Response to Comments

Draft Cleanup Action Plan for the Aluminum Recycling Trentwood Site

Public comment period held June 9 – July 23, 2021
Facility Site ID: 628, Cleanup Site ID: 1081

Toxics Cleanup Program

Washington State Department of Ecology
Spokane, Washington

September 2021

Document Information

This document is available in the Washington Department of Ecology's Aluminum Recycling Trentwood document repository[1].

Related Information

- Facility site ID: 628
- Cleanup site ID: 1081

Contact Information

Toxics Cleanup Program

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Website[2]: Washington State Department of Ecology

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[1] https://fortress.wa.gov/ecy/gsp/CleanupSiteDocuments.aspx?csid=1081
[2] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-sites
[3] https://ecology.wa.gov/About-us/Accountability-transparency/Our-website/Accessibility

Toxics Cleanup in Washington State

Accidental spills of dangerous materials and past business practices have contaminated land and water throughout the state. The Washington State Department of Ecology (Ecology) Toxics Cleanup Program (TCP) works to remedy these situations through cleanup actions. TCP cleanup actions range from simple projects requiring removal of a few cubic yards of contaminated soil to large, complex projects requiring engineered solutions.

Contaminated sites in Washington are cleaned up under the Model Toxics Control Act[4] (MTCA, Chapter 173-340 Washington Administrative Code), a citizen-mandated law passed in 1989. This law sets standards to ensure toxics cleanup protects human health and the environment and includes opportunities for public input.

Public Comment Period Summary

Ecology held a comment period June 9 through July 23, 2021, for the following draft documents for the Aluminum Recycling Trentwood site:

- Cleanup Action Plan[5]
- Enforcement order[6]
- Scope of work and schedule[7]
- Revised Feasibility Study[8]

Ecology extended the comment period 15 days after receiving a request from one of the neighboring facilities. More information is available in the public notice[9] and postcard[10] announcing the comment period extension that we mailed to the surrounding community.

Ecology appreciates the comments we received from three organizations. We address them in the Response to Comments section that begins on page 4. After considering the comments, we have modified the Enforcement Order and Cleanup Action Plan.

Site Background

The site is located at 2317 North Sullivan Road in Spokane Valley. Between 1979 and 1984, the site was used to process and store aluminum. “Primary” and “secondary” aluminum processing was used. The processing created white and black dross as byproducts. When processing ended, two stockpiles of dross were left at the site.

[4] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Rules-directing-our-cleanup-work/Model-Toxics-Control-Act
[5] https://apps.ecology.wa.gov/gsp/DocViewer.ashx?did=101763
[6] https://apps.ecology.wa.gov/gsp/DocViewer.ashx?did=101765
[7] https://apps.ecology.wa.gov/gsp/DocViewer.ashx?did=101762
[8] https://apps.ecology.wa.gov/gsp/DocViewer.ashx?did=101766
[9] https://apps.ecology.wa.gov/gsp/DocViewer.ashx?did=96855
[10] https://apps.ecology.wa.gov/gsp/DocViewer.ashx?did=104419

Around 1986, Union Pacific Railroad (UPPR), the site owner, removed one stockpile and put it in a landfill. In 2017, UPRR removed about 360 cubic yards of the other stockpile to test using it as a raw material in cement production. About 57,000 cubic yards of the second stockpile is left and covers nearly 4 acres.

The remaining stockpile covers an area that includes two neighboring properties. The neighboring properties are owned by Pentzer Venture Holdings II Inc. (Pentzer) and the Washington State Department of Transportation (WSDOT). Pentzer is also responsible for cleanup but is not included in the Enforcement Order.

Response to Comments

The comment letters are printed verbatim in alphabetic order based on the organization's name. Each letter is followed by Ecology's response.

Index of comments received

The three organizations that submitted comments are listed in alphabetical order, followed by the date we received their comments and the page on which their comments begin.

Table 1. Index of comments received

Organization	Name	Date received	Page
Kemira Water Solutions	Alyssa Moir	June 18	4
Pentzer Venture Holdings II, Inc.	Bruce Howard	July 15	5
Union Pacific Railroad Company	Sherry Jackman	July 23	12

Alyssa Moir, Kemira Water Solutions, received via email

Subject: Aluminum Recycling Trentwood - Request to extend comment period.

Dear Ms. Treccani –

Kemira Water Solutions, Inc. ("Kemira") has recently been notified that comments on the draft Order, CAP, SOW and FS regarding Ecology's remediation requirements for the Aluminum Recycling Trentwood Site in Spokane are due on July 9, 2021. Kemira would like to request a 30-day extension to provide comments on these materials.

Please feel free to reach out to me with questions.

Thank you,

Alyssa

Ecology's response

We extended the comment period an additional two weeks to accommodate your request. The new end date became July 23. A postcard was sent to the mailing list with this new end date.

Bruce Howard, Pentzer, received via email July 18

PENTZER VENTURE HOLDINGS II, Inc.
1411 E Mission, Spokane WA, 99220-3727

July 15, 2021

Sandra Treccani
Department of Ecology
Eastern Regional Office
4601 N. Monroe Street
Spokane, WA 99205

Re: Aluminum Recycling Trentwood
Submitted via email to sandra.treccani@ecy.wa.gov

Dear Ms. Treccani:

Pentzer Venture Holdings II, Inc. (Pentzer) has reviewed the cleanup documents Ecology recently made available for public comment regarding the Aluminum Recycling Trentwood site. Pentzer is pleased that Ecology has made cleanup decisions for this site and that Union Pacific Railroad (UPRR) will begin cleanup soon. Please consider the following comments on the draft Cleanup Action Plan (CAP) and the draft Enforcement Order before finalizing those documents.

Cleanup Action Plan

Soil Cleanup Levels for Unrestricted Use. Pentzer supports Ecology's selection of soil cleanup levels based on unrestricted land use. As you know, Pentzer's property is immediately west of UPRR's property. Pentzer's property is vacant land and is not used for industrial purposes. It is immediately adjacent to property owned by the Washington State Parks and Recreation Commission, which in turn is adjacent to the Spokane River. Because this area is used for recreational purposes, it should be cleaned up for unrestricted uses. The draft CAP would require UPRR to remove all stockpiled material, and all soil containing hazardous substances at concentrations exceeding the soil cleanup levels, from areas of the site beyond the boundaries of UPRR's property. This is appropriate.

