future risks to GW compromised if cell or cap fails.	Good. Risks of direct contact elimin.; cur./fut. PCB risks to GW below 10-6; some risk transferred to LF.	Good. Risks of direct contact elimin.; cur./fut. PCB risks to GW below 10-6; some risk transferred to LF.	Unknown. If pilot tests prove successful, direct con. risks could be elim.; cur./fut. PCB risks to GW <10-6, some risk transferred to LF.	Poor.
Reduction of Toxicity, Mobility & Volume	Fair. Most highly contam. material destroyed. Soils with >5ppm RCRA Pb solid.; soils >1,000ppm HOCs incin.	Fair. Most highly contam. material destroyed. Soils with >5ppm RCRA Pb solid.; soils >1,000ppm HOCs incin.; 6,500cyd. of non-HOC, PCB soils (>25ppm) to TSCA LF.	Satisfies preference: 7,500 cyd. soil with >25ppm PCBs treated by incin.; hazardous materials destroyed; ash will be solidified and placed in off-site LF.	Unknown. If effective, would satisfy pref.: 7,500cy soil with >25ppm PCBs treated by biorem. or chem. dechlor.; haz. materials destroyed; ash solid/dis. in off-site LF.	Poor.
Short-term Effectiveness	Air emissions during excavation/consolidation; >1 year before response objectives achieved.	Air emissions during excavation; potential distribution of contaminated soil during transport to off-site incin./LF; response objectives could be achieved within 1 year.	Air emissions during excavation; potential distribution of contaminated soil during transport to off-site incin./LF; >1 year before response objectives could be achieved.	Air emissions during excavation and treatment; >1 year before response objectives could be achieved.	Poor.
Implementability	Tech. & admin. feasible. Requires ROD amendment. Begin in 1992, finish in 1993/94. Could significantly impact future operable unit remedial actions.	Tech. feasible & available. Requires ROD Amendment. Begin in 1992, finish in 1993.	Tech. Impractical; sig. material processing reqmts. Potential delays due to incinerator use backlog. Requires ROD Amendment. Begin in 1992, finish in 1994.	Sig. material processing reqmts. Unknown whether technologies will be tech. effective. Requires ROD Amendment. Begin in 1992, finish in 1994.	Poor.
Cost	ROD est. = \$ 1.2 M Current est. = \$4.4 M	ROD est. = \$ 4 M Current est. = \$ 2.65 M	ROD est. = \$ 8-24 M Current est. = same as above	Current est. = \$ 4.5 M (bio.) Current est. = \$ 2.5 M (dech.)	Current est. = \$2.5 M
State Acceptance	State concurred in 1988.	State concurs.	Unacceptable for site.	Unacceptable for site.	Unacceptable for site.
Community Acceptance	Acceptable in 1988.	Acceptable; no comments received.	No comments received.	No comments received.	No comments received.

- Approximately 900 cubic yards of commingled PCB/Pb-contaminated, RCRA characteristic soils solidified prior to disposal in an approved, off-site hazardous waste landfill.

- Approximately 100 cubic yards of RCRA characteristic, commingled PCB/Pb-contaminated soils containing halogenated organic compounds in excess of 1,000 ppm (California List Waste) transported to an off-site incinerator and the ash solidified prior to disposal in an approved, off-site hazardous waste landfill.

- Approximately 700 cubic yards of debris (scrap material) decontaminated, stockpiled and placed under a protective cover on-site.

- (b) Backfilling, grading and restoration of surface drainage to the extent that site restoration does not interfere with on-going investigation and future remediation of other potential soil and groundwater operable units.

Because the sampling results conducted of on-site groundwater monitoring wells have not indicated the presence of PCBs at harmful levels, groundwater cleanup is not a component of this Operable Unit Remedial Action.

Remedial Action Performance Standards:

The Operable Unit Remedial Action shall be completed subject to the following standards of performance.

- A. The boundaries of the Operable Unit Remedial Action areas within which soil is to be excavated and sampled for compliance purposes are shown in Figure 2.
- B. Within the Operable Unit Remedial Action areas, all soils and debris with PCB concentrations of 25 ppm or above shall be removed from the site, tested and treated via solidification (if TCLP concentrations for lead exceed 5 ppm), and incineration and solidification of the resulting ash (if TCLP concentrations for lead exceed 5 ppm and halogenated organic compound concentrations exceed 1,000 ppm). PCB- and commingled PCB/Pb-contaminated soils which do not fail TCLP shall be placed in an approved, off-site TSCA landfill. All other soils shall be treated off-site and disposed in an approved, off-site hazardous waste landfill. Sampling methods and protocols to be utilized in determining the character and fate of the contaminated soils will be done in accordance with an EPA approved sampling and analysis plan.

