

ORIGINAL FILED JUL 12 2011

Scott G. Weber, Clerk, Clark Co.

STATE OF WASHINGTON CLARK COUNTY SUPERIOR COURT

STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, NO. 09-2-00247-2

Plaintiff,

ORDER ENTERING AMENDED CONSENT DECREE

٧. 12

ALCOA INC.,

13 14

15

1

2

3

4

5

6

7

8

9

10

11

16 17

18 19

20 21

22

.23 24

25 26 Defendant.

Having reviewed the Joint Motion for Entry of the Amended Consent Decree, it is hereby ORDERED AND ADJUDGED that the Amended Consent Decree in this matter is entered and that the court shall retain jurisdiction over the Amended Consent Decree to enforce its terms.

day of July 2011.

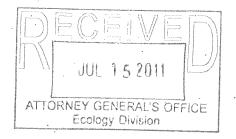
Jel Barbara D. Julineon

Superior Court Judge/Commissioner

ORDER ENTERING AMENDED CONSENT DECREE

ATTORNEY GENERAL OF WASHINGTON **Ecology Division** PO Box 40117 Olympia, WA 98504-0117 (360) 586-6770

1.	Presented by:	
2	ROBERT M. MCKENNA Attorney General	MARTEN LAW PLLC
3	Make	Amda Rham
5	JOHN A. LEVEL, WSBA #20439 Assistant Attorney General	LINDA R. LARSON, WSBA # 9179 Attorneys for Alcoa Inc.
6	Assistant Attorney General Attorneys for Plaintiff (360) 586-6770	Attorneys for Alcoa Inc. (206) 292-2600
7	'	
8		
9		
10		
11		
12		
13		
14		
15		
16	·	
17		•
18		
19 20		
21		
22		
23		
24		•
25		
26		



Scott G. Weber, Clerk, Clark Co.

STATE OF WASHINGTON CLARK COUNTY SUPERIOR COURT

STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY,

NO. 09-2-00247-2

Plaintiff,

JOINT MOTION FOR ENTRY OF AMENDED CONSENT DECREE

v. ALCOA INC., 12

Defendant.

14

15

16

17

18

19

20

21

22

23

24

13

1

2

3

4

5

6

7

8

9

10

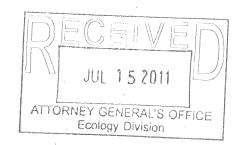
11

Plaintiff, State of Washington, Department of Ecology, and Defendant, Alcoa Inc., (collectively "the Parties"), bring this motion seeking entry of the attached Amended Consent Decree regarding remedial actions taken at the Alcoa Vancouver Site in Vancouver, Washington (Site). This amendment is necessary to implement a final remedy consisting of monitored natural attenuation with respect to releases of trichloroethylene (TCE) and vinyl chloride (VC) from the Site's East Landfill. Declaration of Carol Kraege (Kraege Decl.) ¶ 3. A draft Amended Consent Decree and Supplemental Cleanup Action Plan were subject to public notice and comment, pursuant to WAC 173-340-600. Kraege Decl. ¶ 5.

The Parties request that the court approve and enter the Amended Consent Decree, pursuant to Consent Decree Section XV (Amendment to Decree). The Parties also request that

25 26

1	the court retain jurisdiction over this	action until the work req	uired by the Amended Consent
2	Decree is completed and the Parties re	equest a dismissal of this a	ction.
3	DODERTAL MOVEMBLA		•
4	ROBERT M. MCKENNA Attorney General		•
5	alate	•	
6	JOHN A. LEVEL, WSBA # 20439		. '
7	Assistant Attorney General Attorneys for Plaintiff		- -
8	11		•
9	Date: July 5, 2011		
10	MARTEN LAW PLLC		
11	A A A A A C P S S S S S S S S S S S S S S S S S S		
12	MAAR PAYON LINDA R. LARSON, WSBA # 9171		
13	Attorneys for Defendant Alcoa Inc.		••.
14	Date: June 30, 2011		
15			
16			-
17	,		
18		•	
19	i i		
20			
21			
22			
		,	
23			-
24			•
25			,
اایت			



3

4 5

6

7

8

10

11

12

13 14

15

16

17

18 19

20

2122

23 24

25

26

STATE OF WASHINGTON CLARK COUNTY SUPERIOR COURT

STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY,

Plaintiff,

ALCOA INC.,

Defendant.

NO. 09-2-00247-2

DECLARATION OF CAROL KRAEGE

RE: AMENDED CONSENT DECREE

I, CAROL KRAEGE, make the following declaration:

- 1. I am over the age of 18, competent to be a witness herein, and make this declaration in that capacity. I state the following based upon my personal knowledge.
- 2. I am employed by the Washington State Department of Ecology (Ecology) as a Supervisor with Ecology's Waste 2 Resources Program. I am the designated management lead for the Alcoa Vancouver Site, and I am therefore knowledgeable about matters relating to the Alcoa Vancouver Site. I previously submitted a declaration in support of the entry of the Consent Decree filed under Clark County Superior Court No. 09-2-00247-2, which I signed in January 2009.

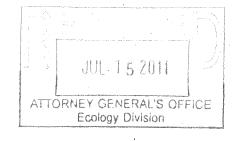
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
	I

- 3. The Consent Decree filed under Clark County Superior Court No. 09-2-00247-2 did not cover releases of trichloroethylene (TCE) and vinyl chloride (VC) from the East Landfill that were above cleanup levels found in the Model Toxics Control Act (MTCA), Chapter 70.105D RCW. Ecology has developed a Supplemental Cleanup Action Plan (SCAP) to address releases of TCE and VC from the East Landfill at the Alcoa Vancouver Site. The chosen remedy under the SCAP for the releases of TCE and VC above MTCA cleanup levels from the East Landfill is monitored natural attenuation. The SCAP is Exhibit A to the Amended Consent Decree.
- 4. Ecology has determined that the actions to be taken pursuant to the Amended Consent Decree are necessary to protect public health and the environment and will lead to a more expeditious cleanup of hazardous substances at the Site in compliance with the cleanup standards established under RCW 70.105D.030(2)(e) and Chapter 173-340 WAC.
- 5. The draft SCAP and draft Amended Consent Decree were subject to public notice and comment. Ecology received comments during the public comment period, which Ecology reviewed, considered, and responded to.
- 6. Ecology has now issued the SCAP for the Site, and the parties have entered into the Amended Consent Decree. The final SCAP is an integral and enforceable part of the Amended Consent Decree.

I declare under penalty of perjury under the laws of the state of Washington that the foregoing is true and correct.

DATED this 30 th day of June 2011, at Olympia, Washington.

CAROL KRAEGE



COPY ORIGINAL FILED JUL 12 2011

Scott G. Weber, Clerk, Clark Co.

STATE OF WASHINGTON CLARK COUNTY SUPERIOR COURT

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY,

Plaintiff,

v.

ALCOA INC.,

Defendant.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

I.

