

HONORABLE RONALD B. LEIGHTON

UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF WASHINGTON  
AT TACOMA

ARKEMA, INC., et al.,  
Plaintiffs,

v.

ASARCO, INC., et al.,  
Defendants.

Case No. C05-5087 RBL

FINDINGS OF FACT AND  
CONCLUSIONS OF LAW

This matter came on for trial before the Court beginning May 7, 2007, and ending on June 13, 2007. The Court has considered the testimony of the witnesses, the exhibits offered and admitted, the trial briefs and other memoranda of the parties, and the arguments of counsel at trial. The Court now makes the following Findings of Fact and Conclusions of Law.

**FINDINGS OF FACT**

**Parties**

1. Plaintiff Arkema, Inc. (“Arkema”), previously named ATOFINA Chemicals, Inc. (“ATOFINA”), is incorporated in Pennsylvania, with its principal offices located at 2000 Market Street, Philadelphia, Pennsylvania, 19103-3222. Arkema is a performing party under the Consent Decree entered in *United States v. ATOFINA Chemicals et al.*, C04-5319-RBL (W.D. Wash. June 2, 2004) at the Commencement Bay Near Shore Tidel flats Superfund Site (“CB N/T Site”) in Tacoma, Washington. Arkema has incurred response and remedial action costs relating to the Site.

1           2.       Plaintiff General Metals of Tacoma, Inc. (“General Metals”) is a Washington corporation  
2 with its principal offices located at 1902 Marine View Drive, Tacoma, Washington, 98424. General  
3 Metals is a performing party under the Consent Decree entered in *United States v. ATOFINA Chemicals et*  
4 *al.*, C04-5319-RBL (W.D. Wash. June 2, 2004) to conduct the remedial action at the Site. General Metals  
5 has incurred response and remedial action costs relating to the Site.

6           3.       ASARCO filed bankruptcy prior to trial and played no part in the litigation.

7           4.       Defendant Weyerhaeuser Co. is a Washington corporation with its principal offices located  
8 at 33663 Weyerhaeuser Way South, Federal Way, Washington.

9 **Site Background and History of Contamination**

10          5.       On February 2, 2005, Arkema Inc. (Arkema) and General Metals of Tacoma, Inc. (General  
11 Metals) (collectively Plaintiffs) filed this action seeking contribution pursuant to CERCLA and MTCA.

12          6.       The Site is an area known as the Head of the Hylebos, which is a portion of the Hylebos  
13 Waterway Problem Area located within the Commencement Bay Nearshore/Tideflats Superfund Site, a  
14 designated National Priorities List site in Tacoma, Washington (the “Site”).

15          7.       In the 1980s, the United States Environmental Protection Agency (EPA) and the  
16 Washington Department of Ecology (Ecology) conducted a Remedial Investigation/Feasibility Study  
17 (RI/FS) on the Site.

18          8.       On September 30, 1989, EPA issued a Record of Decision (ROD) based on the RI/FS.

19          9.       The ROD identified the chemicals of concern for the Hylebos Waterway, and identified the three  
20 chemicals representing the most significant concern for Hylebos Waterway sediment as arsenic, high molecular  
21 weight polycyclic aromatic hydrocarbons (HPAHs), and polychlorinated biphenyls (PCBs).

22          10.       The ROD established the cleanup goal for the Site as reduction of sediment contaminant  
23 concentrations.

24          11.       The ROD established Sediment Quality Objectives (SQOs) for chemicals of concern at the  
25 Site.

26          12.       The ROD does not address wood debris or establish an SQO for wood or wood debris.

27          13.       In the ROD, EPA identified Pennwalt Corporation (a predecessor to Arkema) as a major source  
28 of arsenic, chlorinated hydrocarbons, and low molecular weight PAHs (LPAHs) at the Site.

1 14. Arkema (including its predecessors) has owned and operated a chemical processing plant along  
2 the Hylebos Waterway at 2901 Taylor Way, Tacoma, Washington (the Arkema Facility) since approximately  
3 1928.

