STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
4601 N Monroe Street • Spokane, Washington 99205-1295 • (509) 456-2926

August 17, 2005

Mr. Mark W. Schneider
Perkins Coie
1201 Third Avenue, Suite 4800
Seattle, WA 98101-3099

Dear Mark:

RE: Kaiser Trentwood Site – Agreed Order

The public comment for the Agreed Order closed on August 10, 2005. Ecology received four comment letters and have reviewed and responded to these comments in a Responsiveness Summary, a copy of which is enclosed.

Based on our review of the comments, no changes are required to the Agreed Order language (June 6, 2005 version). Corrections were made to page numbers in the Table of Contents on Page 1. Enclosed is a copy of this Agreed Order No. 2692 with Ecology's signature included. The effective date of this Order is August 16, 2005. The first deliverables – a Draft Phase 1 Remedial Investigation Work Plan, a Draft Sampling and Analysis Plan, and a Health and Safety Plan – are due 60 days after this effective date.

Thank you for your cooperation. We look forward to working with you. Please feel free to contact me at (509) 329-3543 or at tbal461@ecy.wa.gov if you have questions.

Sincerely,

Teresita Bala

Teresita Bala
Toxics Cleanup Program

cc: Leslie Seffern, AAG/Olympia

WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

RESPONSIVENESS SUMMARY

KAISER TRENTWOOD SITE
AGREED ORDER FOR RI/FS

Prepared by:

WASHINGTON DEPARTMENT OF ECOLOGY

Eastern Regional Office
4601 N. Monroe Street
Spokane, WA 99205-1295

August 16, 2005

KAISER TRENTWOOD SITE
RESPONSIVENESS SUMMARY

The Washington Department of Ecology (Ecology) held a 45-day public comment period from July 27 through August 10, 2005 for the proposed Agreed Order that would require the completion of a Remedial Investigation/Feasibility Study at the Kaiser Trentwood Site. The purpose of the Remedial Investigation is to conduct additional soil and groundwater investigations to determine the extent of contamination at the Site. Remedial action technologies will be identified and evaluated in the Feasibility Study. A public meeting to provide information and answer questions on the Agreed Order was held on July 21, 2005 at the Trent Elementary School.

The purpose of this Responsiveness Summary is to document Ecology's responses to comments sent to Ecology during the public comment period and one comment submitted during the public meeting.

Based on the comments received, no changes will be required to the draft Agreed Order including its exhibits. Ecology would like to thank all those who provided comments.

The Responsiveness Summary is organized as follows:

- Index of comments received during the public comment period.
- Comments.
- Responses to comments.

INDEX OF COMMENTS RECEIVED
(These comments as attached are listed in the order of receipt by Ecology.)

1. Comments from Mr. Tom V. Luce submitted on the Comment Form on July 21, 2005 during the public meeting.

2. Comments from Ms. Amber Waldref sent via e-mail on August 2, 2005 (on behalf of The Lands Council).

3. Letter from Ms. Kathy Gunderson received on August 5, 2005.

4. Letter from Bonne Beavers (on behalf of the Sierra Club, Upper Columbia River Group) sent via e-mail on August 9, 2005 and by regular mail which was received by Ecology on August 11, 2005.

COMMENT FORM

KAISER TRENTWOOD SITE

Public Meeting July 21, 2005 7-9 p.m.

Trent Elementary School, 3303 N. Pines Rd, Spokane, WA

If you wish to submit a written comment on the Agreed Order for a Remedial Investigation and Feasibility Study, you may use this form and turn it in to Ecology at the end of the meeting or send it in the mail. **Please include your name, address and phone number so your comments may be answered.** Comments will be accepted until 5 p.m. August 10, 2005. You may also e-mail them to tbal461@ecy.wa.gov or send them to:

Ms. Teresita Bala
WA Department of Ecology
4601 North Monroe
Spokane, WA 99205

(see reverse of this form for tips on effective public commenting)

YOUR NAME:	ADDRESS:	PHONE:
Tom V. Luce	4121 N. Standard St. Spok 99207	483-3826

COMMENTS

① IF P.C.B'S ARE "LEACHING" INTO RIVER FOR 30+ YEARS WHY WERE OTHER SIMILAR YEARSOURCES FROM INDUSTRIAL SITES NOT BEING INCLUDED?

② HAVE THE OTHER SOURCES DISAPEARED COMPLETELY?