NO. 09-2-00247-2

AMENDED CONSENT DECREE

TABLE OF CONTENTS

17	II.	JURISDICTION	5
18	III.	PARTIES BOUND	6
	IV.	DEFINITIONS	6
19	V.	FINDINGS OF FACTS	7
	VI.	WORK TO BE PERFORMED	15
20	VII.	DESIGNATED PROJECT COORDINATORS	17
	VIII.	PERFORMANCE	18
21	IX.	ACCESS	18
22	X.	SAMPLING, DATA SUBMITTAL, AND AVAILABILITY	19
22	XI.	PROGRESS REPORTS	
23	XII.	RETENTION OF RECORDS	21
	XIII.	TRANSFER OF INTEREST IN PROPERTY	
24	XIV.	RESOLUTION OF DISPUTES	21
	XV.	AMENDMENT OF DECREE	24
25	XVI.	EXTENSION OF SCHEDULE	
26	XVII.	ENDANGERMENT	26
20	·		

1	XVIII.					• • • • • • • • • • • • • • • • • • • •	
_	XIX.						
2	XX.					••••••	
3	XXI.						
	XXII.					••••••	
4	XXIII.					***************************************	
	XXIV.					***************************************	
5	XXV.	IMPLEMENT	TATION (OF REMED	IAL ACTION	•••••	33
	XXVI.	PERIODIC R	EVIEW			•••••	33
6	XXVII.	PUBLIC PAR	RTICIPAT	ION			34
7	XXVIII.					•••••	
<i>'</i>	XXIX.					•••••	
8	XXX.					•••••	
9	XXXI.	WITHDRAW	AL OF C	ONSENT	••••••	····	36
	EX	HIBIT A	Clear	up Action l	Plan and Scheo	lule	
10		HIBIT B	Site I	Diagram			
11	l .	HIBIT C		ictive Cove			
11		HIBIT D HIBIT E		c Participati		Plan and Schedule	
12	LA		Ծարք.	icincinal Ci	callup Action i	lan and Schedule	
							•
13							
14							
14							
15	•					·	
		•				•	•
16							
						•	
17				•		•	
18		•					
10				•	•		
19				•			
20			•		•		
, II						.*	•
21							• '
22					•		
23							
24			•			•	
ر							
25			,				
06							

I. INTRODUCTION

- A. Pursuant to Section XV of the Consent Decree Re: Alcoa Vancouver Site in Vancouver, Washington (Site), entered by this Court on January 30, 2009 (the 2009 Decree), Plaintiff, State of Washington, Department of Ecology (Ecology), and Defendant Alcoa Inc. (Alcoa), hereby stipulate to amend the 2009 Consent Decree.
- B. The mutual objective of Ecology and Alcoa under these amendments to the 2009 Decree is to provide for supplemental remedial action at a facility where there has been a release or threatened release of hazardous substances in order to implement a final remedy consisting of monitored natural attenuation with respect to releases of trichloroethylene (TCE) and vinyl chloride (VC) from the East Landfill. The amended provisions of the "Work to be Performed" and the Supplemental Cleanup Action Plan (SCAP), (attached hereto as Exhibit E) require Alcoa to implement the SCAP, develop a Compliance Monitoring Plan and to conduct five events of compliance monitoring (as defined in Section VI.E herein).
- C. The 2009 Decree required Defendant to implement the Cleanup Action Plan (CAP) (attached hereto as Exhibit A) to address those contaminants of concern identified in the approved Remedial Investigation and Feasibility Study Report for the Site (as defined in Section IV.A herein). Ecology determined that the actions required by the CAP were necessary to protect human health and the environment. On December 31, 2009, Alcoa submitted a completion report to Ecology for the remediation required by the CAP. On March 17, 2010, Ecology approved Alcoa's completion report.
- D. The Complaint in this action was filed with the Clark County Superior Court on January 13, 2009. An Answer has not been filed, and there has not been a trial on any issue of fact or law in this case. The Parties resolved the issues raised by Ecology's Complaint through the entry of the 2009 Consent Decree by this Court.

- E. The 2009 Consent Decree superseded the prior Agreed Order made between Ecology and Alcoa (No. DE 97 TC-I032), the prior Order made between Ecology and Columbia Marine Lines (No. DE 85-591), and the Enforcement Order Ecology issued to Alcoa (No. DE 5660). Work that had not been completed under the above listed Order, Agreed Order, and Enforcement Order was completed under the CAP to the 2009 Decree. Alcoa and Ecology entered into two prior consent decrees filed in Clark County Superior Court, under cause numbers 95-2-03268-4 and 92-2-00783-9 ("the Prior Consent Decrees"). On January 30, 2008, Alcoa and Ecology filed a stipulation with the Court documenting the closure of the 1992 and 1995 Consent Decrees and the survival of the Contribution Protection and Covenant Not to Sue under those Prior Consent Decrees prior to entry of this Decree. Any monitoring or operation and maintenance work not completed under the Prior Consent Decrees is addressed in the SCAP and in the amendments to Section XV (Work to be Performed).
- F. This Amended Decree supersedes the prior Agreed Order made between Ecology and Alcoa (No. DE 03 TCPIS-5737). Any work not completed under Agreed Order No. DE 03 TCPIS-5737 is addressed in the SCAP to this Decree.
- G. By signing this Amended Decree, the Parties agree to its entry and agree to be bound by its terms.
- H. By entering into the 2009 Decree and its amendments, the Parties do not intend to discharge non-settling parties from any liability they may have with respect to matters alleged in the Complaint. The Parties retain the right to seek reimbursement, in whole or in part, from any liable persons for sums expended under the 2009 Decree and its amendments.
- I. This Decree and its amendments shall not be construed as proof of liability or responsibility for any releases of hazardous substances or cost for remedial action nor an admission of any facts; provided, however, that Defendant shall not challenge the authority of

the Attorney General and Ecology to enforce these amendments or the 2009 Decree to the extent that Alcoa has remaining obligations under the 2009 Decree.

J. The Court is fully advised of the reasons for entry of these amendments to the 2009 Decree, and good cause having been shown:

Now, therefore, it is HEREBY ORDERED, ADJUDGED, AND DECREED as follows:

II. JURISDICTION

- A. This Court has jurisdiction over the subject matter and over the Parties pursuant to the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.
- B. Authority is conferred upon the Washington State Attorney General by RCW 70.105D.040(4)(a) to agree to a settlement with any potentially liable person (PLP) if, after public notice and any required hearing, Ecology finds the proposed settlement would lead to a more expeditious cleanup of hazardous substances. RCW 70.105D.040(4)(b) requires that such a settlement be entered as a consent decree issued by a court of competent jurisdiction.
- C. Ecology has determined that a release or threatened release of hazardous substances has occurred at the Site that is the subject of this Amended Decree.
- D. Ecology has given notice to Defendant of Ecology's determination that Defendant is a PLP for the Site, as required by RCW 70.105D.020(21) and WAC 173-340-500.
- E. Ecology has determined that the actions to be taken pursuant to this Amended Decree are necessary to protect public health and the environment.
 - F. This Amended Decree has been subject to public notice and comment.
- G. Ecology finds that this Amended Decree will lead to a more expeditious cleanup of hazardous substances at the Site in compliance with the cleanup standards established under RCW 70.105D.030(2)(e) and Chapter 173-340 WAC.

H. Without admitting any of the allegations in Ecology's Complaint in this action, the 2009 Decree or its amendments, Defendant has agreed to undertake those actions specified in this Decree as amended and consents to the entry of this Amended Decree under MTCA.

III. PARTIES BOUND

This Decree shall apply to and be binding upon the Parties to it, their successors and assigns. The undersigned representative of each party hereby certifies that he or she is fully authorized to enter into these amendments and to execute and legally bind such party to comply with this Decree. Defendant agrees to undertake those actions required by the terms and conditions of this Decree. No change in ownership or corporate status shall alter Defendant's responsibilities under this Decree. Defendant shall provide a copy of this Decree to all agents and prime contractors retained to perform work required by this Decree, and shall ensure that all work undertaken by its agents, contractors, and subcontractors complies with this Decree.

IV. DEFINITIONS

Unless otherwise specified herein, all definitions in RCW 70.105D.020 and WAC 173-340-200 shall control the meanings of the terms in this Decree.