4 15. Arkema and its predecessors released arsenic, copper, lead, zinc, mercury, and chlorinated  
5 ethenes from the Arkema Facility to the Site.

6 16. In the ROD, EPA identified General Metals as a potential source of PCBs at the Site.

7 17. General Metals has owned and operated a ferrous scrap metal recycling facility along the  
8 Hylebos Waterway at 1902 Marine View Drive, Tacoma, Washington (the General Metals Facility) since about  
9 1967.

10 18. General Metals admits its operations were a source of PCB-contaminated sediments at the  
11 Site.

12 19. General Metals released PCBs, PAHs, and arsenic to the Site.

13 20. In the ROD, EPA identified Kaiser Aluminum and Chemical Company (Kaiser) as the major  
14 source of HPAHs in the Head of the Hylebos Waterway sediments, associated with historical onsite  
15 disposal of wet scrubber sludge waste and air emission controls.

16 21. Kaiser has owned and operated a large primary aluminum smelting operation located across  
17 Taylor Way from the Hylebos Waterway (the Kaiser Facility) since 1947.

18 22. Kaiser discharged wet scrubber sludge and other materials in stormwater discharges to the  
19 Waterway via a culvert running to the Waterway (the Kaiser Ditch) from 1951 to 1992, and then an  
20 underground pipeline (Outfall 001), which was installed in 1992.

21 23. In 1969 and 1971, Kaiser released several hundred to several thousand tons of wet scrubber  
22 sludge through the Kaiser Ditch to the Waterway as wet slurry from hydraulic dredging of its sludge ponds.

23 24. Kaiser's wet scrubber sludge contained up to 5% PAHs.

24 25. In 1990, Kaiser and Ecology entered into a Consent Decree which ordered Kaiser to remove  
25 PAH-containing sludge and sediment from the Kaiser Ditch and to reroute Outfall 001 discharges to a  
26 dedicated Outfall pipe.  
27  
28

1 26. In the ROD, EPA identified log sort yards that used ASARCO smelter slag as ballast, including  
2 the property at 3009 Taylor Way, Tacoma, Washington (the Dunlap Yard), as sources of metals, including  
3 arsenic, copper, lead, and zinc.

4 27. Arkema and/or its predecessors have owned the Dunlap Yard since it was first acquired.

5 28. From about 1964 to 1986, Arkema leased the Dunlap Yard to various companies including  
6 Balfour Guthrie & Co., Ltd. (Balfour Guthrie) (now Sygen International, P.L.C. (Sygen)), Goodwin Johnson  
7 (1960) Ltd., Johnson-Byers, Inc., Portac Inc. (Portac), and Echo Lumber Company (Echo) (collectively the  
8 Dunlap Tenants), who used it as a log sort yard.

9 29. The Dunlap Tenants each used ASARCO smelter slag as ballast to support their heavy  
10 equipment operations at the Dunlap Yard.

11 30. The Dunlap Tenants released arsenic and other heavy metals contained in ASARCO smelter  
12 slag to the Site through stormwater and groundwater discharges.

13 31. In the ROD, EPA did not specifically identify Weyerhaeuser as a potential source of  
14 contamination at the Site or generally identify log sort yards that did not use ASARCO smelter slag.

15 32. Since 1971, Weyerhaeuser has operated a log sort yard known as the Tacoma Export Facility  
16 (TEF) on its property located at 3401 Taylor Way in Tacoma, Washington, which it purchased from Kaiser  
17 in 1970.

18 33. In December 1970, Weyerhaeuser completed construction of a large wharf, used for loading  
19 raw logs onto ships. The wharf has a paved surface and is supported by approximately 1,700 creosote-treated  
20 pilings. In 1982, EPA informed Weyerhaeuser that it was considered a Potentially Responsible Party (“PRP”)  
21 at the site.

22 34. The TEF receives raw logs from various forests in the Pacific Northwest and British Columbia,  
23 where the trees are harvested, de-limbed, and transported as raw logs by rail, truck, log raft, or barge to the  
24 TEF. Raw logs are loaded at the TEF for export to overseas markets.