③ PER PREVIOUS MEETINGS W/ ECOL. SR. PEOPLE MAKING STATEMENTS RE: "IDENTIFIABLE" "PLUME" ACTIVE INTO LAKE SPOKANE; WHY NO COMMENTS ABOUT SELECTY? LEVELS, WHOSE FAULT & IF THIS IS ONGOING AS STATED HOW WILL THAT BE CORRECTED? (REF ROWLANDS PREVIOUS PRESENTATION).

④ IS GROUND WATER "SEEPAGE" THROUGH RIVER BANKS NOT SIGNIFICANT?

Bala, Teresita F. (ECY ERO)

From: Amber Waldref [awaldref@landscouncil.org]
Sent: Tuesday, August 02, 2005 5:06 PM
To: Bala, Teresita F. (ECY ERO)
Cc: Bergin, Carol; mpetersen@landscouncil.org
Subject: Comments on Agreed Order with Kaiser (Trentwood Site)

Dear Ms. Bala,

Many thanks to you and your Ecology colleagues who agreed to hold a public meeting on your legal agreement with Kaiser to conduct a RI/FS at the Trentwood Site. I appreciated the opportunity to hear comments and questions from other members of the public, as well as Ecology's responses to these comments.

The Lands Council is generally quite satisfied with the Agreed Order and plan for RI/FS to determine where contamination exists on the Trentwood site and evaluate cleanup options.

Our major concern is that the most high risk parts of the Trentwood site are prioritized for evaluation and investigation. For instance, the PCB plume that is moving towards the Spokane River from the north part of the site is of great concern to The Lands Council. We understand Ecology has the ability to take interim actions to C1 reduce very dangerous threats to human health and the environment or correct a problem before it gets worse. However, if the high risk areas are not prioritized, it could be years before the data is available to even make such a decision towards an interim action.

C2 How can we be assured that Kaiser will be testing and monitoring the most high risk areas first? Will Ecology have any say in Kaiser's decision to prioritize work on the site?

Also, what is the agreed upon route that Kaiser and Ecology will take to decide upon the need for an interim C3 action? Does Ecology have the ultimate power to make that decision? I'm assuming that Kaiser would have to pay to correct problems under an interim action. Is Ecology confident it has the tools in place to make sure Kaiser will not shirk this responsibility?

Thank you for the opportunity to provide these comments. I'd love to hear back from you regarding our concerns of prioritizing investigations and interim actions.

Sincerely,

Amber

Amber Waldref
Water Watch/Development Coordinator
The Lands Council
423 W. 1st, Ste 240
Spokane WA 99201
ph: 509-838-4912
fax: 509-838-5155
"Protecting the woods, waters and wildlife of the Inland Northwest"

RECEIVED
AUG - 5 2005
DEPARTMENT OF ECOLOGY
EASTERN REGIONAL OFFICE

2427 E. Sharp
Spokane, WA
99202

8-4-05

Ms. Teresita Bola
Dept of Ecology
4601 N. Monroe
Spokane, WA 99205

Dear Ms. Bola,

I'm writing to thank you for soliciting comments on the River Cleanup at the Kaiser Trentwood Works. The river has been very poluted by the metals + PCB's + oils let into the system at Trentwood. Please see to it that it is cleaned up and the lines capped to prevent further damage. There are other ways to dispose of their waste. Thank you for your efforts.

Associate Steelworker,
Cathy Gunderson

CENTER FOR JUSTICE

COMMUNITY BUILDING
35 WEST MAIN AVENUE
SUITE 300
SPOKANE, WA 99201
TELEPHONE: 509.835.5211
FAX: 509.835.3867

ATTORNEYS & ADVOCATES

JIM SHEEHAN
Founder
BREEAN BEGGS
Chief Catalyst

BONNE BEAVERS
RICK EICHSTAEDT
ANDREA POPLAWSKI
TERRI SLOYER

RECEIVED
AUG 11 2005
DEPARTMENT OF ECOLOGY
EASTERN REGIONAL OFFICE

Teresita Bala
Washington Department of Ecology
Toxics Cleanup Program
4601 N. Monroe
Spokane, Washington 99205

SENT VIA EMAIL AND REGULAR MAIL

RE: Proposed Agreed Order for Remedial Investigation and Feasibility Study for Kaiser Trentwood Site

Dear Ms. Bala:

These comments are submitted on behalf of the Sierra Club, Upper Columbia River Group on the Proposed Agreed Order for a Remedial Investigation and Feasibility Study (RI/FS) for the Kaiser Trentwood Site. Sierra Club urges the Department of Ecology (Ecology) to take a larger role in the implementation of the remediation of the Kaiser property under their powers provided in Washington Administrative Code 173-340-510(4). Since 1994, Kaiser's cleanup efforts have been plagued with problems and inadequacies, and it is time for Ecology to take over the project.