- A. <u>Site</u>: The Site is referred to as the former Alcoa Vancouver Works and is generally located at 5701 Northwest Lower River Road, Vancouver, Washington. The Site is more particularly described in the Site Diagram (attached hereto as Exhibit B) and is defined by the extent of contamination caused by the release of hazardous substances at the Site. The Site constitutes a Facility under RCW 70.105D.020(5). The Site is comprised of the Submerged Lands Area and the Upland Area.
- B. <u>Parties</u>: Refers to the State of Washington, Department of Ecology and Alcoa Inc. (formerly known as the Aluminum Company of America, Inc.).

- C. <u>Defendant</u>: Refers to Alcoa Inc. (formerly known as the Aluminum Company of America, Inc.).
- D. <u>Consent Decree or Decree</u>: Refers to this Consent Decree as amended and each of the exhibits to this Decree. All exhibits are integral and enforceable parts of this Consent Decree. The terms "Consent Decree" or "Decree" shall include all exhibits to this Consent Decree as amended.

V. FINDINGS OF FACTS

Ecology makes the following findings of fact without any express or implied admissions of such facts by Defendant.

- A. The Site is located at 5701 Northwest Lower River Road, Vancouver, Washington, approximately three miles northwest of downtown Vancouver, Washington. The Site is bounded by the Northwest Lower River Road to the north, the Columbia River to the south, lands owned by Clark County and the Port of Vancouver to the east, and lands owned by Russell Towboat and Moorage Company and Moorage 5 Properties (aka Tidewater) to the west.
- B. The Site is listed on the Department of Ecology's Hazardous Sites List as "Alcoa Vancouver," Facility Site ID No. 21. The Site encompasses the following sites on the Hazardous Site List: "Alcoa Northeast Parcel" (FS ID 50815458), "Alcoa Vancouver NPL" (FS ID 25), "Alcoa Vancouver PCB" (FS ID 22), "Alcoa Vancouver Rod Mill" (FS ID 24), "Alcoa Vancouver TCE" (FS ID 23), and "Columbia Marine Lines" (FS ID 26).
- C. At the Site, Alcoa owned and/or operated a primary aluminum smelter and fabrication facility for approximately 45 years. In 1987, Alcoa discontinued primary aluminum manufacturing operations and sold the smelter and underlying lands, and some other ancillary facilities and lands, to Vanalco, Inc. (Vanalco). Vanalco subsequently filed for bankruptcy, and its assets at the Site were purchased by Glencore Washington LLC (now

known as Evergreen Aluminum LLC (Evergreen)) in April 2002. No manufacturing operations have taken place at the Site since December 2000. The Port of Vancouver is the current owner of the Site.

- D. The Site includes three landfill areas east of the former aluminum smelter property, which were formerly owned by Alcoa. These landfill areas are known as the East Landfill, the North Landfill, and the North 2 Landfill. The North and North 2 Landfills were remediated in 2004. The southern boundary of the East Landfill is set back approximately 50 feet landward from the top of the bank of the Columbia River. Alcoa also owned the land generally located to the south and southwest of the East Landfill area, including the bank of the Columbia River (above the ordinary high water mark) and the land located alongside a Clark County Public Utilities (CPU) outfall line (hereinafter "South Bank" or "South Bank Area").
- E. The entire eastern portion of the smelter complex was filled in the early 1940's with dredge sands from the Columbia River. The East Landfill was formed by the filling of a 15 to 20 foot deep drainage valley which emptied into the Columbia River.
- F. Alcoa filled the valley with carbon bake oven furnace brick, scrap aluminum, alumina, steel wire, and miscellaneous volumes of solid and industrial wastes. These wastes contained volatile organic compounds primarily TCE, polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and petroleum hydrocarbons. Alcoa also filled two other smaller areas, the North and North 2 Landfills, with similar industrial waste.
- G. The Site is situated on the flood plain of the nearby Columbia River. The Site hydrogeology has been characterized by numerous borings, including detailed characterization of the East, North and North 2 Landfills and the National Priorities List (aka NPL) Site. The groundwater system in the area can be divided into four general hydrogeologic units: the shallow zone, the intermediate zone, the deep zone, and the aquifer zone. The predominant groundwater flow direction beneath the Site is toward the Columbia River in the deeper

hydrogeologic units. The shallow zone consists of dredged sand placed on the Site during the late 1940s and early 1950s. A discontinuous, perched water table is located in the shallow zone during the wetter months of the year. The direction of the movement of water in the saturated portions of the shallow zone beneath the Site varies with the time of year and the amount of precipitation. The intermediate zone consists of sandy silt with clay lenses. The deep zone consists of fine to medium sand while the aquifer zone consists of sandy gravel.

- H. In late 1990, under an Ecology Agreed Order (No. DE 90–I053), Alcoa initiated a remedial investigation (RI) to determine the source of TCE found in water wells serving the Vanalco aluminum facility. Existing groundwater monitoring wells were sampled for TCE and a review of historical waste handling practices at the smelter were reviewed. The RI revealed two potential sources of the TCE contamination, the East Landfill and the North Landfill. Since that time, Alcoa has conducted numerous studies to characterize these landfills. During the investigations two other areas impacted with PCBs, PAHs, metals, and hydrocarbons were identified to the north of the East Landfill. These areas were identified as the North 2 Landfill and the Northeast Parcel. The requirements of Order No DE 90-I053 have been completed.
- I. In 1992, Ecology and Alcoa entered into a Consent Decree (92-2-00783-9) to remediate an area formerly used to store spent potliner. This area of the Site was also formerly listed by the U.S. Environmental Protection Agency on the National Priorities List. This Consent Decree required the removal and off-site disposal of 47,500 cubic yards of spent potliner and reclaimed alumina insulation. The removal of the spent potliner and reclaimed alumina insulation was completed in 1992. The residual affected soils were capped with a RCRA double-lined cover. Ecology certified on May 3, 1994, that all of the terms of the construction portion of the Consent Decree and CAP had been completed. The operation and maintenance activities consisting of groundwater monitoring, institutional controls, and cover maintenance continue at the Site.

In 1995, Ecology and Alcoa entered into a Consent Decree (95-2-03268-4) to address PCB contamination beneath the Rod Mill/Vanexco building. The Consent Decree required that the building and foundation (i.e., floor slabs) of the buildings serve as a cap and that any redevelopment plans for the area be reviewed and approved by Ecology. Five years of groundwater monitoring indicate that groundwater is not affected by residual PCB impacted soils after limited hot spot removal. In 1992, Alcoa had performed hot spot removal of PCB impacted soils at the Rod Mill/Vanexco building area. The area was then backfilled with clean material and the foundations were restored as a cap. Groundwater monitoring from 1996 through 2001 indicated that groundwater is not affected by residual PCB impacted soils. In 2001, Ecology approved the discontinuation of groundwater monitoring. A deed restriction was recorded that documents contamination beneath the Rod Mill building. The construction and groundwater monitoring portions of the Consent Decree have been completed. Current redevelopment plans require the removal of the Rod Mill/Vanexco building structure and portions of the foundations. Ecology has approved this modification provided that grading of surface materials above the foundation are sloped to provide drainage away from the area or that the foundation is replaced with an impervious layer and storm water control facilities are located above the impervious layer.

K. In 1997, Ecology and Alcoa entered into an Agreed Order (No. DE 97 TC-I032), which required the removal of contaminated soil and industrial solid waste on a parcel of former Alcoa property known as the Northeast Parcel. Site investigations included soil and groundwater sampling. Ecology concluded that groundwater was not impacted by the contaminated soils. The Northeast Parcel Site was remediated to facilitate the sale of the property to Clark County. The scope of the Northeast Parcel Site remediation included excavation and off-site disposal of approximately 3,900 cubic yards of PCB impacted soil and the excavation of approximately 17,000 cubic yards of PAH impacted soil, which contained

concentrations above the MTCA Method A cleanup levels but below dangerous waste criteria. The Northeast Parcel PAH soils were placed in the East Landfill and covered with 12 inches of certified clean fill until the final closure of the East Landfill was completed under Ecology's direction. In 1997, Alcoa removed all of the waste and impacted soils in the Northeast Parcel that were above MTCA Method A soil cleanup levels for unrestricted land use. Alcoa has completed all requirements of the Agreed Order (No. DE 97 TC-I032). No groundwater monitoring or media institutional controls are required for this parcel.

