# TABLE OF CONTENTS HARBOR ISLAND - Lockheed Shipyard Explanation of Significant Differences AR (HLESD)

December 21, 2001

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HEADING: 1. 0. . . EXPLANATION OF SIGNIFICANT DIFFERENCES

SUB-HEAD: 1. 1. . . Vol. 1 - Correspondence

1. 1. . . Vol. 1 - 1071435 DOC ID: 106881 DATE: 7/20/1998 PAGES: 12

AUTHOR(S): ADDRESSEE(S):

Piper L. Peterson-Lee/EPA Ron N. Helgerson/Lockheed Martin Corp.

DESCRIPTION:

Letter regarding a 7/6/98 EPA/Lockheed meeting (EPA comments on the Draft Remedial Design Investigation Data Report and the Draft Source Control Report for the Lockheed

Shipyard Sediment Operable Unit attached).

1. 1. . . Vol. 1 - 1071437 DOC ID: 106882 DATE: 8/13/1998 PAGES: 3

AUTHOR(S): ADDRESSEE(S):

Ron N. Helgerson/Lockheed Martin Corp. Piper L. Peterson-Lee/EPA

**DESCRIPTION:** 

Letter providing a response to EPA comments of 7/20/98 and 7/23/98 on the Draft

Remedial Design Investigation Data Report and the Draft Source Control Report, and an

update on the completion date for the Contamination Mobility Report.

1. 1. . . Vol. 1 - 1071448 DOC ID: 106911 DATE: 12/18/1998 PAGES: 2

AUTHOR(S): ADDRESSEE(S):

Piper L. Peterson-Lee/EPA Carol A. Yuge/Lockheed Martin Corp.

DESCRIPTION:

Letter regarding the 10/1/98 RD Schedule for the Lockheed Shipyard No. 1 Sediment

Operable Unit (LSSOU).

1. 1. . . Vol. 1 - 1099843 DOC ID: 128597

DATE: 3/4/1999 PAGES: 2

AUTHOR(S): ADDRESSEE(S):

Piper L. Peterson-Lee/EPA John R. Johnsen/Lockheed Martin Corp.

DESCRIPTION:

Letter providing clarifications regarding future direction for Lockheed sediment cleanup.

1. 1. . . Vol. 1 - 1099844 DOC ID: 128599 DATE: 4/2/1999 PAGES: 6

AUTHOR(S): ADDRESSEE(S):

Piper L. Peterson-Lee/EPA Carol A. Yuge/Lockheed Martin Corp.

**DESCRIPTION:** 

Letter approving Lockheed's 2/17/99 Remedial Design Investigation Data Report

(comments attached).

1. 1. . . Vol. 1 - 1099848 DOC ID: 128603 DATE: 5/19/1999 PAGES: 4

AUTHOR(S): ADDRESSEE(S):

Peter C. Adolphson/Washington State Dept. Piper L. Peterson-Lee/EPA

of Ecology

**DESCRIPTION:** 

Letter documenting an agreement between EPA, Lockheed Martin and the Dept. of Ecology

regarding statistical analysis of Rhepoxynius abronius reference survival/mortality data for

evaluation of Washington State SMS biological criteria.

1. 1. . . Vol. 1 - 1099851 DOC ID: 128606 DATE: 6/7/1999 PAGES: 3

AUTHOR(S): ADDRESSEE(S):

Peter C. Adolphson/Washington State Dept. Piper L. Peterson-Lee/EPA

of Ecology

**DESCRIPTION:** 

Follow-up response to clarify agreement between EPA, Lockheed and Dept. of Ecology

regarding statistical analysis of Rhepoxynius abronius reference/survival mortality data for

evaluation of State SMS biological criteria.

1. 1. . . Vol. 1 - DOC ID: 1128031 DATE: 2/2/2000 PAGES: 2

AUTHOR(S): ADDRESSEE(S):

Piper L. Peterson-Lee/EPA Natural Resource Trustees

DESCRIPTION:

Memorandum announcing the mailing of the Draft Final Basis of Design Report-Lockheed

Shipyard Sediment Operable Unit, Harbor Island.

Memorandum was addressed to 15 recipients.