25 35. Unlike other log sort yards along the Waterway, the TEF has operated its heavy equipment  
26 on paved surfaces and never used ASARCO slag.  
27  
28

1 36. Since 1978, Weyerhaeuser has de-barked most of the raw logs shipped from the TEF to  
2 overseas markets. Except for de-barking and occasional minor trimming, the raw logs are not processed. The  
3 raw logs are not treated, painted, or stained. Wood bark scraps are sold as commercial products by the TEF.

4 37. Since approximately 1986, some of Weyerhaeuser's log rafts have been temporarily stored in  
5 front of the Arkema/Dunlap Yard shoreline in Confirmation Area ("CO") CO-12 or CO-13 at a location  
6 commonly known as the "Pennwalt Tie" in order to save time in transporting the log rafts to and from its main  
7 storage area in Commencement Bay approximately three miles away from Weyerhaeuser's TEF.

8 38. Manke Lumber Company (Manke), among others, also used the so-called Pennwalt Tie  
9 area to tie off log rafts along the piers near the pier-head line.

## 10 **Site Investigation and Remediation History**

### 11 **Pre-Remedial Design and Site Investigation**

12 39. On November 29, 1993, Plaintiffs, along with ASARCO, Inc. (ASARCO), Kaiser, Occidental  
13 Chemical Corporation (Oxy), and the Port of Tacoma (Port), collectively formed the Hylebos Cleanup  
14 Committee (HCC) and entered into an Administrative Order on Consent (AOC) with EPA to prepare and  
15 perform Pre-Remedial Design Activities focused solely on evaluating and cleaning up contamination in areas  
16 of the Site impacted by chemically contaminated sediments exceeding SQOs.

17 40. During the HCC's investigation of the Hylebos Waterway, it discovered large areas with low  
18 exceedances of non-wood waste related chemicals that were substantially impacted by wood waste. In shallow  
19 marine environments, decomposing wood waste generates and releases ammonia and sulfides, also included  
20 on EPA's list of hazardous substances. *See* 40 C.F.R. §302.4. EPA reviewed HCC's sampling results, and  
21 in February 1996 prepared an "Issue Paper on Wood Waste Contamination: Hylebos Waterway Problem  
22 Areas, Commencement Bay Near Shore/Tide Flats Superfund Site, Tacoma, Washington." In this paper, EPA  
23 found that the Head of the Hylebos was "extensively contaminated with organic material, including wood  
24 waste, which has impacted the biological community." *id.* at 1, and that addressing this "wood waste could  
25 increase the volume of sediments requiring remediation by as much as 20%." *Id.* at 3. EPA found that "[t]he  
26 wood waste has contributed to organic enrichment of sediment at the head of the waterway, as shown by  
27 elevated total organic carbon, . . . ammonia, . . . and sulfides in samples collected in this area." *Id.* at 2.

28 41. EPA determined that wood waste at the Head of the Hylebos Waterway presented an imminent

1 and substantial danger to the public health and welfare that had to be addressed as part of the Superfund action  
2 under the CB N/T ROD.

3 42. In response to concerns regarding wood debris, several forest-products companies with facilities  
4 located on the UTB and Neck, including Weyerhaeuser, began working with EPA and Ecology to determine  
5 a regulatory approach separate and distinct from the HCC's AOC for handling wood issues at the Site.

6 43. On July 28, 1997, EPA issued an Explanation of Significant Differences (1997 ESD) that  
7 revised the requirement for remediation of PCB-contaminated sediments but did not address wood debris in  
8 any way.

9 44. Also in 1997, DOE named Weyerhaeuser a Potentially Liable Party under the Model Toxic  
10 Control Act (MTCA).

11 45. On December 18, 1997, Louisiana-Pacific Corporation (Louisiana-Pacific), Manke Lumber  
12 Company (Manke), and Weyerhaeuser formed the Wood Debris Group (WDG).

13 46. The WDG and Ecology entered an Agreed Order in an action styled *In the Matter of*  
14 *Remedial Action by: Louisiana-Pacific Corporation, et. al.*, No. DE 97TC-5437 (WDG Agreed Order).