The history of the contamination and cleanup efforts supports the need for a larger role by Ecology in the cleanup effort at the Kaiser site. As illustrated below, past cleanup efforts have either been inadequate or non-existent.

1980 - Kaiser reported a fuel oil spill of 10,000 gallons. Ecology's investigations revealed the spill size to be between 50,000 and 100,000 gallons. No remediation ever occurred.

1990 - The 6,000 gallon Hoffman Tank was removed. Approximately 6,500 cubic yards of soil was removed up to a depth of 35 feet and an impermeable liner was placed in the area. Ecology now finds that the contamination needs to be evaluated further by Kaiser.

1991 - Kaiser removed a 20,000 gallon unleaded gasoline UST near the oil house. 1,200 cubic yards were excavated and excavation terminated at 18 feet. The area was capped

with clean fill and asphalt. Contaminates were left beyond the 18 foot mark and now Kaiser is now examining the extent of the contamination.

- Eight USTs were removed and 7,000 cubic yards of soil were removed down to an excavation depth of 32 feet.
- Oil house French drains were removed and PCBs were discovered. Excavation was performed to a depth of 7 feet, along with asphalt capping and backfill. Now PCBs have been detected at a depth of 65 feet.
- An aluminum rolling lubricant leaked from a transfer line in the tank farm east of the oil house. Three-hundred cubic yards of soil were removed with an excavation depth of 12 feet.

1992 - The wastewater lagoon was found to be heavily contaminated with PCBs and hexavalent chromium. Sludge was removed and again was removed in 1998. Kaiser is now investigating the source of the contaminants and the extent of the contamination.

1993 - Kaiser began implementing independent remedial measures to contain and actively remediate groundwater in the oil house and wastewater areas.

1994 - Kaiser was notified of its status as a PLP under MTCA.

1996 - Kaiser submitted a Draft Groundwater Remedial Investigation Study (RIS) to Ecology. The study showed groundwater was contaminated with TPH, PCBs, iron, manganese, antimony and arsenic.

- Investigations were conducted around the oil reclamation building. Contamination was found to be at depths ranging from 20 to 70 feet. Kaiser recommended an asphalt cap and liner.

1998 - Transfer line leak was discovered in a line that carried oil-contaminated wastewater from the oil reclamation building to the wastewater facility. Five-hundred cubic yards was excavated and capping occurred. Ecology estimates that 52,500 square feet were affected by this leak and has asked Kaiser to investigate the extent of the contamination.

- Kaiser discovered petroleum contamination while excavating the sulfide scrubber building site. Excavation was performed on a 20 x 20 x 7 foot area.

2001 - RIS was revised by Ecology and site ranked 2 by SHD.

2003 - RIS was again revised by Ecology.

2003-2005 - Investigations show PCB contamination in the groundwater down-gradient of casting areas.

2004 - More contamination was found from an oil/emulsion transfer line release. Relying on Exhibit B it appears that Kaiser did nothing to prevent further contamination.

- Six inches of oil was observed in an electrical grounding pit.

2003-2005 - Studies show PCB plume in the area of the hot line and casting areas.

2005 - Recent site investigations show releases from transfer lines connecting the oil reclamation building to the wastewater treatment system.

- In April, a release from a UST for waste oil was detected in the truck shop area.

C1 As discussed, Kaiser has consistently failed to fully detect the extent of the contamination and failed to properly clean it up. We recommend that Ecology take the following actions to ensure that this site is adequately addressed and the history of inadequate remediation is avoided: (1) because of recent releases, continuous groundwater and soil samples should be taken throughout the site to monitor potential new sources of pollutants with Ecology retaining the discretion when sampling should be conducted and measures that allow Ecology to perform its own independent sampling at Kaiser's expense; (2) Ecology should retain the discretion to perform studies necessary to determine the scope and area of contamination to be studied and remediate, should data suggest that an expansion of the site is warranted; and (3)Ecology should dedicate staff, at Kaiser's expense, to carefully control and monitor the studies and remediation measures implemented by Kaiser.

C2 Despite the history of contaminant releases, Kaiser continues to release contaminates. Any cleanup efforts should be postponed until these releases are stopped. It is futile to perform remediation on sites that have the potential to be re-contaminated. Accordingly, Ecology must restrict any expansion of Kaiser operations until assurances exist to prevent future contamination of the site and the Spokane River.