1. 1. . . Vol. 1 - 1110535 DOC ID: 136514 DATE: 2/11/2000 PAGES: 5

AUTHOR(S): ADDRESSEE(S):

Piper L. Peterson-Lee/EPA Carol A. Yuge/Lockheed Martin Corp.

DESCRIPTION:

Letter transmitting issues/comments regarding the 1/15/00 Basis of Design Report and

requesting a meeting on 2/16/00 to determine if Lockheed is in agreement with EPA's

suggested modifications to the draft report.

1. 1. . . Vol. 1 - 1110536 DOC ID: 136515 DATE: 3/2/2000 PAGES: 3

AUTHOR(S): ADDRESSEE(S):

Piper L. Peterson-Lee/EPA Carol A. Yuge/Lockheed Martin Corp.

#### DESCRIPTION:

Letter indicating EPA has determined that no further revisions to the 1/15/00 Basis of Design Report are necessary and listing issues that should be addressed in a technical memorandum.

1. 1. . . Vol. 1 - DOC ID: 1128032 DATE: 4/20/2000 PAGES: 2

AUTHOR(S): ADDRESSEE(S):

Piper L. Peterson-Lee/EPA Natural Resource Trustees

DESCRIPTION:

Memorandum transmitting the Draft Technical Memorandum, Basis of Design-Lockheed

Shipyard Sediment Operable Unit, Harbor Island.

Memorandum was addressed to 16 recipients.

1. 1. . . Vol. 1 - 1110540 DOC ID: 136519 DATE: 5/1/2000 PAGES: 3

AUTHOR(S): ADDRESSEE(S):

Pamela Erstad/Washington State Dept. of Piper L. Peterson-Lee/EPA

Fish and Wildlife

DESCRIPTION:

Comments on the draft Hart Crowser Basis of Design Technical Memorandum.

1. 1. . . Vol. 1 - DOC ID: 1128033 DATE: 5/3/2000 PAGES: 1

AUTHOR(S): ADDRESSEE(S):

Robert C. Clark/NOAA Piper L. Peterson-Lee/EPA

DESCRIPTION:

Email transmitting comments on the Draft Technical Memorandum, Basis of

Design-Lockheed Shipyard Sediment Operable Unit, Harbor Island (with handwritten note).

1. 1. . . Vol. 1 - DOC ID: 1128034 DATE: 5/8/2000 PAGES: 1

AUTHOR(S): ADDRESSEE(S):

Glen St. Amant/Muckleshoot Indian Tribe Piper L. Peterson-Lee/EPA

DESCRIPTION:

Email transmitting comments on the Draft Technical Memorandum, Basis of

Design-Lockheed Shipyard Sediment Operable Unit, Harbor Island.

1. 1. . . Vol. 1 - DOC ID: 1128035 DATE: 4/10/2001 PAGES: 9

AUTHOR(S): ADDRESSEE(S):

Lynda E. Priddy/EPA Melanie M. Sviatyla/Lockheed Martin

Corp.

**DESCRIPTION:** 

Letter transmitting EPA and Natural Resource Trustees comments regarding the Technical

Memorandum Basis of Design; Lockheed Shipyard No.1 Sediment Operable Unit (LSSOU),

Harbor Island.

1. 1. . . Vol. 1 - DOC ID: 1128036 DATE: 4/24/2001 PAGES: 8

AUTHOR(S): ADDRESSEE(S):

Lynda E. Priddy/EPA Melanie M. Sviatyla/Lockheed Martin

Corp.

**DESCRIPTION:** 

Letter correcting the April 10, 2001 transmittal of EPA and Natural Resource Trustees comments regarding the Technical Memorandum Basis of Design; Lockheed Shipyard No.1

Sediment Operable Unit (LSSOU), Harbor Island.

1. 1. . . Vol. 1 - DOC ID: 1128037 DATE: 5/17/2001 PAGES: 2

AUTHOR(S): ADDRESSEE(S):

Lynda E. Priddy/EPA Melanie M. Sviatyla/Lockheed Martin

Corp.

**DESCRIPTION:** 

Letter transmitting EPA comments regarding Lockheed's 30% Remedial Design Schedule;

Lockheed Shipyard Sediment Operable Unit (LSSOU), Harbor Island.