15 47. The WDG agreed to conduct an investigation and to perform certain remedial actions in an  
16 area known as the Hylebos Wood Debris Site (HWDS) (which encompasses the Neck and UTB and is  
17 roughly comparable to the Site in this case) in accordance with the ROD pursuant to Ecology's regulations  
18 and supervision, to determine the horizontal and vertical extent of contaminated sediments within the  
19 HWDS, develop a Cleanup Study Report (CSR), and to dredge certain impacted sediments within the Site.  
20

21 48. The WDG conducted a three-year investigation of the HWDS and submitted its findings to  
22 Ecology in the CSR, which was approved by Ecology and EPA after public notice and comment.  
23

24 49. As documented in the CSR, the WDG investigation found highly chemically contaminated  
25 sediments throughout the Neck and UTB caused by the same chemicals EPA identified as chemicals of  
26 concern.  
27

28 **Expanded Scope of EPA Remediation Requirements**

1 50. On August 3, 2000, based on the findings of the pre-remedial design sampling which  
2 demonstrated a more widespread and highly concentrated contamination pattern than shown by the RI/FS,  
3 EPA issued a second Explanation of Significant Differences (2000 ESD) which revised the cleanup plan  
4 that Plaintiffs were required to perform to include subsurface contamination in the remedial requirements.

5  
6 51. In the 2000 ESD, EPA recognized the most severely contaminated sediments at Hylebos  
7 Waterway had high concentrations of several chlorinated organic compounds (including PCBs, pesticides,  
8 hexachlorobenzene and hexachlorobutadiene), HPAHs, LPAHs, lead, copper, zinc, mercury, and arsenic.

9 52. EPA also noted that Ecology identified 10 major ongoing sources to the Hylebos Waterway  
10 sediment contamination, including Elf Atochem (now Arkema), the Dunlap Yard, Kaiser, General Metals,  
11 and Louisiana-Pacific.

12  
13 53. On December 28, 2000, EPA issued Special Notice Letters to potentially responsible parties  
14 (PRPs) at the Site, including Plaintiffs and Weyerhaeuser, requesting additional sediment cleanup at the  
15 Site.

16 **Wood Debris Group Consent Decree and Dredging Work**

17  
18 54. On January 17, 2001, Ecology and the WDG, based upon the results of the CSR, entered  
19 into a Consent Decree in Pierce County Superior Court in the matter styled *State of Washington,*  
20 *Department of Ecology v. Louisiana-Pacific Corporation, et. al.*, No. 012047146 (WDG Consent  
21 Decree), under which Ecology required the WDG members to perform remedial actions as documented in  
22 the WDG's Cleanup Action Plan.

23  
24 55. Ecology excluded those areas containing highly chemically contaminated sediments, as  
25 defined in the WDG Agreed Order and reported in the CSR, from the WDG's responsibility because EPA  
26 intend[ed] to require other parties to perform remedial action pursuant to its authority under Federal laws,  
27 and returned those portions of the Site to EPA for cleanup by those other parties.

28 56. Pursuant to the WDG Agreed Order and the WDG Consent Decree, Weyerhaeuser and

1 other members of the WDG performed remedial actions, including investigating and dredging wood debris  
2 and some highly chemically contaminated sediments in the UTB for which Plaintiffs would otherwise have  
3 been responsible for dredging.

4  
5 57. The WDG divided the cleanup areas its members were to dredge into 39 PSDDA dredged  
6 material management units (DMMUs), approximately 4,000 cubic yards each.

7  
8 58. As required by the WDG Consent Decree, Weyerhaeuser dredged approximately 36,570 cubic  
9 yards of sediment from 10 DMMUs (B-1 through B-10) adjacent to Weyerhaeuser's TEF.

10  
11 59. While chemical concentrations of sediments in the UTB were less than those in the Neck, the  
12 WDG dredged approximately 31,000 cubic yards of chemically contaminated sediments exceeding SQOs,  
13 which were co-located with wood debris in the UTB.

