

---

**Date:** October 29, 2020

**To:** FILE

**Through:** Michael E. Kucinski, Manager, Western Region Environmental Cleanup Section

**From:** Bruce Scherzinger, RG  
Western Region

**Subject:** Neilsen Metal Industries Inc, ECSI # 220; Staff Memorandum in support of a Conditional No Further Action determination

This document presents the basis for the Oregon Department of Environmental Quality's (DEQ's) recommended a Conditional No Further Action (NFA) determination for the Neilsen Metal Industries Inc., in Salem. As discussed in this report, contaminant concentrations in dust residue, soil and groundwater are below acceptable risk levels.

The proposed NFA determination meets the requirements of Oregon Administrative Rules Chapter 340 Division 122, Sections 010 to 0140; and ORS 465.200 through 465.455.

The proposal is based on information documented in the administrative record for this site. A copy of the administrative record index is presented at the end of this report.

## 1. BACKGROUND

### Site location.

The site's location can be described as follows:

- Address: 3501 Portland Rd. NE, Salem, Marion County, Oregon.
- Latitude 44.971591° North, longitude 123.006307° West
- Tax lot 00500, Township 07 South, Range 03 West, Section 12CC

### Site setting.

The site is a 7.83 acre 'L' shaped. There is one 'L' shaped building on the site that appears to have been improved over time and is currently about 143,000 square feet in size. Almost all of the remainder of the property is paved with asphalt except for two areas (about 0.6 acres total) which are covered with grass. The site is zoned Industrial Commercial and is within the Portland Fairgrounds Road Overlay Zone.

North of the site are several commercial businesses including: Viking Auto Sales, El Ranchito Taqueria, La Bonita Mexican Bakery, and T-Mobile, with additional commercial business beyond. All of these properties are zoned Industrial Commercial. East of the site is Portland Road, which is fronted with multiple commercial businesses, including: Shell, Casa Mexico, and Fruteria La Cabana all of which are zoned Retail Commercial. Beyond the retail businesses are single family residences. South of the site is a large warehouse for Ventura Foods which is zoned Industrial Commercial. Additional commercial properties are located further south. West of the site is a railroad line with many industrial properties zoned General Industrial.

**Physical setting.**

The site is generally flat and sits at an elevation of about 171 feet above mean sea level. There is a slight slope from Portland road on the east to the rail line in the west. Historically there was a large swale/ravine located along the southern property boundary that was apparently filled in during development of one or both properties. There is also a steep drop of about 30 vertical feet beyond the rail line before flattening out again. Topography in the surrounding area is generally flat with a slight slope to the northwest toward a branch of Claggett Creek.

The major geologic bedrock unit is mapped by the USGS as being lacustrine and fluvial sedimentary rocks of Pleistocene age. These are further defined as unconsolidated to semi-consolidated lacustrine clay, silt, sand, and gravel; in places includes mudflow and fluvial deposits and discontinuous layers of peat. Shallow soils across the site are mapped according to the USDA as the Woodburn silt loam, 0 to 3 percent slopes. The Willamette Silt unit consists of silt and fine sand deposited in the central and southern Willamette Valley by late Pleistocene glacio outburst floods. Borings completed at the subject property encountered the Willamette Silt unit, which locally consisted of brown, medium-stiff to stiff fine sandy silts to depths of 16.5 to 27.5 feet below ground surface. Well logs within half a mile of the site document the Willamette Silt unit extending to depths of 22 to 50 feet below ground.

Beneath the Willamette Silt unit site borings encountered uncemented to partly cemented sandy gravels with up to cobble-sized clasts extending to the maximum depth explored of 100 feet below ground. These sandy gravels comprise the Troutdale Formation, which correlates with the Willamette Aquifer. The Troutdale Formation is composed predominantly of sand and gravel with lesser amounts of silt and clay, and serves as the predominant aquifer beneath the Salem-Keizer area. Lithologic variations were observed in the Troutdale formation encountered at the site.

The principal aquifers beneath the site occur in the Willamette aquifer (Troutdale geologic unit) and to a lesser degree within the underlying fracture zones of the Columbia River Basalt group. Water bearing zones within the Troutdale aquifer consist primarily of permeable sands and gravel that are a few tens of feet to several tens of feet thick separated by thinner interbeds of sand, silt, and clay. Groundwater was encountered in reconnaissance borings onsite in sandy gravels at depths of around 39 feet below ground. Static water levels stabilized around 36 feet below ground. Groundwater was encountered in several monitoring wells at a depth of approximately 45 feet below ground with static water levels between 34 and 38 feet below ground.