1. 1. . . Vol. 1 - DOC ID: 1128040 DATE: 7/17/2001 PAGES: 12

AUTHOR(S): ADDRESSEE(S):

John Herzog/Hart Crowser and Associates, Melanie M. Sviatyla/Lockheed Martin

Inc. Corp.

DESCRIPTION:

Memorandum transmitting Lockheed Martin Corporation's response to EPA comments on the Technical Memorandum Basis of Design; Lockheed Shipyard No.1 Sediment Operable

Unit (LSSOU), Harbor Island.

(Transmittal letter forwarding document to Lynda Priddy attached).

1. 1. . . Vol. 1 - DOC ID: 1128039 DATE: 7/31/2001 PAGES: 4

AUTHOR(S): ADDRESSEE(S):

Michael F. Gearheard/EPA

John Wiggin/Lockheed Martin Corp.

DESCRIPTION:

Letter denying the Lockheed Martin Corporation proposal for a Remedial Design schedule

extension, and transmitting an acceptable proposed schedule.

SUB-HEAD: 1. 2. . . Vol. 1 - Reports/Technical Documents

1. 2. . . Vol. 1 - 1050713 DOC ID: 67335 DATE: 11/27/1996 PAGES: 79

AUTHOR(S): ADDRESSEE(S): Charles C. Clarke/EPA Unknown

DESCRIPTION:

Record of Decision, Declaration, Decision Summary, and Responsive Summary for the

Shipyard Sediment Operable Unit, Harbor Island.

This document is included in the Harbor Island Lockheed Shipyard ESD AR by reference only. To see a copy of the ROD refer to the Shipyard Sediments Administrative Record

(HIA05), folder 4.2.

I. 2. . . Vol. 1 - 1123594 DOC ID: 154608 DATE: 8/26/1997 PAGES: 288

AUTHOR(S):

Hart Crowser and Associates, Inc.

ADDRESSEE(S):

Lockheed Martin Corp.

**DESCRIPTION:** 

Remedial Design Investigation Work Plan, Lockheed Shipyard No. 1 Sediment Operable

Unit.

1. 2. . . Vol. 1 - 1082808 DOC ID: 106238 DATE: 2/19/1999 PAGES: 243

AUTHOR(S): ADDRESSEE(S):

Hart Crowser and Associates, Inc.

Lockheed Martin Corp.

**DESCRIPTION:** 

Final Remedial Investigation Data Report - Lockheed Shipyard No. 1 Sediment Operable Unit: Volume I (Includes 4/2/99 EPA approval letter, comments on the Final Remedial

Design Investigation Report for Lockheed Shipyard No. 1 Sediment Op Unit,

and Lockheed Martin's response to EPA Comments on the Final Remedial Design

Investigation Report).

SUB-HEAD: 1. 2. . . Vol. 2 - Reports/Technical Documents

1. 2. . . Vol. 2 - 1082809 DOC ID: 106239 DATE: 2/19/1999 PAGES: 839

AUTHOR(S): ADDRESSEE(S):

Hart Crowser and Associates, Inc.

Lockheed Martin Corp.

**DESCRIPTION:** 

Final Remedial Investigation Data Report - Lockheed Shipyard No. 1 Sediment Operable

Unit: Volume II - Appendices A through J.

SUB-HEAD: 1. 2. . . Vol. 3 - Reports/Technical Documents

1. 2. . . Vol. 3 - 1089230 DOC ID: 131466 DATE: 1/1/2000 PAGES: 427

AUTHOR(S): ADDRESSEE(S):

Hart Crowser and Associates, Inc.

Lockheed Martin Corp.

**DESCRIPTION:** 

Final Basis of Design Report, Lockheed Shipyard No. 1 Sediment Operable Unit.

This report was finalized in a letter sent March 2, 2000 (Doc 136515).

1. 2. . . Vol. 3 - 1123574 DOC ID: 154329 DATE: 4/14/2000 PAGES: 19

AUTHOR(S): ADDRESSEE(S):

Hart Crowser and Associates, Inc.

Lockheed Martin Corp.

DESCRIPTION:

Technical Memorandum, Basis of Design report for Lockheed Shipyard No. 1 Operable Unit.