- C. All contaminated metal scrap and debris excavated within the Operable Unit Remedial Action areas which is not treated and/or disposed in an approved, off-site hazardous waste landfill shall be decontaminated subject to the PCB Spill Cleanup Policy. A protective cover, such as a tarp, shall be placed over the decontaminated, stockpiled scrap remaining on-site.
- D. Verification sampling to evaluate the statistical compliance with the 25 ppm cleanup level must be based upon a sufficient number of analytical samples to calculate a statistically valid upper confidence interval for the mean PCB concentration.
- E. Backfilling, grading and restoration of surface drainage shall be conducted to the extent that site restoration does not interfere with on-going investigation and future remediation of other potential soils and groundwater operable units.

STATUTORY DETERMINATIONS

EPA's primary responsibility at CERCLA sites is to undertake remedial actions that are protective of human health and the environment. In addition, Section 121 of CERCLA, 42 U.S.C. §9621, establishes several other statutory requirements and preferences including: a requirement that EPA's remedial action, when complete, must comply with applicable or relevant and appropriate environmental standards established under federal and state laws unless a statutory waiver is invoked; a requirement that EPA select a remedial action that is cost-effective and that utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; and, a statutory preference for remedies that permanently and significantly reduce the volume, toxicity or mobility of hazardous substances over remedies that do not achieve such results through treatment. Remedial alternatives at the site were developed taking into account these Congressional objectives and preferences.

The selected Operable Unit Remedial Action meets the statutory requirements of CERCLA, and, to the extent practicable, the NCP. The evaluation criteria are discussed below.

Protection of Human Health and the Environment:

The selected Operable Unit Remedial Action is protective of human health and the environment and will eliminate the risks posed through each pathway by removal, treatment to the extent practicable, and disposal of both PCB- and commingled PCB/Pb-contaminated soil.

For groundwater, no remedial action under this operable unit cleanup is necessary to protect human health and the environment. The basis for this conclusion is that the results from quarterly groundwater monitoring conducted in 1989-1990 and resumed in 1990-1991 have not confirmed the presence of PCBs at concentrations above the Maximum Federal Drinking Water Contaminant Level which is 0.5 parts per billion.

Preliminary data from the 1990-1991 groundwater studies indicates the presence of Pb in on-site groundwater monitoring wells at levels which may require remediation. EPA will continue to monitor and evaluate potential groundwater contamination. Following a thorough, quality-assured review of all appropriate data, EPA will determine the need to remediate groundwater. If groundwater cleanup is determined to be necessary, it will occur under another operable unit remedial action.

This Operable Unit Remedial Action will eliminate the source of PCB contamination at the site. While this Operable Unit Remedial Action will effectively and permanently remove on-site PCB-contaminated soils, other hazardous substances (i.e. Pb and other inorganic compounds) will remain above health-based levels until EPA develops final remedial alternatives for the remainder of the site. Because this is an Operable Unit cleanup, review of this Operable Unit will continue during development of final remedial alternatives for the remaining contaminated areas of the site. Appropriate statutory and policy 5-year reviews will be conducted on both the Operable Unit Remedial Action and the final Remedial Action at this site to ensure that the remedies are providing adequate protection of human health and the environment.

Compliance with Applicable or Relevant and Appropriate Requirements:

Pursuant to Section 121(d) of CERCLA, 42 U.S.C. §9621(d), remedial actions shall, upon their completion, reach a level or standard of control for such hazardous substances, pollutants or contaminants which at least attains legally applicable or relevant and appropriate federal standards, requirements, criteria, or limitations, or any promulgated standards, requirements, criteria, or limitations under a state environmental or facility siting law that is more stringent than any federal standard (ARARs).