14  
15 60. Weyerhaeuser dredged approximately 7,500 cubic yards of chemically contaminated sediment  
16 exceeding SQOs that were co-located with wood debris in DMMUs B-2, B-5, and B-10, areas in front of the  
17 TEF wharf.

18  
19 61. Sediments dredged by the WDG were subjected by EPA and Ecology to permitting  
20 characterization under Ecology's Puget Sound Dredged Disposal Analysis (PSDDA) Program.  
21 PSDDA-suitable materials were disposed of at the Commencement Bay PSDDA open water disposal site,  
22 while chemically contaminated sediments which exceeded PSDDA requirements were disposed at a solid waste  
23 landfill.

24  
25 62. Weyerhaeuser's total remedial action costs associated with dredging DMMUs B-1 through  
26 B-10 adjacent to Weyerhaeuser's TEF were \$1,631,455.00.  
27  
28

1 **Weyerhaeuser's Kaiser PAH Investigation**

2  
3 63. In 1999, Weyerhaeuser commissioned an extensive investigation of its operations at the TEF  
4 and Kaiser's operations for possible releases of PAHs to the Kaiser Ditch and the Site in response to  
5 allegations made by certain participants in the TLI allocation process.

6 64. The total costs associated with the Battelle and Delta work, as adjusted, were \$1,961,388.00.

7  
8 **Plaintiffs' Remedial Work**

9  
10 65. On March 25, 2002, EPA issued a Unilateral Administrative Order (UAO) to Plaintiffs in  
11 order to maintain the cleanup schedule for the Site.

12 66. On September 15, 2004, this Court entered a Consent Decree between Plaintiffs and EPA in  
13 a case styled *United States v. ATOFINA Chemicals, et al.*, C04-5319-RBL (W.D. Wash. 2004) (HHCG CD),  
14 which replaced the UAO and required Plaintiffs, as the sole members of the HHCG, to conduct cleanup of  
15 chemically contaminated sediments at the Site including areas in the UTB and Neck that were not cleaned  
16 up under the WDG Consent Decree.

17 67. During the course of conducting dredging pursuant to the HHCG CD, Plaintiffs divided their  
18 open-access dredging areas at the Site into twenty (20) Confirmation Areas (COs) for the purpose of  
19 managing dredging operations.

20 68. The Plaintiffs performed cleanup in the Neck and UTB of the Site from 2004 to 2006  
21 during three construction seasons.

22 69. Chemicals discharged by industrial operations at the Site are commingled with wood debris  
23 within sediment deposits.

24 70. The HHCG's 2004 Remedial Action Work Plan established a list of chemicals of concern  
25 specific to their remediation, including arsenic, mercury, zinc, LHAPs, HHAPs, PCBs, Phthalates, and  
26 pesticides, but did not include any wood performance standards.

27 71. Plaintiffs' dredging and disposal of chemicals of concern exceeding SQOs was driven by  
28 the presence of the highly chemically contaminated sediments, not wood debris.

1 72. Plaintiffs relied on direct chemical measurements of chemical contamination to determine  
2 when they had met the SQOs and could stop dredging.

3 73. The “black muck” Plaintiffs encountered while dredging in the Neck is consistent with  
4 Kaiser’s 1969 and 1971 releases of wet scrubber sludge, which represent non-native materials and pre-  
5 date Weyerhaeuser’s operations at the Site.

6 74. Plaintiffs dredged approximately 400,470 cubic yards of highly chemically contaminated  
7 sediment mixed with some wood debris from the Neck.

8 75. Plaintiffs Total Net Costs are now approximately \$41 million.

### 9 **Cost Allocation Factors**

#### 10 **Chemical Contamination**

11 76. Kaiser’s 1969 and 1971 wet scrubber sludge releases are the primary source of PAHs in  
12 CO-14 and at the Site. Weyerhaeuser owns a significant portion of CO-14, having purchased the  
13 property from Kaiser in 1970. The property was highly contaminated with wet scrubber sludge when  
14 purchased.