Topographic maps show the nearest source of surface water to the site as a branch of Claggett Creek located about 450 feet northwest of the site and flowing to the north. Aerial imagery suggest this may be an intermittent stream or a drainage swale and the nearest perennial source of surface water is Claggett Creek and Claggett Creek Reservoir located about 900 feet north of the site.

**Site history.**

From 1957 through about 2005, Nielsen Manufacturing Inc. manufactured precision-cut parts and metal cabinets from sheet aluminum at the site. Over the years, the layout of the site changed with various building additions being added and then demolished. The facility had taken its current form sometime between 1994 and 2000.

The site was owned by Nielsen Manufacturing Inc and their manufacturing operations and waste management practices came under scrutiny by the US EPA in the 1980s. In 1987 the site was entered into the EPAs Preliminary Site Assessment database, which was intended to identify potential hazards at the

site. A 1988 Site Screening Inspection by an EPA contractor recommended further assessment of soil and groundwater beneath the site. In response, the site was added to DEQ's ECSI database.

## **2. BENEFICIAL LAND AND WATER USE DETERMINATIONS**

### **Land use.**

The site and properties to the north and south are zoned IC, Industrial Commercial. The industrial commercial zoning allows for very limited residential use of properties and generally has few or no restrictions for retail service, business/professional services, motor vehicle sales, entertainment/cultural facilities, education services, civic services, construction/contracting services, and manufacturing.

Properties to the west of the site are zoned IG, General Industrial and have similar regulations to the site. Properties east of the site along Portland Road are zoned CR, Retail Commercial and have similar regulations to the site except there are limited 'heavy' industry and manufacturing uses allowed.

The site is currently used as the Career Technical Education Center, which is used by 11<sup>th</sup> and 12<sup>th</sup> grade students from the Salem-Keizer School District. The CTEC has several Education programs including Residential Construction; Manufacturing, Welding, and Engineering; Cosmetology; Video and Game Design Animation; Drone Technology and Robotics; Auto Body Repair and Painting; Law Enforcement; Business Development and Leadership; Culinary Arts Management; and Agriculture Science.

The site is located along Portland Road, which serves as a northern arterial road into and out of the city. The site is also on the edge of a larger industrial area to the west. Normally future site use in this case would be assumed to be residential, however, given the age of the students (high school) and their part-time status the urban residential receptor would be used in the risk assessment.

### **Groundwater use.**

A beneficial water use determination report was submitted on July 25, 2017. The Oregon Water Resources Database was searched for well records within three quarter sections (Township 07 South, Range 03 West southwest ¼ of Section 12, SE ¼ of Section 11, and NE ¼ of Section 14) in an effort to identify all registered wells in the area. The database identified 16 well logs within the search area. Of the 16 well logs identified, eight logs were for well abandonments and one well log was for an alteration of an existing well. The identified wells were completed between 92 and 250 feet deep and are listed for industrial use. The closest well to the site, MARI17005, is located on the adjoining property to the south (cross gradient) and is screened across gravels between 82 and 94 feet below ground.

A door-to-door survey was also completed of properties in the immediate vicinity. The survey encompassed most of the commercial businesses within the Salem Industrial Park to the west of the site. Verbal responses were gathered from 10 of the 15 businesses surveyed and no one interviewed was aware of any active water wells in the search area.

A well located at 3530 Brady Court (located directly northwest of the site across the railroad tracks) is currently unused, capped, and has no intention of being used in the future.

Potable water for the area is provided by the City of Salem and is likely to continue in the future. The City of Salem obtains drinking water from an intake on the North Santiam River located about 17 miles east of Salem. Salem Public works also uses groundwater wells for drinking water supply. The City of Salem also operates an aquifer storage and recovery system that is included in their wellhead protection program.