The selected Operable Unit Remedial Action satisfies the requirements of this section of CERCLA by complying with all identified ARARs. No ARAR waivers have been sought or invoked for any component of the selected Operable Unit Remedial Action. The chemical- and action-specific ARARs (there are no location-specific ARARs for this site) include the following:

- TSCA PCB regulations (40 CFR 761.60 - 761.79) and Subpart G - PCB Spill Cleanup Policy, address the requirements for storage, treatment and disposal of PCB-contaminated material, and establish the 25 ppm cleanup level at this site. These are both action- and chemical-specific ARARS.
- RCRA regulations (40 CFR 261 - 263 and 268), address the requirements for defining, characterizing and listing hazardous wastes; for generators pertaining to manifesting, transporting, and recordkeeping; for transporters pertaining to shipment of hazardous wastes off-site; and, land disposal restrictions.
- Department of Transportation: Hazardous Materials Regulations (49 CFR, Parts 171, 172, 173 Subparts A, B, J and N, and 177, 178 and 180, and Subchapter C), Idaho Code Sections 67-2929, 2930 (Supplement 1988) and 49-2201 through 2212 and IHWMR Section 16.01.5500, address shipment of any hazardous material off-site.
- Clean Air Act (42 USC 7409, 7412) and the Idaho Rules and Regulations for the Control of Air Pollution in Idaho (Citation Section 16.01.1011-1012, 16.01.1251-1253, and 16.01.1501-1504), address the control of fugitive dust emissions during excavation and other field activities, and pertain to compliance with the national ambient air quality standards and national emission standards for hazardous air pollutants.
- Occupational Safety and Health Act (29 CFR Parts 1910 and 1926), address safety requirements for workers engaged in response or other hazardous waste operations.
- Safe Drinking Water Act (42 USC 300) and the Clean Water Act (33 USC 1251, 40 CFR Part 230, 231), establishes the development of national primary drinking water regulations. The regulations provide maximum contaminant level standards which drinking water quality cannot exceed. The PCB MCL of 0.5 ppb shall be maintained and used as the groundwater standard for the site.
- Clean Water Act (CWA) (33 USC 1251, 40 CFR Parts 230 and 231), establishes State Antidegradation Requirements/Use Classification requirements for classification of all the waters within state boundaries according to intended use. CWA (40 CFR Part 122), addresses storm water runoff from site operations.

- Idaho Solid Waste Management Regulations and Standards Manual (Sections 16.01.6005,01 and 16.01.6008,07), requires that all solid wastes be managed during storage, collection, transfer, transport, processing, separation, incineration, composting, treatment, reuse, recycling, or disposal to prevent health hazards, public nuisances, or pollution to the environment.
- Idaho Administrative Procedures Act (Sections 16.01.2050,02, 16.01.2020,06, 16.01.2051, 16.01.2200, and 16.01.2800), establishes standards for protection of state groundwater against unreasonable contamination or deterioration. These standards are designed to control and regulate the public drinking water system in order to protect the health of consumers.

Other Criteria, Advisories, or Guidance To-Be-Considered (TBC)

The following guidance was also considered:

- Guidance on Remedial Actions for Superfund Sites With PCB Contamination (OSWER Directive 9355.4-01, August 1990), which describes the recommended approach for evaluating and remediating CERCLA sites with PCB contamination.

Cost-Effectiveness:

The cost-effectiveness of each alternative was evaluated, including those which were screened out prior to the final alternatives assessment in the focused operable unit feasibility study. The selected Operable Unit Remedial Action is cost-effective as it affords overall effectiveness and protectiveness proportional to costs. Other remedial alternatives including innovative treatment technologies and/or treatment of greater quantities of the waste were considered, but were found to be generally more costly without affording additional protectiveness commensurate with their cost.

Utilization of Permanent Solutions and Alternative Treatment Technologies or Resource Recovery Technologies to the Maximum Extent Practicable:

EPA and the State of Idaho have determined that the selected Operable Unit Remedial Action represents the best balance of tradeoffs among the alternatives considered with respect to EPA's nine evaluation criteria. It is protective of human health and the environment, and complies with all applicable environmental regulations. This Operable Unit Remedial Action also utilizes treatment where feasible and practicable.

Preference for Treatment As a Principal Element:

Because this action does not constitute the final remedy for the entire site, the statutory preference for remedies that employ treatment that reduces toxicity, mobility, or volume as a principal element, although partially addressed in this remedy, will be considered when addressing future remedial action. Subsequent actions are planned to address the threats posed by conditions in other areas of this site.

DOCUMENTATION OF SIGNIFICANT CHANGES

There have been no significant changes from the proposed plan. The selected Operable Unit Remedial Action is the same as the preferred alternative described to the public in the January 23, 1992, public notice and proposed plan.