1

Protectiveness of Remedy Using Remediation Levels. Ecology also proposes to set remediation levels, and to allow UPRR to leave on its property soil with hazardous substance concentrations exceeding the cleanup levels, but lower than the remediation levels. Pentzer is not opposed to this in concept. However, the remediation levels are extremely high. For example, while the proposed cleanup level for chromium is 42 milligrams per kilogram (mg/kg), the proposed remediation level is 5,300,000 mg/kg. The proposed cleanup level for aluminum is 21,400 mg/kg, but the proposed remediation level is 3,500,000 mg/kg. Except for arsenic, all of the proposed remediation levels are multiple orders of magnitude higher than the proposed cleanup levels. That means very contaminated soil may remain on UPRR's property after the cleanup is complete. The draft CAP would require that contaminated soil be capped

with asphalt, concrete, a geotextile barrier overlain by 6 inches of crushed rock, or some combination of these three. Pentzer believes these measures are insufficient to protect adjoining property as well as the Spokane River, and that additional measures are needed to ensure the remedy on UPRR's property is protective.

2 For example, we did not see any requirement in the draft CAP for UPRR to route stormwater away from the capped area, or to manage stormwater runoff from the impacted portion of UPRR property. Pentzer suggests that stormwater runoff on UPRR's property be diverted away from the capped area to prevent infiltration through any highly-contaminated soil left behind after the stockpile is removed. The land that makes up this site slopes downward from the UPRR property toward the Spokane River. That creates a risk that stormwater runoff from the UPRR parcel, where contaminated soil will be capped, could carry contaminants beyond the boundary of the capped area and onto adjoining parcels owned by Pentzer, WSDOT, and the Washington State Parks and Recreation Commission. Stormwater on UPRR's property should be managed to infiltrate on that property, away from the capped area, and not allowed to run off onto adjoining parcels. We also suggest long-term monitoring of groundwater at the site to ensure that hazardous substances left in the soil do not contaminate groundwater.

3 In addition, the draft CAP does not explain how the cap will prevent migration of hazardous substances exceeding cleanup levels from UPRR's property onto adjoining parcels. As currently written, the draft CAP would allow UPRR to cap contaminated soils right up to the boundary between its property and Pentzer's property. How will the edges of the cap be designed to ensure that contaminated soil is contained on UPRR's property, and not allowed to drift onto Pentzer's property? Ecology should consider establishing a setback from Pentzer's property for the cap, so an area of clean soil on UPRR's property serves as a barrier separating the capped contaminated soil from clean soil on Pentzer's property. Alternatively, the CAP could require a cover to extend to the side perimeter of any contaminated soil, or the installation of a retaining structure. Given the clear evidence that waste as well as contaminated soil has migrated off the pile and onto adjoining properties, a secure cover, including periodic inspections and long-term maintenance, is essential.

4 Finally, it is not clear from the draft CAP how UPRR will determine where the stockpile ends and underlying soil begins, either on its property or on the property that Pentzer owns. Section 5.2.3 of the draft CAP states:

> Following removal of the dross stockpile, areas excavated to below grade would be backfilled to bring the final surface up to elevations comparable to the adjacent properties and to create a flat surface prior to placing the cap on the UPRR property.

The draft CAP does not include cross-sections showing what is considered to be "grade," and it is impossible to determine this from visual examination, given the height of the stockpile. It is unclear whether the ground surface beneath the stockpile is flat,

sloped, or of irregular grade . We suggest Ecology require UPRR to prepare a grading plan that provides this missing information, in order to accurately delineate the vertical and lateral extent of the stockpile. A grading plan also would inform appropriate design of the cap. Ecology also should clarify in the draft CAP whether UPRR will remove stockpiled material only to the ground surface, or will remove "one additional foot of underlying material," as described in Section 4.3 of the Revised Feasibility Study. Again, the grading and any backfill should reinforce an overall requirement to securely contain any contaminated soil on UPRR's property in order to prevent any degradation of the adjoining property.

5

COCs Without Remediation Levels. Ecology proposes to set soil cleanup levels for ten hazardous substances, but it is proposing soil remediation levels for only six hazardous substances. The four hazardous substances without remediation levels are lead, silver, nitrate, and nitrite. Was this intentional? If so, soil on UPRR's property will have to meet cleanup levels for these four substances. If it was not intentional, Ecology should specify remediation levels for lead, silver, nitrate, and nitrite.

6

Protection of Groundwater. Section 4.4 states that "soil cleanup levels do not have to consider protection of groundwater" because groundwater at the site is not contaminated. This decision affects at least one of the hazardous substances that Ecology proposes to establish a soil cleanup level for, chromium. According to Table 5 of the draft CAP, Ecology proposes a soil cleanup level of 42 mg/kg for chromium, but the concentration protective of groundwater is 18 mg/kg.

7

We believe MTCA requires soil cleanup levels to be protective of groundwater whether or not groundwater has already become contaminated. WAC 173-340-740(3) sets out the requirements for Method B soil cleanup levels for unrestricted land use. Subsection (3) states that:

> Standard Method B cleanup levels for soils shall be at least as all of the following:
> …
>
> (iii) (A) Concentrations that will not cause contamination of ground water at levels which exceed ground water cleanup levels established under WAC 173-340-720 as determined using the methods described in WAC 173-340-747.

Has Ecology used the methods described in WAC 173-340-747 to determine that the cleanup levels it is setting for soil will not cause groundwater contamination? If so, we believe that analysis should be discussed in the CAP. If not, we believe Ecology is required to undertake that analysis before establishing soil cleanup levels. And if the analysis shows that the soil cleanup level Ecology has proposed for chromium is not protective of groundwater, then the cleanup level should be lowered to 18 mg/kg.