The City of Keizer's boundary is approximately a half-mile northwest of the site. The City of Keizer operates 15 municipal drinking water wells which draw from the Troutdale aquifer. The City of Keizer also supplies the City of Salem with drinking water in emergency situations. Groundwater influence maps are available from the City of Keizer that show six of the municipal wells (Numbers 1, 2, 3, 5, 9, and 11) draw water from an area that includes the site. The site sits within the 10 to 20 year mapped travel time for the Keizer wells. Rough estimates based on mapped distances indicate that any groundwater impacts could take approximately 11 years to migrate to the Keizer wells.

Based on all of this information, groundwater in the area is used for beneficial purposes. Industrial uses are the nearest receptors and the City of Keizer's municipal wells are known to draw water from the area. Given the municipal wells provide water to over 36,000 residents a conservative residential receptor is deemed protective for current or future use.

#### **Surface water use.**

As mentioned above topographic maps show the nearest source of surface water to the site as a branch of Claggett Creek located about 450 feet northwest of the site and flowing to the north. Aerial imagery suggest this may be an intermittent stream or a drainage swale and the nearest perennial source of surface water is Claggett Creek and Claggett Creek Reservoir located about 900 feet north of the site. The Oregon Water Resources Department identifies one water right along Claggett Creek near the reservoir for River Bend Sand and Gravel to use up to 1.5 cubic feet per second of water. Given the distance from the site and the nature of contamination at the site there is no reasonable expectation of impacts to Claggett Creek from the site.

Stormwater onsite is believed to mainly be collected in storm drains that connect to the City of Salem storm sewer located beneath Portland Road. Minimal storm drains are visible from Google Earth or Google Street view. However, given the size of the facility and amount of impermeable surface (about 7 acres) it is unlikely that storm water infiltrates along the perimeter of the property.

### **3. INVESTIGATION AND CLEANUP WORK**

The site's manufacturing operations and waste management practices came under scrutiny by the US EPA in the 1980s. In 1987, the site was entered into the EPA's Preliminary Site Assessment database, which was intended to identify potential hazards at the site. A 1988 Site Screening Inspection by an EPA contractor recommended further assessment of soil and groundwater beneath the site. In response, the site was added to DEQ's ECSI database.

In 2014 a limited Phase II was conducted to evaluate potential impacts to the site from recognized environmental conditions at the site including: historical disposal area for paint and solvents, historical disposal area for paint and solvent wastes, historical photograph processing area, historical printing area, historical plate shop area, historical paint booth areas, historical chromate conversion and process area, historical automobile wrecking yard, and a historical underground storage tank. Hexavalent chromium was detected at levels below the urban residential Risk Based Concentration (RBC) for part-time high school student.

In August and September 2016, 19 soil borings were installed to collect soil and groundwater data from former identified areas. The results of this investigation identified hexavalent chromium in soil and groundwater at concentrations that exceeded various risk based concentrations. This investigation also identified that a wall had been constructed to prevent access to former chromating areas that prevents

exposure to any residual indoor impacts such as dusts. A fence was recommended to be installed around an identified area of shallow soil impacts that would prevent exposure to students and that the owner should consider capping the area to further prevent exposure. A contaminated Media Management Plan was also recommended to properly manage and soil generated during future construction or redevelopment at the site.

In June 2017, 53 dust wipe samples were collected throughout the building to address residual contamination that may have been present in the building. The 95% upper confidence level was hexavalent chromium which was screened against a value published by the US Army Center for Health Promotion and Prevention Medicine and showed that concentrations inside the building were 76% less than the screening level. No further cleaning or remediation were recommended inside the building.

In July 2017 a beneficial water use determination was completed for the site and surrounding area. As described above, there is industrial use of groundwater around the site and that the groundwater is used by the City of Keizer further to the northwest but these wells draw water from below the site. At the same time a risk assessment was performed on available data. The locality of the facility in the risk assessment was identified as not being delineated, specifically in groundwater. The risk assessment identified no constituents of concern for the site in soil or groundwater, and it did not fully address groundwater because the site uses municipal water. It found no cumulative risk at the site and found ecological risk to be unlikely. The only recommendation from the risk assessment was to maintain and follow the previously prepared Contaminated Media Management Plan.

In October 2017 two monitoring wells were installed which were screened from 35 to 50 feet below ground to match an existing well onsite. One boring was advanced to 100 feet to verify lithology and existence of possible confining unit or aquitard. One well was installed up gradient and the other down gradient of the site. The wells were developed and surveyed at this time but not sampled.