C3 For these reasons, Sierra Club recommends that Ecology take a larger role in the oversight and implementation of the remediation effort at the site and not allow Kaiser to continue their poorly performed studies and remediation effects. Thank you for the opportunity to comment and provide suggestions on this matter.

Sincerely,

for BMS

Bonne Beavers
on behalf of the Sierra Club

ECOLOGY'S RESPONSE TO COMMENTS DURING PUBLIC COMMENT PERIOD JULY 27 TO AUGUST 10, 2005

I. Responses to comments submitted by Mr. Tom Luce during the public meeting on July 21, 2005

1. "If PCBs are "leaching" into River for 30+ years, why were other similar yearsources from industrial sites not being included?"

Response: Other industrial sources are not included in this study. Ecology has other efforts underway to evaluate potential sources of PCBs to the river. A Total Maximum Daily Load (TMDL) study is underway for PCB loading to the river and potential sources of sediment contamination in the area upstream of Upriver Dam has been evaluated. This Agreed Order for the Remedial Investigation/ Feasibility Study (RI/FS) is only for the Kaiser Trentwood Site. The purpose of this RI/FS is to define the extent of contamination at the Site and to identify cleanup alternatives that will address the contamination at the Site. The Trentwood cleanup will evaluate potential PCBs discharged to the river due to site groundwater flow and due to the wastewater discharge.

2. "Have the other sources disappeared completely?"

Response: PCB sources to the Spokane River have not disappeared completely. They are being managed under existing industrial and municipal discharge permits. All potential sources affecting current water quality are being investigated under a Total Maximum Daily Loads (TMDLs) process currently being performed by Ecology.

The PCB contamination in the Spokane River is currently being addressed by Ecology. One effort is evaluating current PCB loading to the river from all sources and is referred to as the PCB TMDL. The other effort is evaluating PCB sediment contamination sources and is referred to as the Upriver Dam PCB sediment Site. More information on these efforts can be found at the following web sites: www.ecy.wa.gov/programs/wq/tmdl/watershed/spokaneriver/index.html and www.ecy.wa.gov/programs/tcp/sites/spo_riv/spo_riv.htm. The Kaiser facility is one of the potentially liable parties that are participating in the Upriver Dam PCB Sediment Site cleanup.

3. "Per previous meetings with Ecology Sr. People making statements Re"Identifiable Plume" active into Lake Spokane: Why no comments about severity, levels, whose fault & if this is ongoing as stated, how will that be corrected? (Ref: Rowlands previous presentation.)"

Response: Ecology is unclear of the basis for this comment and its relationship with the Kaiser Trentwood Site. Ecology is unaware of any identifiable PCB plumes in the river at Long Lake. Current PCB water quality conditions in the river, including Long Lake are being evaluated under the PCB TMDL.

4. "Is ground water "seepage through river banks not significant"?"

Response: Groundwater from beneath the Kaiser Trentwood Site is discharging to the Spokane River. At this time, it is believed that the PCB plume in ground water is not reaching the river; thus, based on existing data, no PCBs are currently being discharged to the river due to ground water. Phase I of the RI will investigate this plume further.

II. Responses to Comments submitted by Ms. Amber Waldref (on behalf of The Lands Council)

C1. "Our major concern is that the most high risk parts of the Trentwood site are prioritized for evaluation and investigation. For instance, the PCB plume that is moving towards the Spokane River from the north part of the site is of great concern to The Lands Council. We understand Ecology has the ability to take interim actions to reduce very dangerous threats to human health and the environment or correct a problem before it gets worse. However, if the high risk areas are not prioritized, it could be years before the data is available to even make such a decision towards an interim action."

Response: Ecology is also concerned about the PCB plume in ground water in the north part of the Site. This is why Ecology has elected to focus on ground water investigations in Phase I of the RI, so this PCB plume can be defined in terms of extent and the potential to reach the river. Based on these results, Ecology will make a determination on whether there is a need to conduct interim actions at the Site.

C2. "How can we be assured that Kaiser will be testing and monitoring the most high risk areas first? Will Ecology have any say in Kaiser's decision to prioritize work on the site?"

Response: The Scope of Work and Schedule attached to the Agreed Order as Exhibit B establishes the required investigations and schedule that Kaiser must follow. Phase I of the RI is focused on ground water which is Ecology's priority because of its potential to move off-site. The first deliverable is a Work Plan that will detail the Phase I investigations including a schedule of the activities in the Work Plan. This work plan will require Ecology's review and approval.