- L. Also in 1997, PCBs were discovered in three Columbia River sediment samples collected by the Clark County Public Utility (CPU) as part of the NPDES permitting requirements for a non-contact cooling water discharge installed approximately 300 feet west of the East Landfill. Alcoa initiated a soil and groundwater investigation of the entire bank/shore of the East Landfill. This work indicates that the East Landfill is not the primary source of the PCBs in the Columbia River sediments. During the investigation, an area of elevated PCBs in soil was discovered on the riverbank to the south and southwest of the East Landfill area, adjacent to the CPU outfall line (now known as the South Bank Area). This is thought to be the major source of the PCB contamination found in the Columbia River adjacent to the cooling water discharge.
- M. PCBs found in soils in the South Bank Area adjacent to the East Landfill were below the MTCA Method A industrial cleanup level. However, the South Bank Area near the CPU's outfall included approximately 2,500 cubic yards of soil impacted with PCBs at concentrations above the MTCA Method A industrial cleanup level. This material was localized around the location of the CPU outfall to a depth of approximately 15 feet and was excavated in 2003 in accordance with Ecology Agreed Order No. DE 03 TCPIS-5737. Adjacent to and further down stream from the CPU outfall, sediments of the Columbia River are impacted with PCBs.

- N. The East Landfill area is a well-defined area that contains approximately 150,000 cubic yards of waste materials. An estimated 53,000 cubic yards of this material has concentrations of TCE, PAHs, and PCBs that exceed the MTCA Method A industrial cleanup levels. A portion of the PAH waste that exceeds MTCA Method A industrial cleanup levels would be considered dangerous waste under Washington State dangerous waste regulations if it were moved out of the landfill complex.
- O. The North Landfill contained approximately 15,000 cubic yards of material that exceeded the MTCA Method A industrial cleanup levels for either PCBs or PAHs. Although this area was suspected to be the source of the TCE contamination in groundwater, only two of the six soil samples contained detectable concentrations of TCE and both detections were below the MTCA Method A industrial cleanup level of 0.03 ppm. Waste materials exceeding MTCA Method A industrial cleanup levels were excavated and consolidated in the East Landfill in 2004.
- P. The North 2 Landfill is similar to the North Landfill in that the chemicals identified were predominantly PAHs and PCBs. An estimated 10,000 cubic yards of material exceeding MTCA Method A industrial cleanup levels for one or more of these chemicals was contained in the North 2 Landfill. Waste material exceeding MTCA Method A industrial cleanup levels were excavated and consolidated in the East Landfill in 2004.
- Q. In 2003, Ecology and Alcoa entered into an Agreed Order (No. DE 03 TCPIS-5737) which required Alcoa to conduct source control and riverbank stabilization activities at the East Landfill. The Agreed Order mandated the consolidation of waste from the North and North 2 Landfills into the East Landfill, removal of PCB impacted soil hot spots and off-site soil disposal, capping the East Landfill with a RCRA double-lined cover, and construction of riverbank revetment. The construction work directed by this Order was completed in April of

2004. Groundwater monitoring, institutional controls, and cap/cover maintenance continue at the East Landfill.

- R. The current groundwater monitoring program includes 49 monitoring wells. These wells were located to monitor several areas including the East Landfill, North and North 2 Landfills, the former SPL Storage Area, the South Bank Area, and various facilities associated with the aluminum manufacturing operations. Nine of the 49 wells are screened in the shallow zone, 14 of the wells are screened in the intermediate zone, 14 are screened in the deep zone, and 12 are screened in the aquifer zone.
- S. The current groundwater monitoring program was implemented in 2003. Groundwater has been monitored at the Site since the mid-1980s. Since the consolidation of waste and capping of the East Landfill in 2004, concentrations of TCE and TCE degradation products, fluoride, cyanide, and total petroleum hydrocarbons (TPH) have been in decline. Fluoride, cyanide, and TPH are below the applicable MTCA Method A groundwater cleanup levels. However, the concentrations for TCE and TCE degradation products remain above applicable MTCA Method A groundwater cleanup levels. For a more detailed description of the nature and extent of Site contaminants, refer to the 2008 Remedial Investigation/Feasibility Study, Alcoa/Evergreen Vancouver Site, Anchor Environmental, September 2008.
- T. In 1985, the Department of Ecology issued an Order to Columbia Marine Lines (Ecology Order No. DE 85-591), which required Columbia Marine Lines to install and have operational a hydrocarbon recovery program, to submit a report defining the vertical and horizontal extent of impacted groundwater within the former disposal pits on the Alcoa property, and to submit a plan describing additional remedial measures that would be taken. At the time, Columbia Marine Lines leased and operated a marine repair-facility on the Alcoa property west of the aluminum smelter (Crowley Parcel). In February of 1986, Columbia Marine Lines reached agreement with the State by entering into a Stipulation and Order

(PCHB No. 85-180) with the Pollution Control Hearings Board (PCHB) of the State of Washington to carry out a modified work plan under Order No. DE 85-591. Columbia Marine Lines was subsequently purchased by Crowley Marine Services (Crowley). The hydrocarbon recovery system was completed in 1986 and operated until 1995 when levels of free hydrocarbon liquids floating on the groundwater indicated that the system had removed the maximum amount of free petroleum product that its design allowed. In 1996 and 1999, additional subsurface investigations were conducted to define the nature and extent of the diesel range hydrocarbon contamination in soils and groundwater at the Crowley Parcel. From November 2000 through February 2003, and from December 2004 through December 2005, a new dual phase extraction system was installed and operated at the Crowley Parcel. Further groundwater and soil samples were taken in 2007 to determine the effectiveness of the dual phase extraction system. No free hydrocarbon product was found in the groundwater at the Crowley Parcel, but the soil continued to show TPH values above MTCA Method A soil cleanup levels and the groundwater had dissolved TPH values above MTCA Method A groundwater cleanup levels. The groundwater remediation directed by Ecology Order No. DE 85-591 to remove free product was therefore complete. Additional soil remediation required by the 2009 Decree was completed in 2009.

U. In 2007, Ecology issued Enforcement Order No. DE 4931 to Evergreen, which required Evergreen to develop a list of contaminants for Evergreen's property, determine a sampling strategy, develop contaminant cleanup standards for their property, design a cleanup feasibility study, and complete an interim cleanup. Evergreen has completed the remedial actions required by this enforcement order.

V. In June of 2008, Ecology issued an Enforcement Order to Alcoa (Ecology Order No. DE 5660). This Enforcement Order required Alcoa to: 1) demolish ore handling facilities next to the dock, 2) remove existing above ground petroleum tank foundations and associated

piping east of the dock, 3) remove existing underground petroleum storage tanks located in the river dike west of the dock, 4) conduct petroleum contamination soil sampling after removal of the underground storage tanks and pipelines and, if necessary, perform soil removal, 5) sample and remove any PCB contaminated soil along the riverbank and dike west of the dock with the potential to impact the sediment remediation, and 6) prepare and re-grade the Columbia River riverbank and dike as needed for geotechnical stability required for the sediment remediation. Alcoa has completed the remedial actions required by this enforcement order.

W. On December 31, 2009, Ecology received the final completion report for the cleanup directed by the 2009 Decree. The completion report documented Alcoa's completion of the following actions: the removal or capping of fluoride, PAH, and PCB-affected soils; the remediation of the PCB-affected river sediments and stabilization of the shoreline; the remediation of the TPH-affected soil at the Crowley Parcel as required by the CAP; and the filing of the appropriate deed restrictions on the Site. On March 17, 2010, Ecology approved the completion report.