8

Point of Compliance for Soil. Section 4.5 of the draft CAP sets the point of compliance for soil at 6 feet below ground surface throughout the Site. This is the depth protective of ecological receptors. But as noted in Section 4.3 of the draft CAP, Ecology concluded that "all exposure pathways will be eliminated for ecological receptors concurrently with humans" in all of the active cleanup scenarios considered. In light of that statement, we do not understand why Ecology proposes a point of compliance that protects ecological receptors, rather than direct human contact or groundwater. For protection of human exposure via direct contact, the point of compliance would be 15 feet below ground surface. For protection of groundwater, the point of compliance would be in soils throughout the site. See WAC 173-340-740(6)(b) and (d).

9

Whichever point of compliance Ecology chooses, it probably will not be met on UPRR's property, since UPRR will be allowed to cap contaminated soil as long as contaminant concentrations do not exceed remediation levels. The MTCA rules allow a containment remedy to "be determined to comply" with cleanup levels at the point of compliance if all six criteria in WAC 173-340-740(6)(f) are met. These criteria apply to containment remedies involving the use of remediation levels. See WAC 173-340-355(2). Ecology should evaluate and confirm in the CAP that these six criteria are met, or adjust the remedy as appropriate.

10

Other. The first sentence of the last paragraph in Section 2.1 should be revised to read as follows:

11

> In October 1998, Pentzer Venture Holdings II Inc. ~~purchased~~ <u>acquired approximately 8</u> ~~7.5~~ acres of land immediately west of the UPRR property.

Enforcement Order

Section IV.A. This paragraph states that the Remedial Action Location Diagram (Exhibit A) shows where UPRR will implement the remedial action, but Exhibit A is missing. In addition, the boundaries of the site are not clear from the Site Map included in the Cleanup Action Plan.

12

Section IV.C. The "Subject PLP" is defined as the "PLP subject to the Order." It would be clearer to define the "Subject PLP" as "Union Pacific Railroad Company."

13

Section V.D. We suggest revising the first sentence of this paragraph to read as follows:

14

> This Site was the location of aluminum dross reprocessing activities by Aluminum Recycling Corporation<u>, a tenant of the Subject PLP,</u> resulting in the generation and storage of aluminum dross.

Section V.T. This paragraph states that "Ecology approved the revised draft Feasibility Study on April 15, 2021," but this date appears to be wrong. The version of the Revised Feasibility Study on Ecology's website is dated April 20, 2021.

15

Section VII.A. From reviewing the draft CAP, we understand that UPRR will be required to remove all stockpiled material from its property, but will be allowed to leave soil beneath the stockpile as long as that soil does not exceed remediation levels. However, this paragraph does not clearly require UPRR to remove stockpiled material from its property. It requires UPRR only to excavate and dispose off-site all materials "exceeding remediation levels." In addition, we noticed a typo in the first sentence of the paragraph ("Subject PLPs" should be singular, not plural). We suggest revising this paragraph to read as follows:

16

> The Subject PLP~~s~~ will implement the CAP (Exhibit C) in accordance with the Scope of Work and Schedule attached to this Order (Exhibit B). Among other remedial actions, the CAP requires the Subject PLP to excavate and dispose off-site all materials exceeding cleanup levels on the properties owned by Pentzer Venture Holdings II, Inc. and the Washington State Department of Transportation; ~~and~~ to excavate and dispose off-site all materials in the stockpile; and to excavate and dispose off-site all soil exceeding remediation levels, and cap on-site all ~~materials~~ soil exceeding cleanup levels but below remediation levels, on the property owned by the Subject PLP.

Thank you for considering these comments. If I can answer any questions, please don't hesitate to contact me at (509) 495-2941.

Sincerely,

Bruce Howard

Ecology's response

The following responses addresses the comments that have been numbered within the comment letter:

Cleanup Action Plan (CAP)

1. This comment, in addition to concerns about protection of groundwater in Comment 8, prompted Ecology to re-evaluate the remediation levels and protection of groundwater values. As a part of this process, an error was discovered in the CAP Table 5; the value of 18 milligrams/kilogram (mg/kg) for chromium protection of groundwater was the

hexavalent chromium value instead of the trivalent chromium value. For chromium, values should be selected for the valence state that is present at the site. It has already been determined that the majority of chromium is in the trivalent form. Since trivalent chromium is much less toxic than hexavalent chromium, this means the standard groundwater protection value should be 480,000 mg/kg. However, that number wasn't used because a site-specific value was calculated, which is explained below.

Rather than applying generic criteria, Ecology used site-specific groundwater flow and infiltration water values (Equations 747-3, 747-4, and 747-5 in WAC 173-340-747) to calculate appropriate values for the protection of groundwater. A value of 4,300 feet per day was used as the site-specific hydraulic conductivity in equation 747-4 (the Spokane Valley measurement taken from the 2007 USGS Groundwater Flow Model) and a value of 17 inches per year was used as the site-specific precipitation value for equation 747-5. Because of the use of these site-specific numbers, Equation 747-1 in WAC 173-340-747 yields a new set of values for the protection of groundwater. We added these to the CAP Table 5 and as a new column in the CAP Table 6, which resulted in the remediation level for arsenic lowering from 88 mg/kg to 42 mg/kg. Other remediation levels were not affected by the inclusion of groundwater protection values.

2. The CAP requires compliance with applicable, relevant, and appropriate requirements, listed in Table 7 in the document. Compliance with Ch. 197-11 WAC (the State Environmental Policy Act [SEPA]) requires any stormwater generated by the project be mitigated. The potentially liable persons (PLPs) will need to complete a SEPA checklist prior to initiating their action, which requires a 15-day public comment period.

3. Ecology will require a setback from neighboring properties. These will be detailed in the Engineering Design Report for the site, but will also be included in the SEPA checklist for review and comment.

4. The stockpile material is visually distinct from native soils. Its gray/tan color and extremely fine-grained texture make distinction clear.

5. A grading plan will be part of the Engineering Design Report. Additionally, the SEPA checklist will include the proposed erosion control measures. Ecology's requirement in the CAP is that all of the stockpile will be removed and disposed offsite; UPPR has proposed additional excavation below the stockpile, which would meet the CAP requirements.

6. The CAP only sets soil cleanup levels for six contaminants, not ten; four were screened out because maximum concentrations do not exceed applicable cleanup levels.