1. 2. . . Vol. 3 - DOC ID: 1128030

DATE: 1/1/2001 PAGES: 29

AUTHOR(S): ADDRESSEE(S):

12/21/2001 U.S. Environmental Protection Agency, Region 10

Management of Environmental Resources

**EPA** 

**DESCRIPTION:** 

Support documentation for Shipyard Waste, Abrasive Grit Blast and Shipyard Debris

Definitions (data tables attached).

Document date has been estimated.

Vol. 3 -DOC ID: 1. 2. . .

DATE: 8/1/2001 PAGES: 16

AUTHOR(S): ADDRESSEE(S):

General Construction Co. Unknown

DESCRIPTION:

Olympic View Resource Area Pile Pull Demonstration Summary Report.

**Administrative Order on Consent (AOC)** SUB-HEAD: 1. 3. . . Vol. 1 -

97865 1. 3. . . Vol. 1 - 1052492 DOC ID: DATE: 2/13/1995 PAGES: 40

AUTHOR(S): ADDRESSEE(S):

EPA Atlantic Richfield Co.

Fisher Mills, Inc.

Lockheed Corp.

Mobil Oil Corp.

Port of Seattle

DESCRIPTION:

Administrative Order on Consent for Additional Sampling and Analysis for Sediment Operable Unit (EPA No: 10-95-0130-CERCLA) (three additional recipients listed).

1. 3. . . Vol. 1 - 1099960 DOC ID: 97918 PAGES: DATE: 1/6/1997 53

AUTHOR(S): ADDRESSEE(S):

Carol A. Yuge/Lockheed Martin Corp. Catherine Krueger/EPA

DESCRIPTION:

Cover letter and Administrative Order on Consent for the Lockheed Shipyard No. 1 Operable Unit Remedial Investigation/Feasibility Study, dated September 11, 1990.

1. 3. . . 97921 Vol. 1 - 1052518 DOC ID: DATE: 6/29/1997 PAGES: 14

AUTHOR(S): ADDRESSEE(S):

Catherine Krueger/EPA Carol A. Yuge/Lockheed Martin Corp.

DESCRIPTION:

Letter discussing the Final Administrative Order on Consent for Remedial Design of the Lockheed Martin Portion of the Shipyard Sediment Operable Unit of Harbor Island, and transmitting a copy of the Remedial Design Statement of Work.

1. 3. . . Vol. 1 - DOC ID: 1128029 DATE: 7/11/1997 PAGES: 53

AUTHOR(S): ADDRESSEE(S): Lockheed Martin Corp.

**DESCRIPTION:** 

Administrative Order on Consent for Remedial Design for the Lockheed Martin Portion,

Shipyard Sediment Operable Unit.

SUB-HEAD: 1. 4. . . Vol. 1 - Supplemental Studies Under The Harbor Island OU4 1998 AOC

SUB-HEAD: 1. 4. 1. . Vol. 1 - Report: Tissue Residue Effects Data for TBT, Hg and PCB

1. 4. 1. . Vol. 1 - 1088104 DOC ID: 123677 DATE: 5/1/1999 PAGES: 96

AUTHOR(S): ADDRESSEE(S): EVS Environment Consultants Lockheed Martin Corp.

Port of Seattle

Todd Pacific Shipyards Corp.

**DESCRIPTION:** 

Review of Tissue Residue Effects Data for Tributyltin (TBT), Mercury (Hg), and

Polychlorinated Biphenyls (PCBs).

This document is included in the Harbor Island Lockheed Shipyard ESD by reference only and is available in the West Waterway Sediments Administrative Record, folder 1.11.1.

SUB-HEAD: 1. 4. 2. . Vol. 1 - Report: TBT in Marine Sediments and Tissue

1. 4. 2. . Vol. 1 - 1088025 DOC ID: 121668 DATE: 7/1/1998 PAGES: 133

AUTHOR(S): ADDRESSEE(S): EVS Environment Consultants Port of Seattle

Lockheed Martin Corp.

Todd Shipyards Corp.

**DESCRIPTION:** 

Waterway Sediment Operable Unit Sampling and Analysis Plan for TBT Study.

This document is included in the Harbor Island Lockheed Shipyard ESD by reference only and is available in the West Waterway Sediments Administrative Record, folder 1.11.2.