15 77. Creosote from the Weyerhaeuser TEF wharf was a minor source of PAHs in CO-14.

16 78. Weyerhaeuser did not use or generate arsenic at the TEF.

17 79. No PCBs were found in any TEF stormwater samples.

18 80. To the extent stormwater runoff from the TEF contained chemical contaminants, those  
19 contaminants were in concentrations equivalent to or less than typical urban runoff.

20 81. PAHs found in minor amounts in Weyerhaeuser’s stormwater discharges are associated  
21 primarily with engine exhausts, urban air deposition, and air deposition, and air deposition or runoff of  
22 PAHs associated with the operations of Kaiser and other industrial facilities near the Waterway.

#### 23 **Wood Debris Accumulation**

24 82. Wood is a naturally occurring substance comprised of three long-chain polymers cellulose,  
25 hemicellulose, and lignin.

26 83. Wood does not contain any hazardous substances. Wood is not a hazardous substance.  
27  
28

1 84. During the biological degradation process of wood, microorganisms may excrete hazardous  
2 substances such as ammonia, hydrogen sulfide and 4-methylphenol under very specific conditions, but such  
3 substances are not contained within the wood.

4 85. While certain regulated phenols (2-methylphenol, 4-methylphenol, 2,4dimethylphenol, benzyl  
5 alcohol, and benzoic acid) are considered to be wood-related chemicals, they are not chemicals contained in  
6 wood but are excreted by microorganisms feeding on wood during the biological degradation process under  
7 very specific conditions.

8 86. The CSR found no association of ammonia or methylphenols with wood. Further, ammonia  
9 and sulfide were not identified as Chemicals of Concern under the EPA's ROD and CERCLA decision  
10 documents, and no cleanup areas were identified for phenols under either the EPA (CERCLA) or Ecology  
11 (MTCA) cleanup processes.

12 87. There are no references to wood, wood debris, or any other form of wood in the cleanup  
13 performance standards for the Site as governed by the ROD, the HCC AO, the 1997 ESD, the 2000 ESD, or  
14 the HHCG CD.

15 88. There is no one continuous wood depositional area in the Neck, but rather two distinct and  
16 separate areas associated with two known operations - Arkema's Dunlap Yard operations (primarily in CO-13)  
17 and Weyerhaeuser's TEF operations (in CO-14).

18 89. The WDG's investigation found that significant deposits of wood debris in the Hylebos  
19 Waterway are typically found only in high-energy areas where active log handling operations take place, *i.e.*,  
20 the log ramp and log pen areas at respective log sort yards.

21 90. Prior to 1971, the bulk of the sedimentation near the Dunlap Yard is attributable to Kaiser's  
22 1969 and 1971 releases of massive amounts of wet scrubber sludge.

23 91. Between 1971 and 1983, the sedimentation and wood debris accumulation near the Dunlap  
24 Yard is attributable primarily to the Dunlap Tenants' log pen activities.

25 92. The only measurable impact on the Plaintiffs' remedial actions resulting from the presence of  
26 this incidental wood debris was an increase in the volume of material handled.

1 **Other Wood Operations at the Site**

2 93. Many of the Dunlap Tenants who were originally defendants in this action settled their liability  
3 to Plaintiffs for the following amounts:

- 4 • Sygen/Balfour Guthrie: \$300,000
- 5 • Portac: \$750,000
- 6 • Echo Lumber Company: \$150,000.
- 7 • Total: \$1.2 million.

8 94. Manke Lumber settled its liability to EPA at the Site for \$252,708.

9 95. Louisiana Pacific settled its liability to EPA at the Site for \$161,444.

10 **Kaiser's Potential Orphan Share**

11 96. Kaiser was a member of the HCC from 1993 to 2001 along with Plaintiffs and paid its one-sixth  
12 share of the investigative costs at the Site.

13 97. On February 12, 2002, Kaiser filed a Voluntary Petition for Chapter 11 reorganization in the  
14 Bankruptcy Court for the District of Delaware.