VI. WORK TO BE PERFORMED

This Decree contains a supplemental work program designed to protect human health and the environment from the known release, or threatened release, of hazardous substances or contaminants at, on, or from the Site.

- A. Work to be performed consists of those remedial actions defined in the attached SCAP (Exhibit E) developed by Ecology and based on an approved Remedial Investigation and Feasibility Study Report prepared by Defendant. The basic remediation tasks of the Work under the SCAP shall include the following:
 - 1. Within 30 days of the effective date of the amendments to this Decree, Alcoa shall submit to Ecology a Compliance Monitoring Plan (CMP) pursuant to WAC 173-340-410 that includes a Sampling and Analysis Plan (SAP) as

required by WAC 173-340-820. The CMP and SAP shall include data collection and evaluation procedures for monitoring transition zone groundwater (defined as the 0 to 5-inch interval of sediment located below the riverbed) using passive peepers. Alcoa shall perform five compliance monitoring events. Monitoring data shall be used to demonstrate that the cleanup action meets the cleanup standards established for transition zone groundwater adjacent to the East Landfill.

- 2. Schedule. After Ecology approval of the CMP and SAP, transition zone groundwater compliance monitoring shall begin within 60 days of the first hydrologic event described in the CMP.
- 3. Reporting. Within 30 days after receiving preliminary laboratory data for each compliance monitoring event, Alcoa shall submit a brief progress report presenting the preliminary validated laboratory data set and providing a summary of the monitoring activities including a detailed description of any deviations from the CMP, SAP or schedule. No additional progress reports shall be required. Following the fifth and final monitoring event, Alcoa shall submit a report describing the results of the transition zone groundwater compliance monitoring remedial activities. The report shall be submitted to Ecology 90 days after receiving validated laboratory data generated from the fifth compliance monitoring event.
- B. The basic long-term O&M tasks of the Work shall include:
 - 1. Defendant shall perform operation and maintenance of the East Landfill cap, the former SPL Storage Area, and the Vanexco/Rod Mill cap as required by the CAP; and

1	
2	,
3	
4	
5	
. 6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	-
24	
25	
	1

- 2. Defendant shall monitor groundwater as required by the CAP and SCAP.
- C. Defendant agrees not to perform any remedial actions outside the scope of this Decree unless Defendant receives approval from Ecology to do so as required by Section XV (Amendment of Decree). All work conducted by Defendant under this Decree shall be done in accordance with Chapter 173-340 WAC unless otherwise provided herein.

VII. DESIGNATED PROJECT COORDINATORS

The project coordinator for Ecology is:

Name: Address:

Paul Skyllingstad Industrial Section

Department of Ecology

P.O. Box 47706

Olympia, WA 98504-7706

The project coordinator for Alcoa is:

Name: Address:

Mark Stiffler Alcoa Inc.

201 Isabella Street

Pittsburgh, PA 15212-5858

Each project coordinator shall be responsible for overseeing the implementation of this Decree. Ecology's project coordinator will be Ecology's designated representative for the Site. To the maximum extent possible, communications between Ecology and Defendant and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Decree shall be directed through the project coordinators. The project coordinators may designate working level staff contacts for all or portions of the implementation of the work to be performed required by this Decree.

Any party may change its respective project coordinator. Written notification shall be given to the other party at least ten (10) calendar days prior to the change.

VIII. PERFORMANCE

All geologic and hydrogeologic work performed pursuant to this Decree shall be under the supervision and direction of a geologist licensed in the State of Washington or under the direct supervision of an engineer registered in the State of Washington, except as otherwise provided for by Chapters 18.220 and 18.43 RCW.

All engineering work performed pursuant to this Decree shall be under the direct supervision of a professional engineer registered in the State of Washington, except as otherwise provided for by RCW 18.43.130.

All remediation tasks performed pursuant to this Decree shall be under the direct supervision of a professional engineer or a qualified technician under the direct supervision of a professional engineer. Except for groundwater monitoring (hydrogeologic work), O&M tasks do not require direct supervision by a professional engineer or qualified technician. The professional engineer must be registered in the State of Washington, except as otherwise provided for by RCW 18.43.130.

Any documents submitted containing geologic, hydrologic, or engineering work shall be under the seal of an appropriately licensed professional as required by Chapter 18.220 RCW or RCW 18.43.130.

During implementation of remediation tasks and groundwater monitoring, Defendant shall notify Ecology in writing of the identity of any engineer(s), geologist(s), and prime contractor(s) it uses in carrying out the terms of this Decree, in advance of its involvement at the Site.

IX. ACCESS

Subject to the Defendant's health and safety procedures, Ecology or any Ecology authorized representative shall have full authority to enter and freely move about all property at the Site that Defendant either owns, controls, or has access rights to at all reasonable times for

the purposes of, inter alia: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Decree; reviewing Defendant's progress in carrying out the terms of the amendments to this Decree; conducting such tests or collecting such samples as Ecology may deem necessary for purposes of this Decree; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Decree; and verifying the data submitted to Ecology by Defendant. Nothing in this Order is intended by Defendant to waive any right it might have under applicable law to limit disclosure of documents protected by the attorney work-product and/or attorney-client privilege. If Defendant withholds any requested records based on an assertion of privilege, it shall provide Ecology with a privilege log specifying the records withheld and the applicable privilege. No actual data collected on Site pursuant to this Decree shall be considered privileged. Defendant shall make all reasonable efforts to secure access rights for those properties within the Site not owned or controlled by Defendant where remedial activities or investigations will be performed pursuant to this Decree. Ecology or any Ecology authorized representative shall give reasonable notice before entering any Site property owned or controlled by Defendant unless an emergency prevents such notice. All parties who access the Site pursuant to this Section shall comply with any applicable Health and Safety Plan(s), any applicable health and safety procedures of the Defendant, and any access regulations under the United States Coast Guard Maritime Security (MARSEC) system. Ecology employees and their representatives shall not be required to sign any liability release or waiver as a condition of Site property access.

X. SAMPLING, DATA SUBMITTAL, AND AVAILABILITY

For work required for the implementation of this Decree, Defendant shall make the results of all sampling, laboratory reports, and/or test results generated by it or on its behalf available to Ecology. Pursuant to WAC 173-340-840(5), all such sampling data shall be

submitted to Ecology in both printed and electronic formats in accordance with Section XI (Progress Reports), Ecology's Toxics Cleanup Program Policy 840 (Data Submittal Requirements), and/or any subsequent procedures specified by Ecology for data submittal.

If requested by Ecology, Defendant shall allow Ecology and/or its authorized representative to take split or duplicate samples of any samples collected by Defendant and required by the implementation of this Decree. Defendant shall notify Ecology seven (7) days in advance of collecting samples at the Site pursuant to this Order; provided, however, that Ecology may waive this notification requirement and accept samples where they were collected during construction projects or other circumstances where sampling was prudent or necessary but unplanned; and provided further, sampling conducted pursuant to the approved SCAP (Exhibit E) shall not require separate reporting as a result of this subsection. Ecology shall, upon request, allow Defendant and/or any of its authorized representatives to take split or duplicate samples of any samples collected by Ecology pursuant to the implementation of this Decree, provided that doing so does not interfere with Ecology's sampling. Without limitation on Ecology's rights under Section IX (Access), Ecology shall notify Defendant seven (7) days prior to any sample collection activity unless an emergency prevents such notice.

In accordance with WAC 173-340-830(2)(a), all hazardous substance analyses shall be conducted by a laboratory accredited under Chapter 173-50 WAC for the specific analyses to be conducted, unless otherwise approved by Ecology.