C3. "What is the agreed upon route that Kaiser and Ecology will take to decide upon the need for an interim action? Does Ecology have the ultimate power to make that decision? I'm assuming that Kaiser would have to pay to correct problems under an interim action. Is Ecology confident it has the tools in place to make sure Kaiser will not shrink this responsibility?"

Response: The need for interim actions will be evaluated under the conditions set forth under WAC 173-340-430. Ecology will make this determination based on data collected during the investigations. The Scope of Work attached to the Agreed Order has a provision to conduct interim actions, as necessary. It is to be noted that Kaiser has for several years been conducting independent interim actions to contain the contamination on-site. Ecology will utilize its authority as appropriate to assure that Kaiser will implement additional interim actions, if needed, under the terms of the Agreed Order.

III. Response to Comment from Ms. Cathy Gunderson, dated August 4, 2005 and received by Ecology on August 5, 1005.

Comment: "The river has been very poluted by the metals and PCBs and oils let into the system at Trentwood. Please see to it that it is cleaned up and the lines capped to prevent further damage. There are other ways to dispose of their waste."

Response: Under the Agreed Order, Ecology has formal oversight of the cleanup process at the Trentwood Site to make sure that the requirements of the Model Toxics Control Act are met. Remedial alternatives that will be considered for this Site will be protective of human health and the environment. Discharges of contaminants from this Site to the Spokane River will be addressed accordingly.

IV. Responses to Comments submitted by Bonne Beavers (on behalf of the Sierra Club, Upper Columbia River Group sent to Ecology by e-mail on August 9, 2005 and by regular mail (received by Ecology on August 11, 2005).

C1. "Kaiser has consistently failed to fully detect the extent of the contamination and failed to properly clean it up. We recommend that Ecology take the following actions to ensure that this site is adequately addressed and the history of inadequate remediation is avoided: (1) because of recent releases, continuous groundwater and soil samples should be taken through the site to monitor potential new sources of pollutant with Ecology retaining the discretion when sampling should be conducted and measures that allow Ecology to perform its own independent sampling at Kaiser's expense; (2) Ecology should retain the discretion to perform studies necessary to determine the scope and area of contamination to be studied and remediate, should data suggest that an expansion of the site is warranted; and (3) Ecology should dedicate staff, at Kaiser's expense, to carefully control and monitor the studies and remediation measures implemented by Kaiser."

Response: Ecology's formal oversight under the Agreed Order will ensure that the cleanup process that will be undertaken at the Site will meet the requirements of the Model Toxics Control Act. By entering into this Agreed Order, Kaiser has agreed to perform the Scope of Work that is attached as Exhibit B of the Order. Kaiser will be furnishing all personnel, materials, and services necessary to implement the Scope of Work under this Order.

(1) Groundwater and soil investigations, as well as site physical studies and drainage investigations, proposed in the Scope of Work and Schedule will characterize the contamination from past releases and will identify potential new sources, if there are any. Kaiser will be preparing a Work Plan that will detail the investigations identified in the Scope of Work for Ecology's review and approval. If requested by Ecology, Kaiser shall allow split or duplicate samples to be taken by Ecology and/its authorized representative of any sample collected by Kaiser pursuant to implementation of this Order.

(2) Under Section VIII.N of the Agreed Order, Ecology reserves its rights under Chapter 70.105D, including the right to require additional or remedial actions at the Site should it deem such actions necessary to protect human health and the environment, and to issue orders requiring such actions.

(3) Ecology has already assigned staff to oversee the implementation of this Order and the Scope of Work. The Agreed Order requires Kaiser to pay to Ecology costs pursuant to the Order, including costs for amount of time spent by staff members on the project.

C2. "Despite the history of contaminant releases, Kaiser continues to release contaminates. Any cleanup efforts should be postponed until these releases are stopped. It is futile to perform remediation on sites that have the potential to be re-contaminated. Accordingly, Ecology must restrict any expansion of Kaiser operations until assurances exist to prevent future contamination of the site and the Spokane River".

Response: Ecology will advance the RI/FS considering that protection of human health and the environment are being threatened due to the contamination at the Trentwood Site. As the investigations identify possible sources of releases, the potential for future releases will be minimized. It will be to Kaiser's advantage to work with Ecology on any expansion plans so future releases will be prevented to avoid additional remediation costs.

C3. Sierra Club recommends that Ecology take a larger role in the oversight and implementation of the remediation effort at the site and not allow Kaiser to continue their poorly performed studies and remediation effects.

Response: This Agreed Order gives Ecology the authority to formally oversee the cleanup at the Site. All Site work will be reviewed, approved, and inspected by Ecology.