15 98. On August 22, 2003, Kaiser and the United States moved for entry of a Consent Decree, the  
16 purpose of which was to resolve Kaiser's liability for environmental claims by the United States under  
17 CERCLA, including claims related to the Hylebos Waterway Superfund Site. Notice of lodging of the Consent  
18 Decree was published in the Federal Register. Both General Metals and Atofina (Arkema's predecessor)  
19 initially objected to entry of the proposed Consent Decree but ultimately withdrew their objections.

20 99. The Delaware Bankruptcy Court issued an order approving the Consent Decree on  
21 November 27, 2003.

22 100. The Consent Decree settles Kaiser's liability to the United States for the Hylebos Waterway  
23 for \$8.9 million. In addition, the Consent Decree grants Kaiser contribution protection under CERCLA §  
24 113(f)(2) with regard to the Hylebos Waterway. To date, Kaiser has paid nothing toward the cleanup costs  
25 incurred by Plaintiffs.  
26  
27  
28

**CONCLUSIONS OF LAW**

1  
2 1. Plaintiffs have brought claims against Weyerhaeuser under the Comprehensive  
3 Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9613(f), and the  
4 Model Toxics Control Act (MTCA), R.C.W. § 70.105D.080, to recover contribution for response costs  
5 incurred by Plaintiffs at a site in Tacoma, Washington (the Site).

6 2. The Site is part of the Hylebos Waterway, a man-made shipping channel connected to  
7 Commencement Bay in the Puget Sound, and is more specifically delineated as the Head of the Hylebos  
8 Problem Area, which includes the Neck and Upper Turning Basin.

9 3. Over a period of many years, hazardous substances under both CERCLA and MTCA were  
10 released to the Site by numerous industrial facilities located on or near the Hylebos Waterway.

11 4. Weyerhaeuser has contribution protection against Plaintiffs' MTCA claim by virtue of the  
12 2001 Ecology-WDG MTCA Consent Decree. RCW 70.105D.040(4)(d); Order (Doc. 254). Therefore,  
13 Plaintiffs' MTCA claim for contribution is denied.

14 5. Plaintiffs are liable under CERCLA for releasing hazardous substances including substantial  
15 quantities of arsenic and PCBs into the Site over a period of many years. 42 U.S.C. § 107(a).

16 6. Kaiser is liable under CERCLA for releasing hazardous substances consisting of very large  
17 amounts of PAHs into the Site over a period of many years. 42 U.S.C. § 107(a).

18 7. The Court previously granted summary judgment against Weyerhaeuser on the following  
19 elements of CERCLA and MTCA liability:

20 (a) The Weyerhaeuser Site is a "facility" within the meaning of Section 101(9) of  
21 CERCLA, 42 U.S.C. §9601(9) and MTCA, RCW 70.105D.020(4).

22 (b) Weyerhaeuser is an "operator" within the meaning of Section 101(20) of CERCLA,  
23 42 U.S.C. §9601(20A) and RCW 70.105D.020(12).

24 (c) Weyerhaeuser is a "current owner and operator" under CERCLA §107(a)(1), 42  
25 U.S.C. §9607(a)(1).

26 (d) Weyerhaeuser is liable as an owner and operator because its creosote pilings  
27 released hazardous substances into the Site.

28 (e) Although the evidence does not support the conclusion that wood contains

1 hazardous substances, when placed in significant volume in still water the degradation of wood attracts  
2 microorganisms that excrete hazardous substances such as ammonia, hydrogen sulfide and 4-methylphenol  
3 which “come to be located” at the site. Weyerhaeuser is therefore liable as the owner of a facility from  
4 which hazardous substances are released to the environment. See U.S.C. §9601(9).

5 (f) The cleanup action conducted by Plaintiffs included removal of contaminated  
6 sediment on Weyerhaeuser’s property.

7 8. Plaintiffs’ remedial actions were completed in accordance with EPA-approved remedial  
8 action work plans and associated addenda. Plaintiffs’ costs are consistent with the National Contingency  
9 Plan (“NCP”) and satisfy the NCP “substantial compliance” requirement. Plaintiffs’ remedial actions were  
10 also a “substantial equivalent” of a Department of Ecology sponsored cleanup.