XI. PROGRESS REPORTS

- A. Defendant has submitted to Ecology all written quarterly Progress Reports required by the 2009 Decree. Defendant shall submit additional Progress Reports as required by Section VI(A).
- B. Defendant shall submit long-term monitoring reports in accordance with the schedule in the SCAP. Progress Reports and any other documents submitted pursuant to this

Decree may be submitted electronically. However, Defendant agrees to also submit a hard copy of any Progress Report by certified mail, or equivalent shipping/mailing alternative, return receipt requested, if requested by Ecology's project coordinator.

XH. RETENTION OF RECORDS

During the pendency of this Decree, and for ten (10) years from the date this Decree is no longer in effect as provided in Section XXVIII (Duration of Decree), Defendant shall preserve all records, reports, documents, and underlying data in its possession relevant to the implementation of this Decree and shall insert a similar record retention requirement into all contracts issued by it after the effective date of the amendments to this Decree with project contractors and subcontractors. Upon request of Ecology, Defendant shall make all records available to Ecology and allow access for review within a reasonable time. Nothing in this Order is intended by Defendant to waive any right it might have under applicable law to limit disclosure of documents protected by the attorney work-product and/or attorney-client privilege. If Defendant withholds any requested records based on an assertion of privilege, it shall provide Ecology with a privilege log specifying the records withheld and the applicable privilege. No actual data collected on Site pursuant to this Decree shall be considered privileged.

XIII. TRANSFER OF INTEREST IN PROPERTY

Ecology and Alcoa acknowledge that any successor owner of the Site, who is liable solely due to that person's ownership in the Site, is entitled to the limitation on the state's ability to enforce MTCA described in RCW 70.105D.040(4)(e) upon entry of this Decree by the Court.

XIV. RESOLUTION OF DISPUTES

A. In the event a dispute arises as to an approval, disapproval, proposed change, or other decision or action by Ecology's project coordinator, or an itemized billing statement

under Section XXIV (Remedial Action Costs), the Parties shall utilize the dispute resolution procedure set forth below.

- 1. Upon receipt of Ecology's project coordinator's written decision, or action, or the itemized billing statement, Defendant has fourteen (14) days within which to notify Ecology's project coordinator in writing of its objection to the decision or itemized statement.
- 2. The Parties' project coordinators shall then confer in an effort to resolve the dispute. If the project coordinators cannot resolve the dispute within fourteen (14) days after Ecology receives the notification of Defendant's objection, Ecology's project coordinator shall issue a written decision.
- 3. Defendant may then request Ecology's Industrial Section management review of the decision. Any such request shall be submitted in writing to the Industrial Section Manager at 300 Desmond Drive SE, Olympia, Washington within fourteen (14) days of receipt of Ecology's project coordinator's written decision.
- 4. Ecology's Industrial Section Manager shall conduct a review of the dispute and shall issue a written decision regarding the dispute within thirty (30) days of receiving the request for review.
- 5. If Defendant finds Ecology's Industrial Section Manager's decision unacceptable, Defendant may then request final management review of the decision. This request shall be submitted in writing to the Waste 2 Resources Program Manager at 300 Desmond Drive SE, Olympia, Washington within fourteen (14) days of receipt of the Industrial Section Manager's decision.
- 6. Ecology's Waste 2 Resources Program Manager shall conduct a review of the dispute and shall issue a written decision regarding the dispute within thirty (30) days of Defendant's request for review of the Industrial Section Manager's decision.

The Waste 2 Resources Program Manager's decision shall be Ecology's final decision on the disputed matter.

- B. If Ecology's final written decision is unacceptable to Defendant, Defendant has the right to submit the dispute to the Court for resolution. The Parties agree that one judge should retain jurisdiction over this case and shall, as necessary, resolve any dispute arising under this Decree. In the event Defendant presents an issue to the Court for review, the Court shall review the action or decision of Ecology on the basis of whether such action or decision was arbitrary and capricious and render a decision based on such standard of review.
- C. The Parties agree to only utilize the dispute resolution process in good faith and agree to expedite, to the extent possible, the dispute resolution process whenever it is used. Where any party utilizes the dispute resolution process in bad faith or for purposes of delay, the other party may seek sanctions.
- D. Implementation of these dispute resolution procedures shall not provide a basis for delay of any activities required in this Decree, unless (1) Ecology agrees in writing to a schedule extension, (2) Ecology agrees that such activities are dependent upon resolution of the disputed issue, or (3) the Court so orders. With regard to a dispute over an itemized billing statement, Defendant shall pay any amount not in dispute as required by Section XXIV (Remedial Action Costs). Any amount that is in dispute shall proceed through these dispute resolution procedures, and upon a final decision that Defendant owes all or any portion of the disputed amount, that Defendant shall pay that amount within 90 days of receipt of said decision. Failure to pay Ecology's costs within ninety (90) days of said final decision will result in interest charges at the rate of twelve percent (12%) per annum, compounded monthly.

AMENDMENT OF DECREE

The project coordinators may agree to minor changes to the work to be performed without formally amending this Decree. Minor changes will be documented in writing by Ecology.

Substantial changes to the work to be performed shall require formal amendment of this Decree. This Decree may only be formally amended by a written stipulation among the Parties that is entered by the Court, or by order of the Court. Such amendment shall become effective upon entry by the Court. Agreement to amend the Decree shall not be unreasonably withheld by any party.

A request for amendment of this Decree by Defendant shall be submitted in writing to Ecology for approval. Ecology shall indicate its approval or disapproval in writing within 20 business days after the written request for amendment is received. If the amendment to the Decree is a substantial change, Ecology will provide public notice and opportunity for comment. Reasons for the disapproval of a proposed amendment to the Decree shall be stated in writing and provided to Defendant. If Ecology does not agree to a proposed amendment, the disagreement may be addressed through the dispute resolution procedures described in Section XIV (Resolution of Disputes).

XVI. EXTENSION OF SCHEDULE

A. An extension of schedule shall be granted only when a request for an extension is submitted in a timely fashion, generally at least twenty (20) days prior to expiration of the deadline for which the extension is requested, and good cause exists for granting the extension. All extensions shall be requested in writing. The request shall specify:

- 1. The deadline that is sought to be extended;
- 2. The length of the extension sought;
- The reason(s) for the extension; and

- 4. Any related deadline or schedule that would be affected if the extension were granted.
- B. The burden shall be on Defendant to demonstrate to the satisfaction of Ecology that the request for such extension has been submitted in a timely fashion and that good cause exists for granting the extension. Good cause may include, but is not limited to:
 - 1. Circumstances beyond the reasonable control and despite the due diligence of Defendant including delays caused by unrelated third parties or Ecology, such as (but not limited to) delays by Ecology in reviewing, approving, or modifying documents submitted by Defendant; or
 - 2. Acts of God, including fire, flood, blizzard, extreme temperatures, storm, or other unavoidable casualty; or
 - 3. A disputed issue has been submitted in good faith by Defendant for review pursuant to Section XIV (Resolution of Disputes) and Ecology agrees that the resolution of the disputed issue impacts the deadline sought to be extended; or
 - 4. Endangerment as described in Section XVII (Endangerment).

However, neither increased costs of performance of the terms of this Decree nor changed economic circumstances shall be considered circumstances beyond the reasonable control of Defendant.

C. Ecology shall give Defendant written notification of its response to any extension request within twenty (20) days of receipt of said request. A requested extension shall not be effective until approved by Ecology or, if required, by the Court. Unless the extension is a substantial change, it shall not be necessary to amend this Decree pursuant to Section XV (Amendment of Decree) when a schedule extension is granted.