7. See comment 1.

8. WAC 173-340-747(2)(f) permits the use of empirical demonstrations to ensure that soil cleanup levels are protective of groundwater. The site has been exposed to weathering

for more than 30 years, and groundwater sampling showed that site contaminants did not exceed groundwater cleanup levels, as shown in the CAP. See comment 1.

9. Exceedances of human health cleanup levels were not found below 6 feet in soil, and groundwater did not exceed any cleanup levels. Therefore, soil cleanup levels are based on the protection of ecological receptors (or background), which has a point of compliance of 6 feet below ground surface.

10. The cleanup action has been determined to comply with WAC 173-340-740(6)(f) and WAC 173-340-355(2).

11. We changed the word “purchased” to “acquired” in CAP Section 2.1.

Enforcement Order

12. We added Exhibit A, which was accidentally left out of the public review documents. The map is identical to Figure 2 in the CAP.
13. We added the following words to Section IV(C): “Union Pacific Railroad Company.”
14. We added the following clarification to Section V(D): “… , a tenant of the Subject PLP, …”
15. We corrected the date in Section V(T) to April 20, 2021.
16. We removed the “s” after PLP in Section VII(A). Clarified language in Section VII(A) to make it clear that all stockpile materials will be removed from the site, consistent with the CAP.

Sherry Jackman, Union Pacific Railroad Company, received via email and online July 23

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July 23, 2021

By Public Comment Form and Email

Ms. Sandra Treccani
Site Manager
Washington State Department of Ecology
4601 N. Monroe St.
Spokane, WA 99205
sandra.treccani@ecy.wa.gov

Re: Union Pacific Railroad Company | Comment Letter
Aluminum Recycling Trentwood - 2317 N. Sullivan Rd., Spokane Valley, WA
Facility Site ID #628; Cleanup Site ID #1081

Dear Ms. Treccani:

Union Pacific Railroad Company ("Union Pacific") appreciates the opportunity to comment on the draft Cleanup Action Plan dated May 2021 ("CAP"), Enforcement Order ("Order"), Scope of Work and Schedule ("SOW"), and Feasibility Study (Revised) dated April 20, 2021 ("FS" and, with the CAP, Order, and SOW, the "Draft Documents") issued for public comment on June 9, 2021 by the Washington State Department of Ecology ("Ecology") regarding the Aluminum Recycling Trentwood Property in Spokane Valley, Washington ("Trentwood Property"). Union Pacific's comments are set forth below and supporting exhibits will supplied via Ecology's online Public Comment Form.

By way of background, Union Pacific recently identified documents within its files that reveal previously unknown operator history at the Trentwood Property. Some of these documents were difficult to locate because they were associated with a Union Pacific predecessor that owned the Trentwood Property until 1987.[1] Union Pacific regrets the delay in bringing these documents to light, but believes they form a critical piece of the operator history at the Trentwood Property, and are relevant to the identification of additional potentially liable persons ("PLPs") that fall within the PLP categories set forth in the Washington Model Toxics Control Act ("MTCA").

Accordingly, as explained in greater detail below, Union Pacific believes Ecology should consider revising the Draft Documents to: (I) reflect additional operator history; and (II) relatedly, name additional PLPs at the Trentwood Property, as enumerated below. Irrespective of Union Pacific's comments, Union Pacific intends to comply with the final Order assuming no substantive revisions to the proposed cleanup.

I. Supplemental Operator History at the Trentwood Property

Union Pacific submits the supplemental operator history set forth below for Ecology's consideration.

[1] In 1987, Union Pacific acquired the Property when it merged with a subsidiary, Spokane International Railroad Company ("Spokane International"), which owned the property before the merger. For convenience, Union Pacific and Spokane International are used interchangeably herein.

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A. Between 1966 and 1980, early tenant Hillyard operated a dross processing facility at the Trentwood Property.

The Draft Documents identify Trentwood Property dross operations dating back to 1979;[2] however, Trentwood Property dross operations actually date back to 1966.

According to recently discovered records, The Hillyard Processing Company ("Hillyard Processing") leased the Trentwood Property starting in 1966. Although Union Pacific has not yet located the 1966 Hillyard Processing lease, historical correspondence references "a lease of the site for an aluminum processing plant and the right to drill a 10-inch water well and construct the necessary facility thereto" commencing in 1966 and terminating in 1980, when the lease was assigned to Aluminum Recycling Corporation ("ARC"), the now-defunct operator from 1980 to 1986.[3] Well records confirm that Hillyard Processing was in the business of "processing aluminum dross" at the Trentwood Property.[4]

The name "Hillyard" may sound familiar to Ecology because Ecology oversaw PLP BNSF's cleanup of another Hillyard site at 3412 East Wellesley Avenue in Spokane ("Wellesley Property") in the early 2000s.[5] In 1954, Hillyard Processing leased the Wellesley Property from BNSF and operated an aluminum dross facility thereon.[6] According to the 2001 Wellesley Property Consent Decree, Hillyard Processing was sold to Hillyard Aluminum Recycling Corporation ("Hillyard Aluminum") in 1976, which was then sold to ARC in 1979.[7] Similar to the activities at the Trentwood Property, at the Wellesley Property, "[Hillyard] processed aluminum scrap metals and aluminum skim called white dross, obtained from aluminum smelters, in a batch process. This secondary processing of aluminum dross involved addition of sodium and potassium chloride salts. Molten aluminum metal was extracted during the process, poured into ingots and sold. Spent dross process waste called black dross, along with non-reprocessed white dross waste" were eventually abandoned and then became the subject of an Ecology cleanup.[8]

In 2000, Ecology notified the former Hillyard Aluminum ultimate parent, Aluminum Company of America ("Alcoa"), of the preliminary finding of potential liability at the Wellesley Site and requested comment on that finding. After reviewing Alcoa's responsive comments, Ecology determined that Alumax Inc. was the corporation responsible for the release of hazardous substances at the Wellesley Site[9] and found that "Alumax Incorporated is the corporate successor to Hillyard Aluminum."[10] That conclusion is consistent with Union Pacific's research, which shows that Hillyard Aluminum was a subsidiary of Alumax