In December 2017, February 2018, and August 2018 the monitoring wells were sampled. Depth to groundwater was measured and is interpreted to flow to the northwest, roughly perpendicular to the railroad tracks. Concentrations of hexavalent chromium were above all groundwater ingestion screening levels but below construction/excavation worker screening levels.

In August 2018 a background study on hexavalent chromium was conducted. The study used three borings placed near the eastern, southeastern, and southern property lines of the site. These borings were placed up gradient and as far away from the known source areas as possible without going offsite. Soil and groundwater samples collected were analyzed for hexavalent chromium, total chromium, and iron. The study attempted to show that background concentrations at the edge of the property are similar to those near former source areas. It also discussed the background concentrations of hexavalent chromium in Willamette Valley municipal water supplies. Concentrations of hexavalent chromium are generally an order of magnitude greater than the individually mentioned municipal water supplies. It does show that the Unregulated Contaminant Monitoring Rule 3 (EPA) published data indicates the highest detection in Oregon is slightly higher than has been detected at the site (2.2 ppb vs 2.04 ppb). However, the data does not indicate where that high detection was from. DEQ reviewed this data and it shows the average concentration for the Salem and Keizer water supplies is 0.066 ppb and the 95% confidence interval is 0.078 which are both two orders of magnitude lower than concentrations seen onsite.

In February 2020, three offsite borings were completed to delineate the extent of hexavalent chromium impacts to the area groundwater. The borings were installed in the general vicinity of Brady Court to the west of the site. Each boring was completed to 100 feet below ground. Soil samples were collected at the

first encountered soil-water interface and then subsequently at each water bearing unit. Groundwater was sampled at about 40 feet below ground above an anticipated confining unit with additional groundwater samples collected in about 20 foot intervals targeting any more hydraulically productive zones encountered.

**Nature and extent of contamination.**

Based on previous assessments of the subject property and historical land use of the site the COIs for the site initially consisted of diesel/oil range petroleum, VOCs, PAHs, PCBs, and total metals.

*Soil:*

No petroleum, VOC, or PAH contamination was detected in any of the samples analyzed. PCBs were tested in select samples collected from the former spill bottom disposal area. The highest concentration detected was 0.00638 mg/Kg in surface soil from boring B39 at this location. This concentration is below the most conservative screening level. Data suggests that impacts of PCBs are limited to the former still bottoms disposal area.

All detections of total arsenic, barium, beryllium, cadmium, chromium, copper, nickel and silver were below their default background concentrations for the South Willamette Valley, suggesting no significant impacts for the site for these contaminants of concern. Total chromium, manganese, and iron were detected in off-site soils, but below their respective default background concentrations.

Hexavalent chromium (CrVI) was detected in on-site soil at up to 7.48 mg/Kg, exceeding the most conservative screening level of 0.30 milligrams per kilogram (mg/Kg). CrVI has been detected in most of the soil borings sited at and near the former still bottom disposal area, under the existing building at and near the closed chromate conversion area, and at the former north chromate conversion area, located in the central portion of the subject site (Figure 3). Most detections are generally in the upper five (5) feet; however, there were a few detections in soil samples collected at approximately eight (8) feet depth (borings B58, B59, B72, all at concentrations less than 0.5 mg/Kg) and over ten (10) feet depth [borings B19 (0.653 mg/Kg), B69 (0.323 mg/Kg), B70 (0.219 mg/Kg), and B71 (0.392 mg/Kg)].

- Closed chromate conversion area: The highest concentrations of CrVI were found in soil borings sited under the former closed chromate conversion area, located in the southwestern portion of the building (up to 7.48 mg/Kg at 1.5 feet bgs in B50, attenuating to 0.774 mg/Kg by 5.5 feet bgs). Impacted soil appears to be limited to soil under the current building location, though possibly comingling with impacts from the former still bottom disposal area to the west.
- Former still bottom disposal area: The highest concentrations of CrVI were found in soil borings sited at the former still bottom disposal area (3.28 mg/Kg in B10, attenuating to <0.4 mg/Kg by eight (8) feet bgs). Impacted soil at this location appear appears to be limited to the former spill bottom disposal area, possible extending towards the adjacent railroad right-of-way to the west, and likely comingling with impacts from the closed chromate conversion area to the east.
- North chromate conversion area: The maximum detection of CrVI in the north chromate conversion area is 0.653 mg/Kg, detected at 12 feet bgs in B19; however, most detections in this area were in surface soil 0.566 mg/Kg (B17) and 0.496 mg/Kg (B70). Impacted soil is likely limited to the immediate area of the former chromate conversion operation.
- Hexavalent chromium was not detected in offsite soil samples.