11 9. Raw wood that has not been treated, painted, or stained is not a CERCLA hazardous  
12 substance. 42 U.S.C. §9601(14); 40 C.F.R. §302.4. Raw wood is not a listed hazardous substance under  
13 either CERCLA regulations or incorporated statutes. 42 U.S.C. §9601(14); 40 C.F.R. §302.4. Raw  
14 wood is not otherwise a hazardous substance because it does not contain any hazardous substances that  
15 are released through the normal decomposition of wood.

16 10. Because Weyerhaeuser is liable at the Site, the Court performs an allocation to determine  
17 Weyerhaeuser’s fair share of the Plaintiffs’ response costs using such equitable factors as it deems  
18 appropriate. 42 U.S.C. §9613(f)(1).

19 11. Because all PRPs are liable under the statute, a claim by one PRP against another PRP  
20 necessarily is for contribution. A PRP’s contribution liability will correspond to that party’s equitable  
21 share of the total liability. Weyerhaeuser’s liability is several.

22 12. CERCLA authorizes the Court to utilize its own discretion in determining the equitable  
23 factors that are appropriate in allocating the Plaintiffs’ response costs.

24 13. In performing the equitable allocation, courts often apply the so-called Gore Factors: (1)  
25 the ability of the parties to demonstrate that their contribution to the site can be distinguished; (2) the  
26 amount of hazardous waste involved; (3) the degree of toxicity of the hazardous waste involved; (4) the  
27 degree of involvement of the parties in the generation, transportation, treatment, storage or disposal of the  
28 hazardous waste; (5) the degree of care exercised by the parties with respect to the hazardous waste,

1 taking into account the characteristics of such waste; and (6) the degree of cooperation by the parties with  
2 government agencies to prevent harm to the public health or the environment. However, the trial court is  
3 not limited to the Gore factors and can use discretion to determine which factors are appropriate in the  
4 particular case.

5 14. The Plaintiffs were required by EPA's 2000 ESD to remediate both surface and subsurface  
6 chemical contamination in sediment at the Site, which required Plaintiffs to dredge to a clean bottom in the  
7 Waterway regardless of other materials or substances present in the sediment.

8 15. Kaiser is an orphan at the Site.

9 16. Kaiser's orphan share must be allocated equitably among all the parties. Under §113(f)(1),  
10 the cost of orphan shares is distributed equitably among all PRPs, just as cleanup costs are.

11 17. Weyerhaeuser's contribution to chemical contaminants and wood debris in CO-9, CO-12  
12 and CO-13 was insignificant. Settlement amounts paid by the members of the wood debris group and  
13 other timber industry PRPs (\$1,614,152.00) provide adequate reimbursement to plaintiffs for costs  
14 incurred dredging wood debris and any amount of chemicals generated by wood companies, including  
15 Weyerhaeuser.

16 18. In CO-14, plaintiffs' dredged 42,000 cubic yards of sediments and wood debris. The  
17 estimated cost to dredge is \$72 per cubic yard. Wood debris in CO-14 and a small portion of CO-9 was  
18 estimated at 34% of total volume. The Court estimates the PAHs emanating from the Creosote pilings  
19 installed by Weyerhaeuser and from its upland operations at 6%. Weyerhaeuser is therefore allocated 40%  
20 of the cost to dredge CO-14 before allocating Kaiser's orphan share. The Court estimates Kaiser's orphan  
21 shares at 60% of the total cost incurred at CO-14.

22 19. Plaintiffs and defendant Weyerhaeuser should share equal responsibility for Kaiser's 60%  
23 orphan share of CO-14 costs. Weyerhaeuser purchased contaminated property from Kaiser and was  
24 benefitted by the dredge operation. The plaintiffs, on the other hand, were the parties who, because of  
25 their responsibility for chemicals throughout the waterway, would have been compelled to clean up CO-14  
26 on their own but for Weyerhaeuser's 1970 purchase of the property.