- D. An extension shall only be granted for such period of time as Ecology determines is reasonable under the circumstances. Ecology may grant schedule extensions exceeding ninety (90) days only as a result of:
 - 1. Delays in the issuance of a necessary permit which was applied for in a timely manner; or
 - 2. Other circumstances deemed exceptional or extraordinary by Ecology; or
 - 3. Endangerment as described in Section XVII (Endangerment).

XVII. ENDANGERMENT

In the event Ecology determines that any activity being performed at the Site is creating or has the potential to create a danger to human health or the environment, Ecology may direct Defendant to cease such activity(ies) for such period of time as it deems necessary to abate the danger. Defendant shall immediately comply with such direction.

In the event Defendant determines that any activity being performed by it at the Site is creating or has the potential to create a danger to human health or the environment, Defendant may cease such activities. Defendant shall notify Ecology's project coordinator as soon as possible, but no later than twenty-four (24) hours after making such determination or ceasing such activities. Upon Ecology's direction, Defendant shall provide Ecology with documentation of the basis for the determination or cessation of such activities. If Ecology disagrees with Defendant's cessation of activities, it may direct Defendant to resume such activities.

If Ecology concurs with or orders a work stoppage pursuant to this Section, Defendant's obligations with respect to the ceased activities shall be suspended until Ecology determines the danger is abated, and the time for performance of such activities, as well as the time for any other work dependent upon such activities, shall be extended, in accordance with

Section XVI (Extension of Schedule), for such period of time as Ecology determines is reasonable under the circumstances.

Nothing in this Decree shall limit the authority of Ecology, its employees, agents, or contractors to take or require appropriate action in the event of an emergency.

XVIII. COVENANT NOT TO SUE

A. Covenant Not to Sue: In consideration of Defendant's compliance with the terms and conditions of this Decree and its amendments, Ecology covenants not to institute legal or administrative actions against Defendant regarding the release or threatened release of hazardous substances covered by this Decree or its amendments.

This Decree and its amendments cover only the Site specifically identified in the Site Diagram (Exhibit B) and those hazardous substances that Ecology knows are located at the Site as of the dates of entry of this Decree and its amendments. This Decree and its amendments do not cover any other hazardous substance or area. Ecology retains all of its authority relative to any substance or area not covered by this Decree or its amendments.

This Covenant Not to Sue shall have no applicability whatsoever to:

- 1. Criminal liability;
- 2. Liability for damages to natural resources; and
- 3. Any Ecology action, including cost recovery, against PLPs not a party to this Decree.
- B. Reopeners: Ecology specifically reserves the right to institute legal or administrative action against Defendant to require it to perform additional remedial actions at the Site and to pursue appropriate cost recovery, pursuant to RCW 70.105D.050 under the following circumstances:

- 1. Upon Defendant's failure to meet the requirements of this Decree, as amended, including, but not limited to, failure of the remedial action to meet the cleanup standards identified in the CAP (Exhibit A) or SCAP (Exhibit E);
- 2. Upon Ecology's determination that remedial action beyond the terms of this Decree is necessary to abate an imminent and substantial endangerment to human health or the environment;
- 3. Upon the availability of new information regarding factors previously unknown to Ecology, including the nature or quantity of hazardous substances at the Site, and Ecology's determination, in light of this information, that further remedial action is necessary at the Site to protect human health or the environment; or
- 4. Upon Ecology's determination that additional remedial actions are necessary to achieve cleanup standards within the reasonable restoration time frame set forth in the CAP or SCAP.

If factors not known at the time of entry of the settlement agreement are discovered and present a previously unknown threat to human health or the environment, the Court shall amend this Covenant Not to Sue.

- C. Except in the case of an emergency, prior to instituting legal or administrative action against Defendant pursuant to this Section, Ecology shall provide Defendant with fifteen (15) calendar days notice of such action. Defendant reserves the right to challenge such action.
- D. Defendant reserves all rights and defenses with respect to any additional remedial actions that Ecology may seek to require at the Site, including but not limited to, reopening this Decree or seeking to amend or otherwise limit the Covenant Not to Sue.

XIX. CONTRIBUTION PROTECTION

With regard to claims for contribution against Defendant, the Parties agree that Defendant is entitled to protection against claims for contribution for matters addressed in this Decree and its amendments as provided by RCW 70.105D.040(4)(d).

XX. LAND USE RESTRICTIONS

Defendant shall cause to be recorded a Restrictive Covenant affecting the portion of the Site owned or controlled by Defendant of similar form and substance as that Restrictive Covenant provided in Exhibit C attached hereto with the office of the Clark County Auditor within thirty (30) days of the completion of all of the remedial tasks listed in Section VI.A (Work to be Performed). The Restrictive Covenant shall appropriately restrict future uses of the Site. Defendant shall provide Ecology with a copy of its recorded Restrictive Covenant within thirty (30) days of the recording date.

XXI. FINANCIAL ASSURANCES

Pursuant to WAC 173-340-440(11), Defendant shall maintain sufficient and adequate financial assurance mechanisms to cover all costs associated with the operation and maintenance of the remedial action at the Site, including institutional controls, compliance monitoring, and corrective measures.

Within sixty (60) days of the effective date of the amendments to this Decree, Defendant shall submit to Ecology for review and approval an estimate of the costs that it will incur in carrying out the terms of the amendments to this Decree, including operation and maintenance, and compliance monitoring. Within sixty (60) days after Ecology approves the aforementioned cost estimate, Defendant shall provide proof of financial assurances sufficient to cover all such costs in a form acceptable to Ecology.

Defendant shall adjust its financial assurance coverage and provide Ecology's project coordinator with documentation of the updated financial assurance for:

- A. Inflation, annually, within thirty (30) days of the anniversary date of the entry of the amendments to this Decree; or if applicable, the modified anniversary date established in accordance with this Section, or if applicable, ninety (90) days after the close of Defendant's fiscal year if the financial test or corporate guarantee by Defendant is used; and
- B. Changes in cost estimates, within thirty (30) days of issuance of Ecology's approval of a modification or revision to the SCAP that result in increases to the cost or expected duration of remedial actions required by Defendant. Any adjustments for inflation since the most recent preceding anniversary date shall be made concurrent with adjustments for changes in cost estimates. The issuance of Ecology's approval of a revised or modified SCAP will revise the anniversary date established under this Section to become the date of issuance of such revised or modified SCAP; and
- C. Changes in cost estimates, within thirty (30) days of issuance of Ecology's written notification that all completion reports have been approved as provided in Section VI (D). Any adjustments for inflation since the most recent preceding anniversary date shall be made concurrent with adjustments for changes in cost estimates. The issuance of Ecology's written notification that all remediation tasks have been completed will revise the anniversary date established under this Section.

XXII. INDEMNIFICATION

Defendant agrees to indemnify and save and hold the State of Washington, its employees, and agents harmless from any and all claims or causes of action for death or injuries to persons or for loss or damage to property to the extent arising from or on account of acts or omissions of Defendant, its officers, employees, agents, or contractors in entering into and implementing this Decree. However, Defendant shall not indemnify the State of Washington nor save nor hold its employees and agents harmless from any claims or causes of

action to the extent arising out of the negligent acts or omissions of the State of Washington, or the employees or agents of the State, in entering into or implementing this Decree.

XXIII. COMPLIANCE WITH APPLICABLE LAWS

- A. All actions carried out by Defendant pursuant to this Decree shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in RCW 70.105D.090. The permits or other federal, state or local requirements that Ecology has determined are applicable and that are known at the time of entry of this Decree have been identified in the CAP (Exhibit A) and SCAP (Exhibit E).
- B. Pursuant to RCW 70.105D.090(1), Defendant is exempt from the procedural requirements of Chapters 70.94, 70.95, 70.105, 77.55, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals. However, Defendant shall comply with the substantive requirements of such permits or approvals. The exempt permits or approvals and the applicable substantive requirements of those permits or approvals, as they are known at the time of entry of this Decree, have been identified in the CAP (Exhibit A) and SCAP (Exhibit E).