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[2] *See, e.g.*, CAP at section 2.1 ("Site Description and History"); FA at p. i ("Executive Summary"); FA at p. 1 ("Background and Summary of Remedial Investigation"); Order at V ("Findings of Fact").
[3] *See* Exhibit 3 (1980-05-29 Letter from C.O. Durham (Spokane International) discussing Hillyard lease); Exhibit 5 (1985-08-22 Letter from P. Conley (Spokane International) discussing ARC 1979 assignment of 1966 Hillyard lease).
[4] *See* Exhibit 1 (1966 Hillyard Processing well records).
[5] Aluminum Recycling Corp., Facility Site ID #627; Cleanup Site ID 1133 - https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=1133.
[6] *Id.*
[7] *See* Exhibit 17 (2001 Consent Decree re: Hillyard Wellesley Site, ¶ 4).
[8] *See* Exhibit 17 (2001 Consent Decree re: Hillyard Wellesley Site, ¶ 5); Aluminum Recycling Corp., Facility Site ID #627; Cleanup Site ID 1133 - https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=1133.
[9] *See* Exhibit 17 (2001 Consent Decree re: Hillyard Wellesley Site, ¶ 19).
[10] *See* Exhibit 17 (2001 Consent Decree re: Hillyard Wellesley Site, ¶ 3).

Inc. prior to Alcoa's $2.8 billion acquisition of Alumax Inc. in 1998.[11] Hillyard Aluminum dissolved in 1998[12] and Alumax Inc. n/k/a Alumax LLC (an active entity) appears to have assumed the Hillyard Aluminum liabilities. For reasons unknown to Union Pacific, Alumax Inc. declined to sign the Wellesley Site Consent Decree.[13]

The fact that Hillyard Aluminum operated two nearby facilities around the same time is further confirmed through historic Ecology documents. A 1970 Ecology Water Pollution Status Report identifies the two Hillyard Processing Company facilities: one on Wellesley Avenue and one on Sullivan Road (the location of the Trentwood Property).[14]

Recently obtained aerial images also confirm the earlier operations. A 1972 EDR aerial depicts the Trentwood Property with what appears to be the Hillyard dross facility surrounded by piles of dross.[15]

Accordingly, the Draft Documents should be updated to reflect the Hillyard tenancies and operations. Additionally, as stated in Section II below, Hillyard's successor, Alumax LLC f/k/a Alumax Inc.[16] should be named a PLP at the Trentwood Property.

B. The Imperial West Chemical Co. tenancy was understated: IWC operated a dross processing facility at the Trentwood Property from as early as 1976 to 1998, not merely from 1986 to 1995.

It was previously believed that Imperial West Chemical Co. ("IWC")[17] leased the Trentwood Property from 1986 to 1995;[18] however, our review of recently discovered documents indicates that IWC leased the Trentwood Property from as early as 1976 to 1998.

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[11] *See* Exhibit 34 (1997 Annual Report (10-K) of Alumax Inc.); Exhibit 20 (2006 California Regional Water Quality Control Board Cleanup and Abatement Order, stating that Hillyard Aluminum was a wholly-owned subsidiary of Alumax Inc.); Exhibit 14 (1998 Wall Street Journal Article – "Alcoa Reaches Deal to Buy Alumax for $2.8 Billion in Cash and Stock"). *See also*, infra n.16.

[12] *See* Exhibit 25 (Hillyard Aluminum Recovery Corporation - corporate records).

[13] *See* Exhibit 17 (2001 Consent Decree re: Hillyard Wellesley Site, Exhibit D [2001 Draft Public Participation Plan] p. 2).

[14] *See* Exhibit 2 (1970 Ecology Water Pollution Status Report).

[15] *See* Exhibit 24 (EDR Aerial Photo Decade Package).

[16] As mentioned herein, Alumax Inc. was previously a subsidiary of Alcoa. In 1998, Alumax Inc. (i.e., "old" Alumax) merged into AMX Acquisition Corp. as part of Alcoa's acquisition of Alumax Inc. and, following the merger, AMX Acquisition Corp. changed its name to Alumax Inc. (i.e., "new" Alumax). In 2016, Alumax Inc. converted into Delaware limited liability company "Alumax LLC." *See* Exhibit 28 (Alumax LLC - corporate documents), Exhibit 29 (Alumax Inc. – corporate documents). As of 2020, Alumax LLC was a subsidiary of Arconic Inc. *See* 2020 Arconic Inc. annual report - https://www.arconic.com/global/en/investors/pdf/Arconic-Annual-Report-2020.pdf.

[17] Pioneer Companies, Inc. and related entities, including IWC, were involved in a bankruptcy in or around 2000; however, it does not appear that all environmental liabilities were discharged in connection with that bankruptcy.

[18] *See, e.g.*, CAP at section 2.1 ("Site Description and History"); FA at p. i ("Executive Summary"); FA at p. 1 ("Background and Summary of Remedial Investigation"); Order at V ("Findings of Fact").

In addition to IWC's direct lease with Union Pacific's predecessor commencing in 1986, IWC was also an earlier subtenant of Aluminum Recycling Corporation on a portion of the Trentwood Property.[19] In fact, IWC's tenancy dates back to approximately 1976, around the time IWC was formed—which means that IWC was also likely a subtenant of Hillyard Aluminum (a Trentwood Property operator from approximately 1976-1980).[20]

After ARC filed for bankruptcy and was evicted from the Property in 1986, Union Pacific and IWC entered into a new 1986 lease for the Property.[21] IWC purchased assets from ARC, including dross, as part of the bankruptcy proceedings,[22] and therefore it is possible that IWC is also a *de facto* corporate successor to ARC, which is now defunct.

IWC operations at the Property included manufacturing and distributing aluminum sulfate and aluminum oxides and storage and handling of sulfuric acid in addition to aluminum recycling.[23] In or after 1986, IWC transported to the Trentwood Property dross from the nearby Hillyard Wellesley Site for use in aluminum sulfate manufacturing[24]—further confirming the nexus between the two Hillyard sites. In the early 1990s, Union Pacific conducted an environmental audit at the Trentwood Property and noted that IWC was operating a byproduct dump at the Property, consisting of 30,000 tons of slag produced by ARC and 15,000 tons of alum byproduct generated by IWC since 1976.[25] Although some black dross was allegedly removed in 1986,[26] black dross was observed during IWC's tenancy.[27] IWC continued to lease the Property until 1998, when Kemwater North America Company ("Kemwater") entered into a lease for the Property.

