

January 29, 2018

Vicki ZumBrunnen
PACCAR Inc.
P.O. Box 1518
Bellevue, WA 98004

**Re: Off-Site Well Decommissioning Report
PACCAR Renton Site
Renton, Washington
1639-73**

Dear Vicki:

This letter provides a summary of the activities related to the decommissioning of off-site monitoring wells at the PACCAR Renton site in Renton, Washington. The wells, LW-13S and LW-13D, were located beneath the footprint of the proposed PACCAR Parts Distribution Warehouse. These wells were required to be abandoned as part of the construction project. We understand that Washington Department of Ecology (Ecology) has approved decommissioning these wells.

Project Background

The PACCAR site is in the City of Renton, Washington, approximately ½-mile northeast of the downtown area. The site is bounded by Garden Avenue North on the west, Houser Way North on the east, North 4th Street on the south, and North 8th Street on the north. The PACCAR site is 82 acres in area. The northern 40 acres were initially remediated to allow construction of the Kenworth Truck Plant. The truck plant began operations in 1993.

The PACCAR Renton site was placed on the National Priorities List (NPL) on February 21, 1990. The cleanup is managed by Washington State Department of Ecology (Ecology) under the authority of the Model Toxics Control Act (MTCA; Chapter 70.105D RCW) and other applicable state and federal laws.

After the 2014 periodic review, Ecology reduced the number of monitoring wells requiring water quality sampling to eight wells, all on site. The remaining on-site wells, as well as the off-site wells, are no longer to be required for monitoring and should be decommissioned, as required by Washington regulations (WAC 173-160-460) for unused wells. Off-site wells are especially vulnerable to damage and provide a potential pathway for storm water to infiltrate into groundwater. We identified a total of 17 off-site wells that can be decommissioned (Table 1).



For wells that have been legally completed, and for which a drilling report is available, decommissioning can be done by filling the casing with bentonite or cement. For wells with no drilling report, the casing must be removed and the borehole will be grouted in place with bentonite or cement.

Scope of Work

The scope of work is outlined below.

Well Decommissioning Activities

- All wells were decommissioning per state regulations using Holt Services, a Washington licensed driller between January 18 to 26, 2018. The drillers provided all drilling materials and equipment to complete decommissioning activities. The driller completed the decommissioning logs and submitted the logs to Ecology.
- The drilling contractor completed the following activities:
 - Removed the aboveground monuments around each well.
 - Drilled out the PVC pipe from the well boreholes. The wells were removed using hollow stem drilling methods.
 - Grouted the boreholes using hydrated bentonite.
 - Transported the well cuttings to an off-site location for disposal.
- The drilling contractor completed the following activity:
 - Filled the casing with hydrated bentonite.
- The drilling contractor decommissioned 17 wells using the following procedures:
 - Two wells (OSP-9D and OSP-8D) with legal wells logs were abandoned in-place. Borehole (OSP-9D), located in a parking lot, was repaired with a concrete patch. Borehole (OSP-8D) is in a landscaped area which was restored to match surrounding conditions by adding top soil and reseeding with grass.
 - One well (OSP-13D), with legal wells log and located in City right-of-way, was abandoned in-place. After filling the casing with bentonite, the monument was left in-place.
 - One well (B-15D), located on PACAAR property, should be drilled out because water under artesian pressure is leaking from top of the well. The well is in a landscaped area and was be restored to match surrounding conditions by adding top soil and reseeding with grass.



- Three wells (OSP-5D, OSP-5S, and OSP-3D), located on sidewalks within City of Renton right-of-ways, were abandoned in-place. A variance was obtained from Department of Ecology to abandon wells OSP-5D and OSP-5S in-place.
 - Two wells (CW-2D and CW-2S), located on City of Renton right-of-ways, were abandoned in-place. A variance was obtained from Department of Ecology to abandon the wells in-place.
 - Six wells (HC-4I, HC-5I, HC-6I, OSP-6D, OSP-6S and OSP-4D), located on City of Renton street right-of-ways, were decommissioned by drilling out, the monuments removed, and temporary concrete patches applied.
- Hart Crowser obtained appropriate City of Renton street use permits and provided traffic control during decommissioning activities per traffic controls plan following City of Renton standards.

Future Work – Asphalt Patching and Repair

The City of Renton requires that any new penetration of street pavement to be repaired to existing conditions using hot patch asphalt following City of Renton standards. Well decommissioning by drilling requires a new penetration of street pavement. The contractor will provide their own permits and traffic control per City of Renton standards.

We appreciate this opportunity to continue to work with you on this project. If we may provide any additional information or clarification of this proposal, please call us.

Sincerely,

HART CROWSER, INC.

ROY E. JENSEN, LHG

Senior Hydrogeologist

Roy.jensen@hartcrowser.com

Attachments:

Table 1 – PACCAR Renton Decommissioned Off-site Well Decommissioning

Figure 1 – Decommissioned Well Location Map

Attachment A – Photographs of Field Activities

Table 1 - PACCAR Renton Off-site Well Decommissioning

Well Name	Boring Depth (ft)	Well Diameter (in)	Monument Type	Monument Status	Decommission Method	Location	Future Task 2
B-15D	40	2	Flush	Removed	Drill-out	Landscaping	NFA
CW-2D	35	2	Flush	In-place	Abandon In-place	Street	NFA
CW-2S	20	2	Flush	In-place	Abandon In-place	Street	NFA
HC-4I	54	2	Flush	Removed	Drill-out	Street	HP
HC-5I	50	2	Flush	Removed	Drill-out	Street	HP
HC-6I	49	2	Flush	Removed	Drill-out	Street	HP
OSP-2D	49	2	Flush	Removed	Drill-out	Landscaping	NFA
OSP-2S	24.5	2	Flush	Removed	Drill-out	Landscaping	NFA
OSP-3D	49.5	2	Meter box	In-place	Drill-out	Landscaping	NFA
OSP-4D	45	2	Flush	Removed	Drill-out	Street	HP
OSP-5D	52.8	2	Flush	In-place	Abandon In-place	Sidewalk	NFA
OSP-5S	24.5	2	Flush	In-place	Abandon In-place	Sidewalk	NFA
OSP-6D	49	2	Flush	Removed	Drill-out	Street	HP
OSP-6S	19	2	Flush	Removed	Drill-out	Street	HP
OSP-8D	50.3	2	Flush	Removed	Abandon In-place	Landscaping	NFA
OSP-9D	50.8	2	Flush	Removed	Abandon In-place	Parking Lot	NFA
OSP-13D	49	2	Flush	In-place	Abandon In-place	Street	NFA

Notes:

Boring depth: depth from ground surface to the bottom of the original boring, in feet.

Well diameter: inner diameter of well casing, in inches.

Monument type: "flush" mounted monument that is smooth to ground surface,
or a "meter box" monument that is a box elevated above or smooth to ground surface.

Location: "Off" means wells are off-site outside the NPL site boundary.

Future Task 2: NFA - no further action; HP - hot patch asphalt repair

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EAL 01/29/18 163973-001 (SPlan).dwg

0 400 800
Scale in Feet



ATTACHMENT A

Photographs of Field Activities

Hart Crowser
1639-73



B-15D



CW-2D and CW-2S

Hart Crowser
1639-73



HC-4I



HC-5I



HC-6I



OSP-2D and OSP-2S



OSP-3D



OSP-4D



OSP-5D and OSP-5S



OSP-6D and OSP-6S



OSP-8D



OSP-9D



OSP-13D