Defendant has a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action required of it under this Decree. In the event either Ecology or Defendant determines that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Decree, it shall promptly notify the other party of this determination. Ecology shall determine whether Ecology or Defendant shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, Defendant shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those

agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by Defendant and on how Defendant must meet those requirements. Ecology shall inform Defendant in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Decree. Defendant shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

C. Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.090(1) would result in the loss of approval from a federal agency that is necessary for the State to administer any federal law, the exemption shall not apply and Defendant shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(1), including any requirements to obtain permits.

XXIV. REMEDIAL ACTION COSTS

Defendant shall pay to Ecology costs incurred by Ecology pursuant to this Decree and consistent with WAC 173-340-550(2). These costs shall include work performed by Ecology or its contractors for, or on, the Site under Chapter 70.105D RCW, including remedial actions and Decree preparation, negotiation, oversight and administration. These costs shall include work performed both prior to and subsequent to the entry of this Decree. Ecology's costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). Defendant shall pay the required amount within ninety (90) days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an identification of involved staff, and the amount of time spent by involved staff members on the project. A general statement of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Pursuant to WAC 173-340-550(4), failure to pay

Ecology's costs within ninety (90) days of receipt of the itemized statement of costs will result in interest charges at the rate of twelve percent (12%) per annum, compounded monthly.

Pursuant to RCW 70.105D.055, Ecology has authority to recover unreimbursed remedial action costs by filing a lien against real property subject to the remedial actions.

XXV. IMPLEMENTATION OF REMEDIAL ACTION

If Ecology determines that Defendant has failed without good cause to implement the remedial action, in whole or in part, Ecology may, after notice to Defendant, perform any or all portions of the remedial action that remain incomplete. If Ecology performs all or portions of the remedial action because of Defendant's failure to comply with its obligations under this Decree, Defendant shall reimburse Ecology for the costs of doing such work in accordance with Section XXIV (Remedial Action Costs), provided that Defendant is not obligated under this Section to reimburse Ecology for costs incurred for work inconsistent with or beyond the scope of this Decree.

Except where necessary to abate an emergency situation, Defendant shall not perform any remedial actions at the Site outside those remedial actions required by this Decree, unless Ecology concurs, in writing, with such additional remedial actions pursuant to Section XV (Amendment of Decree). Defendant is expressly authorized to continue its respective demolition activities as long as those demolition activities do not interfere with the cleanup of the Site.

XXVI. PERIODIC REVIEW

As O&M tasks, including groundwater monitoring, continue at the Site, the Parties agree to review the progress of remedial action at the Site, and to review the data accumulated as a result of monitoring the Site as often as is necessary and appropriate under the circumstances. At least every five (5) years after the initiation of cleanup action at the Site the Parties shall meet to discuss the status of the Site and the need, if any, for further remedial

action at the Site. At least ninety (90) days prior to each periodic review, Defendant shall submit a report to Ecology that documents whether human health and the environment are being protected based on the factors set forth in WAC 173-340-420(4). Ecology reserves the right to require further remedial action at the Site under appropriate circumstances. Defendant reserves its rights to respond to such Ecology action. Any determinations by Ecology under this Section shall be subject to the dispute resolution procedures in Section XIV (Resolution of Disputes). This provision shall remain in effect for the duration of this Decree.

XXVII. PUBLIC PARTICIPATION

A Public Participation Plan (Exhibit D) is required for this Site. Ecology shall review any existing Public Participation Plan to determine its continued appropriateness and whether it requires amendment, or if no plan exists, Ecology shall develop a Public Participation Plan alone or in conjunction with Defendant.

Ecology shall maintain the responsibility for public participation at the Site. However, Defendant shall cooperate with Ecology, and shall:

- A. If agreed to by Ecology, develop an appropriate mailing list, prepare drafts of public notices and fact sheets at important stages of the remedial action, such as the submission of work plans, remedial investigation/feasibility study reports, cleanup action plans, and engineering design reports. As appropriate, Ecology will edit, finalize, and distribute such fact sheets and prepare and distribute public notices of Ecology's presentations and meetings.
- B. Notify Ecology's project coordinator prior to the preparation of all press releases and fact sheets, and before major meetings with the interested public and local governments. Likewise, Ecology shall notify Defendant prior to the issuance of all press releases and fact sheets, and before major meetings with the interested public and local governments. For all press releases, fact sheets, meetings, and other outreach efforts by Defendant that do not receive prior Ecology approval, Defendant shall clearly indicate to its

`	1		
	2	,	
	3		
	4		
	5		
	6		
	7		
	8		
	9		
1	0		
1	1		
1	2		
ĺ	3		
1	4		
1.	5		
1	6		
1′	7		-
18	8		
19	9		
20)		
2:	1		
22	2		
23	3		
24	1	-	
25	5		
26	ó		

audience that the press release, fact sheet, meeting, or other outreach effort was not sponsored or endorsed by Ecology.

- C. When requested by Ecology, participate in public presentations on the progress of the remedial action at the Site. Participation may be through attendance at public meetings to assist in answering questions, or as a presenter.
- D. When requested by Ecology, arrange and/or continue information repositories at the following locations:
 - a. Fort Vancouver Regional Library
 1007 E. Mill Plain Blvd.
 Vancouver, WA 98663
 - b. Department of Ecology Industrial Section Headquarters Office 300 Desmond Drive SE Lacey, WA 98504-7706

At a minimum, copies of all public notices, fact sheets, and press releases, all quality assured monitoring data; remedial actions plans and reports, supplemental remedial planning documents, and all other similar documents relating to performance of the remedial action required by this Decree shall be promptly placed in these repositories.

XXVIII. DURATION OF DECREE

The remedial program required pursuant to this Decree shall be maintained and continued until Defendant has received written notification from Ecology that the requirements of this Decree have been satisfactorily completed. This Decree shall remain in effect until dismissed by the Court. When dismissed, Section XVIII (Covenant Not to Sue), Section XXIV (Periodic Review), and Section XIX (Contribution Protection) shall survive.

XXIX. CLAIMS AGAINST THE STATE

Defendant hereby agrees that it will not seek to recover any costs accrued in implementing the remedial action required by this Decree from the Department of Ecology;

1 and further, that Defendant will make no claim against the State Toxics Control Account or 2 any local Toxics Control Account for any costs incurred in implementing this Decree. Except 3 as provided above, however, Defendant expressly reserves its right to seek to recover any costs 4 incurred in implementing this Decree from any other PLP. This Section does not limit or 5 address funding that may be provided under Chapter 173-322 WAC. 6 XXX. EFFECTIVE DATE 7 This Decree is effective upon the date it is entered by the Court. 8 XXXI. WITHDRAWAL OF CONSENT 9 If the Court withholds or withdraws its consent to this Decree, it shall be null and void 10 at the option of any party and the accompanying Complaint shall be dismissed without costs 11 and without prejudice. In such an event, no party shall be bound by the requirements of this 12 Decree. 13 14 STATE OF WASHINGTON, ROBERT M. MCKENNA 15 DEPARTMENT OF ECOLOGY Attorney General 16 17 A. LEVEL, WSBA # 20439 Program Manager Assistant Attorney General Waste 2 Resources Program(360) 586-6770 18 (360) 407-6000 Date: 6/30/2011 19 20 21 ALCOA INC. 22 23 Director Asset Management 24 (412) 553-1658 25

26

1	ENTERED this day of 2011.
2	/s/ Barbara D. Johnson
3 -	
4	JUDGE Clark County Superior Court
5	Clark County Superior Court
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
11	
22 23	· · · · · · · · · · · · · · · · · · ·
- 11	
24	
25 26	
26	