Accordingly, the Draft Documents should be updated to reflect the full scope of the IWC tenancy. Additionally, as explained in Section II, IWC should be named a PLP at the Trentwood Property given that it released dross and other hazardous substances on the Trentwood Property during its operations.

C. *KNA California, Inc. (f/k/a Kemwater North America Company) operated at the Trentwood Property and utilized hazardous substances thereon between 1998 and 2000 and is potentially a successor to IWC.*

In 1996, the parent company of IWC, Pioneer Companies, LLC (f/k/a Pioneer Companies, Inc.), arranged for the sale of IWC's assets (and the assets of another Pioneer subsidiary, Pioneer Water

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[19] *See* Exhibit 5 (1985-08-22 Letter from P. Conley (Spokane International) re: ARC Bankruptcy).
[20] *See* Exhibit 10 (1992-10-19 Letter from J. Gorley (Spokane International) stating that IWC has occupied the Trentwood Property since 1976); Exhibit 26 (IWC – corporate records).
[21] *See* Exhibit 6 (Lease to IWC).
[22] *See* Exhibit 7 (1987-12-00 Phase I Site Inspection Report – Aluminum Recycling Corporation by Ecology).
[23] Exhibit 4 (1985-07-15 Industrial Lease Form - IWC); Exhibit 32 (1985-08-07 Letter from IWC clarifying scope of operations); Exhibit 6 (1986-11-02 Lease to IWC); Exhibit 11 (1992-11-2 Lease Supplemental Agreement to IWC); Exhibit 12 (1995-07-17 Lease to IWC).
[24] Exhibit 7 (1987-12-00 Phase I Site Inspection Report – Aluminum Recycling Corporation by Ecology).
[25] Exhibit 10 (1992-10-19 Letter from J. Gorley (Union Pacific) re: inspection report).
[26] Exhibit 33 (1986-07-15 Real Estate Environmental Audit by Union Pacific).
[27] Exhibit 8 (1992-06-24 Union Pacific Lease File Information comment stating that "photos show that ground is saturated with aluminum oxide and settling ponds and black dross."); Exhibit 9 (1992-06-29 Memo from D. Rice (Union Pacific) enclosing photos depicting black dross); Exhibit 7 (1987-12-00 Phase I Site Inspection Report – Aluminum Recycling Corporation (Ecology) section 2 ("IWC could handle high-salt dross . . . some high-salt black dross has been left on site because of this")).

Technologies, Inc.) to create a new wholly-owned subsidiary, Kemwater North America Company ("Kemwater").28 Although the transaction appears to have been an asset sale, in 1997, Kemwater held itself out to Union Pacific as the successor to IWC and should be equitably bound by that representation.29

At that time, Kemwater also informed Union Pacific that it desired to construct a new facility at the Property and sought a long-term lease. In 1998, Kemwater entered into a five-year lease ("1998 Lease")30 with Union Pacific for the Property for "manufacturing and distribution of aluminum sulfate and oxides, storage and handling of sulfuric acids, a hazardous commodity and purposes incidental thereto . . ." The 1998 Lease provided that upon its commencement, the 1995 Lease with IWC was canceled, "except for any rights, obligations or liabilities arising under such prior lease before cancellation . . . ." Such liabilities included IWC's environmental liabilities based on its operations. In 2000, Kemwater sold its coagulant business and assigned its lease to Kemiron Northwest, Inc. ("Kemiron NW").31 In 2002, Kemwater changed its name to KNA California, Inc.32

Accordingly, the Draft Documents should be updated to reflect the Kemwater tenancy and operations. Additionally, as explained in Section II, Kemwater should be named a PLP at the Trentwood Property given that it was potentially an operator at the time of disposal of dross and the admitted successor to IWC.

D. Kemira and its predecessor Kemiron NW operated at the Trentwood Property and utilized hazardous substances thereon from 2000 to present.

As Ecology is aware, Kemira Water Solutions Inc. ("Kemira") is the present-day lessee and operator of the Trentwood Property. The Draft Documents characterize Kemira as a producer of "industrial water treatment chemicals" and indicate that Kemira "does not stockpile or process aluminum dross."33 While those facts may be true today, Kemira's corporate history reveals a nexus to aluminum dross.

Kemira's predecessor, Kemiron Northwest, Inc. ("Kemiron NW"), was incorporated in Delaware in 2000. As mentioned above, in 2000, Kemiron NW purchased the coagulant business from Kemwater and reported to Union Pacific that Kemiron NW would continue Kemwater's operations at the Property.34 It is unclear whether stockpiled dross was part of the asset sale; however, it appears that some or all liabilities

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[28] Exhibit 22 (2009-03-13 Letter from Olin re: PLP status).
[29] Exhibit 13 (1997-09-17 Letter from Kemwater to Union Pacific).
[30] *See* Exhibit 36 (1998 Lease with Kemwater).
[31] *See* Exhibit 19 (2001 Lease Assignment to Kemiron NW backdated to 2000).
[32] *See* Exhibit 35 (Kemwater – corporate records).
[33] *See, e.g.*, FS at 1.
[34] Exhibit 16 (2001-03-15 Email from Kemiron NW to Union Pacific stating that "We recently purchased the business of Kemwater North America"); Exhibit 15 (2000-06-21 Kemiron NW Land Lease Application Form stating that Kemiron NW "intends to continue [Kemwater's] business activities" at the Trentwood Property).

associated with the operations at the Property were transferred to Kemiron NW.35 Kemwater assigned the 1998 Lease to Kemiron NW in 2001 but backdated the assignment to 2000.36 In a Land Lease Application Form, Kemiron NW reported to Union Pacific that "the intended use [of the Property] will stay basically the same. [Kemiron NW] will continue [Kemwater's] operating activities at the Spokane site."[37] Additionally, Kemiron NW listed the following "Hazardous Materials or Petroleum Products" that would be used on the property: "Aluminum and Iron Sulfates, Aluminum and Iron Chlorides, Poly Aluminum Chloride, Sulfuric Acid, Hydrochloric Acid."[38] In 2006, Kemiron NW merged into Kemira.[39]

Accordingly, the Draft Documents should be updated to reflect Kemira's predecessor's earlier operations. Additionally, as explained in Section II, Kemira should be named a PLP at the Trentwood Property given that (a) its predecessor was likely an operator at the time of disposal of dross and (b) Kemira is the current operator at the Trentwood Property.