1. 4. 2. . Vol. 1 - 1088107 DOC ID: 123681 DATE: 5/1/1999 PAGES: 480

AUTHOR(S):

EVS Environment Consultants

ADDRESSEE(S):

Lockheed Martin Corp.

Port of Seattle

**EVS Environment Consultants** 

Todd Pacific Shipyards Corp.

**DESCRIPTION:** 

Waterway Sediment Operable Unit: Tributyltin (TBT) in Marine Sediments and the

Bioaccumulation of TBT Combined Data Report.

This document is included in the Harbor Island Lockheed Shipyard ESD by reference only and is available in the West Waterway Sediments Administrative Record, folder 1.11.2.

1. 4. 2. . Vol. 1 - 1088125 DOC ID: 124386 DATE: 9/1/1999 PAGES: 14

AUTHOR(S): ADDRESSEE(S):

Environmental Solutions Group Unknown

**EPA** 

DESCRIPTION:

Technical Memorandum: Topics Related to the Tributyltin (TBT) Study at the Harbor Island

Superfund Site, Waterway Sediment Operable Unit.

This document is included in the Harbor Island Lockheed Shipyard ESD by reference only and is available in the West Waterway Sediments Administrative Record, folder 1.11.2.1.

SUB-HEAD: 1. 4. 3. . Vol. 1 - Report: Conceptual Site Model and Human Health Risk

1. 4. 3. . Vol. 1 - 1088106 DOC ID: 123679 DATE: 11/1/1998 PAGES: 93

AUTHOR(S): ADDRESSEE(S): EVS Environment Consultants Lockheed Martin Corp.

Port of Seattle

Todd Pacific Shipyards Corp.

**DESCRIPTION:** 

Assessing Human Health Risks from the Consumption of Seafood: Sampling and Analysis

Plan.

This document is included in the Harbor Island Lockheed Shipyard ESD by reference only and is available in the West Waterway Sediments Administrative Record, folder 1.11.3.

1. 4. 3. . Vol. 1 - 1088093 DOC ID: 123556 DATE: 12/1/1998 PAGES: 32

AUTHOR(S):

EVS Environment Consultants

ADDRESSEE(S):

Lockheed Martin Corp.

Port of Seattle

Todd Pacific Shipyards Corp.

DESCRIPTION:

Assessing Human Health Risks from the Consumption of Seafood: Conceptual Site Model

and Exposure Assessment.

This document is included in the Harbor Island Lockheed Shipyard ESD by reference only and is available in the West Waterway Sediments Administrative Record, folder 1.11.3.

1. 4. 3. . Vol. 1 - 1088024 DOC ID: 121663 DATE: 3/3/1999 PAGES: 226

AUTHOR(S): ADDRESSEE(S):

Lorraine L. Davis/Quality By Design

Julie Vivieros/EVS Environment

Consultants

**DESCRIPTION:** 

Data validation report for the Harbor Island Waterway Sediment Superfund Site, Assessing

Human Health Risks from the Consumption of Seafood.

This document is included in the Harbor Island Lockheed Shipyard ESD by reference only and is available in the West Waterway Sediments Administrative Record, folder 1.11.3.

1. 4. 3. . Vol. 1 - 1088127 DOC ID: 124388 DATE: 9/1/1999 PAGES: 198

AUTHOR(S): ADDRESSEE(S): Environmental Solutions Group Lockheed Martin Corp.

Port of Seattle

Todd Pacific Shipyards Corp.

**DESCRIPTION:** 

Assessing Human Health Risks from the Consumption of Seafood: Human Health Risk

Assessment Report (Final).

This document is included in the Harbor Island Lockheed Shipyard ESD by reference only and is available in the West Waterway Sediments Administrative Record, folder 1.11.3.

SUB-HEAD: 1. 5. . . Vol. 1 - Explanation of Significant Differences (ESD)

1. 5. . . Vol. 1 - DOC ID: 1128310 DATE: 12/20/2001 PAGES: 82

AUTHOR(S): ADDRESSEE(S): Lynda E. Priddy/EPA Unknown

**DESCRIPTION:** 

Explanation of Significant Differences - Shipyard Sediment Operable Unit, Harbor Island

Superfund Site (with December 2001 Harbor Island Fact Sheet attached).