Total lead was detected at up to 272 mg/Kg in surface soil located at boring B10, sited within the former still bottom disposal area, exceeding its default background concentrations which suggests the site has contributed to the elevated lead concentrations. The only other detection of total lead that exceeded both its default background concentration was in surface soil at boring B64 (91.7 mg/Kg), which was cited in

the southern margins of the former still bottom disposal area. This data suggests the extent of impacts of total lead in soil is limited to surface soil within the former still bottom disposal area.

*Groundwater:*

Petroleum was not analyzed for and not necessary based on the lack of detection in soil. PAHs were only analyzed from boring B10 near the still bottom disposal area as the only likely source of PAHS and none were detected.

Only three VOCs were detected in any of the groundwater samples analyzed: Chloroform (B73 at 4.3 µg/L). The likely source area is the still bottom disposal area, and plume morphology suggests a north-northeast flow direction. Based on the low-level detections and lack of detections in other reconnaissance borings, the plume is likely confined to the site margins and does not likely extent offsite. Chloromethane was detected at less than the most conservative screening level. Lastly, toluene was detected at a trace concentration in boring B63.

Lead and arsenic were detected in temporary borings at low concentrations that may result from groundwater interacting with naturally occurring concentrations of these metals in the soil. Total CrVI was tested in onsite temporary borings and monitoring well ground water samples. Total CrVI was detected in seven (7) of these samples (borings B40, B58, B64, B65, B68 and B72 and monitoring well MW-01), with a maximum concentration of 2.72 micrograms per liter (µg/L) in MW01, exceeding its most conservative screening level (0.05 µg/L). Down gradient samples for dissolved CrVI were essentially below laboratory detection limits and only 2 of the 16 samples had detections at estimated concentrations.

#### **4. RISK EVALUATION**

##### **Conceptual site model.**

To evaluate human exposure to residual chemical contamination requires an assessment of the type and extent of that exposure. This is based on current and reasonably likely future site use. DEQ publishes risk-based concentrations (RBCs) for contaminants commonly encountered, for different types of exposure scenarios. These RBCs are conservative estimates of protective levels of contaminants in soil, groundwater and air. Table 1 shows potential exposure pathways and receptors for this site. Based on this, applicable RBCs are identified and used for risk screening.

**Table 1. Identification of applicable RBCs, based on pertinent pathways and receptors (see below)**

**RISK BASED CONCLUSIONS**  
 SKSD-Career Technical Education Center (CTEC) - Site Investigation  
 Salem, Oregon

	Pathway	Receptor	Is Pathway Com	Is RBC Exceeded?	Comments
<b>Soil</b>	Ingestion, Dermal Contact and Inhalation	Residential	Restricted	Yes	Site is and will remain a technical school. Site will remain paved or developed preventing exposure to contaminated soil. Concentrations all below construction and excavation worker RBCs.
		Urban Residential	Restricted	Yes	
		Occupational	Restricted	Yes	
		Construction Work	Yes	No	
		Excavation Worker	Yes	No	
	Volatilization to Outdoor Air	Residential	Yes	No	Concentrations are below all RBCs.
		Urban Residential	Yes	No	
		Occupational	Yes	No	
	Vapor Intrusion Into Buildings	Residential	Yes	No	Concentrations are below all RBCs.
		Urban Residential	Yes	No	
		Occupational	Yes	No	
	Leaching to Groundwater	Residential	Restricted	Yes	All RBCs exceeded. No current use of groundwater within LOF. EES will prevent future use.
		Urban Residential	Restricted	Yes	
		Occupational	Restricted	Yes	
	<b>Groundwater</b>	Ingestion & Inhalation From Tap Water	Residential	Restricted	Yes
Urban Residential			Restricted	Yes	
Occupational			Restricted	Yes	
Volatilization to Outdoor Air		Residential	Yes	No	Concentrations are below all RBCs.
		Urban Residential	Yes	No	
Vapor Intrusion Into Buildings		Residential	Yes	No	Concentrations are below all RBCs.
		Urban Residential	Yes	No	
		Occupational	Yes	No	
Groundwater in Excavation		Occupational	Yes	No	Concentrations are below all RBCs.
<b>Soil Gas to VI</b>		Residential	Yes	No	Soil gas sampling not required based on soil and groundwater results.
	Urban Residential	Yes	No		
	Occupational	Yes	No		
<b>Air</b>	Residential	Yes	No	Air sampling not required based on soil and groundwater results.	
	Urban Residential	Yes	No		
	Occupational	Yes	No		
<b>Ecological</b>	Terrestrial & Surface Water	No		Site and contaminated are is developed as a commercial/industrial site. Impacted surface soils are covered with asphalt and will remain covered by EES. No habitat impacte or likely to be. No further investigation required.	