E. Pioneer Companies, LLC, the parent company of IWC and Kemwater, arranged for the disposal of dross when it sold (i) IWC's assets to Kemwater in 1996 and/or (ii) Kemwater's assets to Kemiron NW in 2000.

As discussed above, in 1996, Pioneer Companies, LLC (f/k/a Pioneer Companies, Inc.) ("Pioneer")40 arranged the sale of assets of IWC and another company, Pioneer Water Technologies, Inc., to form Kemwater; and in 2000, Pioneer arranged the sale of Kemwater's assets to Kemiron NW, the predecessor of present-day operator Kemira.41 The stockpiled aluminum dross remained at the Trentwood Property, as Pioneer necessarily intended, but Kemiron and its successor Kemira have failed to properly handle or dispose of the dross. Therefore, the transaction arranging for the sale of the aluminum dross and its disposal at the Trentwood Property by virtue of lack of its removal subjects Pioneer to arranger liability under MTCA.

Ecology may recall that it issued a 2008 PLP notice letter to Pioneer for the Trentwood Property stating that Pioneer was the corporate successor to IWC and Aluminum Recycling Corporation, and

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[35] Exhibit 28 (2001-09-91 U.S. Bankruptcy Court Chapter 11 Debtor's Joint Disclosure Statement In re: Pioneer Companies, Inc., *et al.* stating "On August 21, 2000, Pioneer sold its remaining coagulant business and transferred to the buyer fixed assets, including plants in Spokane, Washington, and Savannah, Georgia, certain technology-related assets and liabilities associated with the Spokane operations . . . Pioneer received cash of $0.9 million as payment for Spokane.").
[36] Exhibit 19 (2001-08-15 Lease Assignment to Kemiron NW backdated to 2000).
[37] Exhibit 15 (2000-06-21 Kemiron NW Land Lease Application Form).
[38] Exhibit 15 (2000-06-21 Kemiron NW Land Lease Application Form).
[39] Exhibit 27 (Kemira/Kemiron NW – corporate records).
[40] Pioneer is the parent company of IWC, and IWC is the parent company of Kemwater (n/k/a KNA California, Inc.). Olin Corporation is the ultimate parent company of Pioneer. *See* https://www.olin.com/investors/financials-filings/annual-reports-proxy/ (2020 Olin Annual Report). *See* Exhibit 35 (Kemwater/KNA California – corporate records).
[41] Exhibit 22 (2009-03-13 Olin response to Ecology PLP Letter).

therefore responsible for those companies' dross operations.[42] Pioneer's parent company, Olin Corporation, responded by confirming that "Pioneer was merely the successor to the former parent holding company of [Kemwater], which in turn was the successor to IWC" and "[as] the successor with little direct involvement at the [Trentwood Property], neither Olin nor Pioneer should be considered a PLP."[43] Ecology accepted that explanation in a letter dated March 30, 2009 but "reserve[d] the right to name Pioneer . . . as a PLP at any time should additional information come forward."[44] The arranger activities discussed herein constitute additional information that Ecology should consider in naming Pioneer/Olin a PLP.

Accordingly, the Draft Documents should be updated to reflect the arranger role of Pioneer Companies, LLC at the Trentwood Property. Additionally, as explained in Section II, Pioneer Companies, LLC should be named a PLP at the Trentwood Property.

F. Tenancy Summary

For Ecology's convenience, a summary of the aforementioned tenancies is as follows:

Approx. Years	Operator/Tenant
1966-1980	Hillyard Processing Company / Hillyard Aluminum Company
1980-1986	Aluminum Recycling Corporation ("ARC") (defunct)
1986-1998	Imperial West Chemical Co. (earlier sublease from ARC/Hillyard Aluminum Company from approximately 1976 to 1986; purchased assets of ARC out of bankruptcy)
1998-2000	Kemwater North America Company (admitted it was the successor to Imperial West Chemical Co.)
2000-Present	Kemira Water Solutions, Inc. (successor-in-interest to Kemiron Northwest, Inc., which purchased the business from Kemwater North America Company)

II. Additional PLPs at the Trentwood Property

The Washington Model Toxics Act specifies who is liable for response costs at a facility. In sum, the following persons may be held liable:

- The current owner or operator of the facility;
- Persons who owned or operated the facility at the time of release;
- Persons who generated hazardous waste disposed of or treated at the facility;
- Persons who arranged for the disposal or treatment of a hazardous substance at the facility;
- Persons who transported a hazardous substance for disposal or treatment at the facility, if the facility could not legally receive the substance; and

[42] Exhibit 21 (2008-07-23 Pioneer PLP Notice Letter).
[43] Exhibit 22 (2009-03-13 Letter from Olin to Ecology re: PLP determination).
[44] Exhibit 23 (2009-03-30 Letter from Ecology re: Olin PLP determination).

- Persons who sell and provide written instructions for the use of a hazardous substance, if a person following those instructions causes the release.[45]

The Draft Documents identify only two PLPs: Union Pacific and Pentzer, based on their respective current owner statuses. The Draft Documents do not, however, identify past operators or arrangers as PLPs and, as explained above, there are several viable additional PLPs.

In summary and as discussed above, Ecology should name the following PLPs at the Trentwood Property because they fit within the categories of liable parties under the Washington Model Toxics Act:

1. Alumax LLC f/k/a Alumax, Inc. as the successor to Hillyard Aluminum Corporation (and possibly The Hillyard Processing Company), which, as described above, operated a dross processing facility on the Trentwood Property from 1966 to 1980 and released dross thereon;

2. Imperial West Chemical Co. ("IWC"), which operated a dross processing facility on the Trentwood Property from as early as 1976 to 1998 and released dross thereon;

3. KNA California, Inc. (f/k/a Kemwater North America Company), which operated a dross processing facility on the Trentwood Property from 1998 and 2000 and released dross thereon (and as the admitted successor to IWC);

4. Kemira Water Solutions, Inc. (f/k/a Kemiron Northwest Inc.), the present operator of the Trentwood Property whose tenancy dates back to 2000, and whose predecessor Kemiron Northwest Inc.'s operations likely resulted in the release of dross at the Trentwood Property; and

5. Pioneer Companies, LLC (f/k/a Pioneer Companies, Inc.), the parent company of IWC and Kemwater, which arranged the sale of IWC's assets to Kemwater in 1996 and Kemwater's assets to Kemiron in 2000, functionally resulting in arrangement for disposal of dross at the Trentwood Property.

Union Pacific is in the process of searching for additional parties that may also be properly identified as PLPs. To the extent that Union Pacific identifies any additional PLPs, it will notify Ecology.[46]

III. Site Plan Exhibit

[45] *See* RCW 70.105D.040(1); *see also* Ecology's Policy 500A regarding the "Identification of Potentially Liable Persons."

[46] For example, Union Pacific is presently researching whether Kaiser Aluminum of Washington, LLC (f/k/a Kaiser Aluminum & Chemical Corporation) ("Kaiser") should be named as a PLP given that one or more of the entities discussed herein were in the business of processing dross supplied to them by Kaiser. *See, e.g.,* Exhibit 1 (Hillyard well record indicating that Hillyard was processing dross from Kaiser). Therefore, Kaiser is likely a generator with respect to the Trentwood Property. Union Pacific understands that Ecology issued Kaiser a PLP letter in 2008 based on generator activities; but Kaiser asserted a bankruptcy defense and was not pursued further. However, as conceded by Kaiser, Kaiser's bankruptcy did not fully discharge all environmental liabilities, and Union Pacific is evaluating whether a PLP case may be made against Kaiser. *See* Exhibit 18 (2008-08-20 Kaiser response to Ecology re: PLP status).

As a final miscellaneous comment, the Order did not include an exhibit for the Site Plan. We suggest using Figure 2 from the Revised Feasibility Study as the Site Plan because it provides a reasonable representation of the Site as a whole.[47]

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We welcome the opportunity to discuss any and all aspects of this letter with Ecology, including the new facts set forth herein. We are continuing our investigation based on the recently discovered documents and will provide you with additional supporting documentation as we receive it. Please note that Union Pacific has recently notified the foregoing entities of their PLP status under MTCA and PRP status under CERCLA.

Sincerely,

Robert C. Bylsma
Sr. Regional Environmental Counsel

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David E. Cranston – dcranston@greenbergglusker.com
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[47] *See* Exhibit 31 (Proposed Trentwood Site Plan).

Exhibit List

Exhibit No.	Document
1	1960s Well records for Hillyard Processing Company
2	1970-03 Ecology Water Pollution Status Report
3	1980-05-29 Letter from C.O. Durham (Spokane International)
4	1985-07-15 Industrial Lease Form
5	1985-08-22 Letter from P. Conley (Spokane International)
6	1986-11-02 Lease to IWC
7	1987-12 Phase I Site Inspection Report – Aluminum Recycling Corporation
8	1992-06-24 Union Pacific Lease File Information
9	1992-06-29 Memo from D. Rice (Union Pacific) enclosing photos
10	1992-10-19 Letter from J. Gorley (Union Pacific) re: inspection report
11	1992-11-2 Lease Supplemental Agreement with IWC
12	1995-07-17 Lease with IWC
13	1997-09-17 Letter from Kemwater to Union Pacific
14	1998-03-10 WSJ Article – "Alcoa Reaches Deal to Buy Alumax for $2.8 Billion in Cash and Stock"
15	2000-06-21 Kemiron NW Land Lease Application Form
16	2001-03-15 Email from Kemiron NW to Union Pacific
17	2001-04-12 Consent Decree re: 3412 Wellesley Avenue, Spokane, Washington
18	2008-08-20 Kaiser response to Ecology re: PLP status
19	2001-08-15 Lease Assignment to Kemiron NW
20	2006-06-08 CA Regional Water Board Cleanup and Abatement Order
21	2008-07-23 Pioneer PLP Notice Letter
22	2009-03-13 Letter from Olin to Ecology re: PLP determination
23	2009-03-30 Letter from Ecology re: Olin PLP determination
24	EDR Aerial Photo Decade Package – Trentwood Property
25	Hillyard Aluminum Recovery Corporation - corporate records
26	IWC – corporate records
27	Kemira/Kemiron NW – corporate records
28	2001-09-91 U.S. Bankruptcy Court Chapter 11 Debtor's Joint Disclosure Statement In re: Pioneer Companies, Inc.
29	Alumax Inc. – corporate records
30	Alumax LLC – corporate records
31	Trentwood Site Plan
32	1985-08-07 Letter from IWC clarifying scope of operations
33	1986-07-15 Real Estate Environmental Audit by Union Pacific
34	Alumax Inc. 10-K (1997)
35	Kemwater/KNA California – corporate records
36	1998-08-20 Lease with Kemwater

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[11] The 36 exhibits total 556 pages that can be viewed in Ecology's Aluminum Recycling Trentwood online comments site for the CAP. We omitted the pages from this document to reduce the file size and downloading time.

Ecology's response

Ecology appreciates the additional information provided on the site history and PLPs. UPPR provided a significant amount of information, including potential minor revisions to lessee timelines and corporate successorship. However, important pieces of information, such as leases, were not included.

In response to the comment, Ecology has elected not to revise those elements of Section V in the Enforcement Order with this information. However, Ecology has made the following change in response to the comment:

- We added the following sentence to Section IV(B): "Ecology retains the right to name additional PLP(s) for this Site as credible evidence is found or presented to the Agency." This makes it clear that Ecology's review of the information will continue, and Ecology can name additional PLP(s) at any time.