Neilsen S  
 Notes:  
 CMMP - Contaminated Media Management Plan  
 HASP - Health and Safety Plan



The site is currently used as a technical school for high school students. Currently the facility is used by high school students on a part-time basis therefore urban residential is considered protective. Surface soil impacts are largely covered by asphalt paving except for a grassy area near Portland Road which the Department understands will be paved for additional parking. Direct contact with contamination by day to day occupants at the site is therefore deemed incomplete but an EES will be recorded to ensure the site remains capped preventing future exposure.

The leaching to groundwater and groundwater ingestion pathways are deemed incomplete as there is no beneficial use of groundwater in the LOF. To ensure there is no future use of groundwater in the area the EES will include a prohibition on beneficial groundwater use.

All other pathways are deemed applicable and complete for the site.

### **Contaminant Concentrations.**

Attached are tables presenting all available soil and groundwater sampling data from the site. Also attached is a table that presents the maximum concentrations for each analyte in the different media (surface soil, subsurface soil, and groundwater). Based on the Conceptual Site Model above all of DEQ's applicable RBCs are also shown on this table. As shown on this table none of the applicable RBCs have been exceeded.

### **Human health risk.**

As stated above, none of the remaining contamination exceeds any RBCs based on the conceptual site model above. Therefore there is not an unacceptable human health risk at the site currently. However, the potential for future changes at the site could potentially expose occupants at the site to unacceptable risk. In order to prevent this from happening an EES must be recorded on the property deed. The EES should include provisions that the site remain capped. Groundwater beneath the site remains contaminated with CrVI and beneficial consumptive uses of groundwater should be prohibited including the installation of water wells.

The interior of the building was cleaned to remove CrVI residues and dusts from historical operations. A certified Industrial Hygienist (Forensic Analytical Consulting Services (FACS)) was used to analyze through surface wipe sample analysis to evaluate and determine if the inside of the building is safe for the occupants. Based on their sampling of the areas of concern the sample result concentrations were below the US Army Center for Health Promotion and Prevention (USACHPPM) which used a target risk level of 1 in a 1,000,000 risk factor. The Department relied upon the certified industrial hygienist's determination the inside of the buildings was determined to be safe for the intended use.

### **Ecological risk.**

The site is developed as an industrial building and school. Invasive blackberries are present along the western railroad right of way. Further west are additional industrial properties. Surface soil impacts are limited to the site and expected to be fully paved soon. Impacted groundwater is found around 15 feet below ground and does not discharge to surface water. Based on all of this information there is no significant habitat that may be impacted from the site and no further ecological screening was required.

## 5. RECOMMENDATION

Following an investigation of contamination and based on sample results for soil, groundwater and surface residue (building interior), acceptable risk levels are not exceeded if an EES is implemented. An EES should be prepared and recorded with Marion County that will require:

- Prohibit beneficial consumptive use of groundwater at the site.
- Prohibit growing any food crops without prior Department approval.
- Implement the CMMP dated January 5, 2017, which covers the entire property.
- Maintain all protective surfaces (i.e. concrete, asphalt) which includes driveways, parking lots and floors to reduce direct soil contact and storm water infiltration.

Following the recording of the EES, a No Further Action determination is recommended for this site. The No Further Action determination should be recorded in DEQ's ECSI database (ECSI # 220).

## 6. ADMINISTRATIVE RECORD

Letter: Notice of Preliminary Assessment – October 20, 1987 – Bill Glasser (EPA)  
Report: Site Inspection Report for Neilsen Metal Industries – December 1988 – Ecology and Environment Inc.  
Report: Site Assessment for Existing Manufacturing Facility and Two Adjacent Parcels – February 8, 1990 – Geotechnical Resources Inc.  
Report: Subsurface Exploration Borings – February 8, 1990 – Geotechnical Resources Incorporated  
Letter: Notice of no further investigation – May 21, 1993 – David Bennett (EPA)  
Report: Level I Environmental Site Assessment – June 15, 1994 – Geotechnical Resources Incorporated  
Report: EDR Radius Map with GeoCheck – December 27, 1996 – Environmental Data Resources  
Report: Level I Environmental Site Assessment Update – January 23, 1997 – Geotechnical Resources Incorporated  
Report: Environmental Property Review – October 11, 2006 – CJE Consultant and Constructors  
Misc: Copy of Ground Lease between Suntek Oregon LLC and Mountain West Investment Corporation – July 15, 2014  
Report: Phase I Environmental Site Assessment – August 5, 2014 – Ktec Environmental Consulting  
Report: Phase II Limited Site Investigation Report – September 9, 2014 – Ktec Environmental Consulting  
Report: Contaminated Media Management Plan – October 8, 2014 - Ktec Environmental Consulting  
  
Letter: Update on Soil and Ground Water Contamination – October 25, 2016 – Evren Northwest  
Report: Laboratory Report on Water Samples – November 20, 2016 – Brooks Applied Labs  
Report: Supplemental Site Investigation Work Plan – November 22, 2016 – Ktec Environmental Consulting  
Letter: DRAFT Demand for Payment and Removal and Remedial Actions – December 29, 2016 – Bruce Scherzinger (DEQ)  
Memo: No Longer Contained-In Determination – January 13, 2017 – Bruce Scherzinger (DEQ)  
Report: Surface Dust Characterization and Occupational Risk Assessment for CrVi – July 19, 2017 - Evren Northwest  
Report: Beneficial Water Use Determination – July 25, 2017 - Evren Northwest  
Report: Risk Assessment Former Nielsen Manufacturing Property - July 27, 2017 - Evren Northwest  
Memo: No Longer Contained-In Determination – August 25, 2017 – Bruce Scherzinger (DEQ)  
Report: Monitoring Well Installation Work Plan – Sept 18, 2017 – Evren Northwest  
Report: Monitoring Well Installation Report – January 10, 2018 – Evren Northwest  
Report: December 2017 Groundwater Monitoring Report – June 18, 2018 – Evren Northwest

Report: February 2018 Groundwater Monitoring Report – June 18, 2018 – Evren Northwest  
Report: August 2018 Groundwater Monitoring Report – September 20, 2018 – Evren Northwest  
Report: Background Study Hexavalent Chromium – September 30, 2018 – Evren Northwest  
Agreement: Signed VCP Agreement – October 30, 2018 – Mountain West Incorporated  
Report: Offsite Investigation Work Plan – July 9, 2019 – Evren Northwest  
Report: Offsite Investigation Work Plan – January 2, 2020 – Evren Northwest  
Report: Groundwater Monitoring Report First Quarter 2020 – March 30, 2020 – Evren Northwest  
Report: Down Gradient Delineation/Investigation of Hexavalent Chromium – April 8, 2020 – Evren Northwest  
Report: Risk Assessment Former Nielsen Manufacturing Property – July 15, 2020 - Evren Northwest  
Report: Addendum Contaminated Media Management Plan – January 5, 2017 - Ktec Environmental Consulting

## 7. ATTACHMENTS

### Figures:

1. Site Vicinity Map
2. Site Plan
3. Soil Sample Location Diagram
4. Groundwater Location Diagram
5. Locality of Facility (Soil)
6. Locality of Facility (Groundwater) Need to insert new LoF GW

### Tables:

1. Sample Location Summary
2. Summary of Analytical Data, Surface Soil
3. Summary of Analytical Data, Subsurface Soil
4. Summary of Analytical Data, Ground Water, Monitoring Wells
5. Summary of Analytical Data, Reconnaissance Ground Water
6. Further Evaluation of COPCs in Surface Soil
7. Further Evaluation of COPCs in Subsurface Soil, Onsite
8. Further Evaluation of COPCs, Ground Water, Onsite
9. Applicable DEQ Risk Based Screening Concentrations