



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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August 23, 2017

Mr. Scott McKnight
Conway Feed
18700 Main Street
(P. O. Box 576)
Conway, WA 98238

COPY

Re: Opinion pursuant to WAC 173-340-515(5) on Remedial Actions for the following Hazardous Waste Site:

- **Name:** Conway Feed VCP (aka Conway Feed LUST)
- **Address:** 2110 Jones Road, Conway, WA
- **Facility/Site No.:** 5135 (Formerly F/S No.: 3194825)
- **VCP No.:** NW2185
- **Cleanup Site ID Nos:** 2524 & (7524)

Dear Mr. McKnight:

Thank you for submitting documents regarding your remedial actions for the Conway Feed facility (Site) for review by the Washington State Department of Ecology (Ecology) under the Voluntary Cleanup Program (VCP). Ecology appreciates your initiative in pursuing this administrative option for cleaning up hazardous waste sites under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

This letter constitutes an advisory opinion regarding a review of submitted documents/reports pursuant to requirements of MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and remediating the following releases at the Site:

- Gasoline-range petroleum hydrocarbons (TPH-G), diesel-range petroleum hydrocarbons (TPH-D), benzene, toluene ethylbenzene, and xylenes (BTEX) into the Soil.
- Potentially TPH-G, TPH-D, and BTEX into the Ground Water

Ecology is providing this advisory opinion under the specific authority of RCW 70.105D.030(1)(i) and WAC 173-340-515(5).

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This opinion does not resolve a person's liability to the state under MTCA or protect a person from contribution claims by third parties for matters addressed by the opinion. The state does not have the authority to settle with any person potentially liable under MTCA except in accordance with RCW 70.105D.040(4). The opinion is advisory and not binding on Ecology.

Ecology's Toxics Cleanup Program has reviewed the following information regarding your remedial actions:

1. Northwest HydroGeo Consultants, Site Remediation Report Conway Feed Site, August 25, 2011.
2. Ecology, Further Action Opinion Letter, March 5, 2010.
3. Northwest HydroGeo Consultants, Hydrogeologic Investigation Report Conway Feed Site, October 20, 2008.
4. Materials Testing & Consulting Inc., Site Assessment Conway Feed, February 1992.

The reports listed above will be kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Appointments can be made by calling the NWRO resource contact at (425) 649-7235 or by e-mail to nwro_public_request@ecy.wa.gov.

The Site is defined by the extent of contamination caused by releases of TPH-G, TPH-D, and BTEX in Soil and Ground Water.

The Site is more particularly described in Enclosure A to this letter, which includes Site diagrams. The description of the Site is based solely on the information contained in the documents listed above.

Based on a review of supporting documentation listed above, pursuant to **requirements contained in MTCA and its implementing regulations, Chapter 70.105D RCW and Chapter 173-340 WAC, for characterizing and addressing the releases (described above) at the Site, Ecology has determined:**

- (1) Remedial Actions: Ecology understands the remedial actions accomplished at the Site to date included the following:

Two underground storage tanks (UST's) were removed from the Property during December 1991. The UST's included a 2,000 gallon tank used for diesel fuel storage and a 1,000 gallon tank used for gasoline storage. Both UST's were collocated in a single excavation and buried beneath concrete and asphalt paving. The UST's were reportedly installed in the mid-1960s and both showed corrosion and holes when removed.

After the UST removals, soil contamination in the excavation was observed and verified by subsequent soil sampling. Sheen was observed on ground water in the UST excavation at approximately five feet below ground surface (bgs). Efforts were made to over-excavate the contaminated soil to the extent defined by Method A cleanup levels for TPH-G, TPH-D, and BTEX applicable in 1991. As determined by field observations and confirmation soil samples, this extent was achieved on the east, south, and north sides, and bottom (approximately 6 feet bgs) of the excavation. The excavation was not extended to the west because of concrete paving and risk to the structural support of a large steel canopy. Confirmation samples from the west wall of the excavation showed that elevated levels of TPH-G and BTEX (up to 1,646 parts/million (ppm) TPH-G and 16 ppm benzene) in excess of both the 1991 and current Method A cleanup levels remained in the soil. There were also detections of TPH-D slightly in excess of the 1991 Method A cleanup level (200 ppm), but not in excess of the current cleanup level for TPH-D (2,000 ppm). Fifteen cubic yards (cyds) of contaminated soil were removed from the excavation to another area on the Property for remediation by land farming (aeration). The excavation was filled with gravel (approximately 30 cyds) and the surface repaved. A ground water monitoring well was installed at the western edge of the excavation in the gravel and sampled on February 25, 1992. Sample results showed no detections of TPH or BTEX.

During June and August 1994, three samples of the land-farmed soil were acquired and analyzed for TPH-G and BTEX. Analytical results for the samples indicated that contaminant levels were non-detectable in the treated soil.

On September 9, 2008 the monitoring well installed at the Site in early 1992 was sampled for the second time. The water sample was analyzed for TPH-G, TPH-D, TPH-O, BTEX, and lead. Contaminant levels were non-detectable except for benzene and lead, which had detectable levels below their respective Method A cleanup levels for ground water.

In July 2009, Ecology's opinion on the environmental circumstances at the Site was requested through enrollment in the VCP. Ecology's opinion letter dated March 5, 2010 stated in summary that the compliant ground water samples from the one monitoring well did not preclude the necessity to characterize both soil and ground water further to the west and southwest of the former UST's.

During November 2010 the soil was characterized to the west of the 1991 gravel-filled excavation. The concrete slab beneath the steel canopy was removed and six test pits were completed in the area. Odors and an oily sludge material were encountered. Eight soil samples were acquired from the test pits at depths of 5 to 7 feet bgs and analyzed for TPH-G, TPH-D, TPH-O, BTEX and lead. The sample results indicated an area of contaminated soil extending west of the former UST's location with maximum levels of TPH-G (2,650 ppm) and benzene (1 ppm) exceeding the Method A soil cleanup levels for TPH-G with benzene present and benzene (30 ppm and 0.03 ppm respectively).

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A sample of water in the test pits was acquired on December 30, 2010 and analyzed for TPH-G, BTEX, and lead. No sheen was observed on the water. The water sample results were non-detectable except for a minimal detection of lead.

During June 2011 a remedial excavation was performed to remove the remaining contaminated soil. The limits of the contaminated soil were determined by field observation (visual and olfactory evidence) and confirmation soil samples referenced to the Method A soil cleanup levels for TPH, BTEX, and lead. The remedial excavation encompassed the locations of two of the exploratory test pits. Three confirmation samples were acquired at 6 to 7 feet bgs - two along the east wall of the remedial excavation (adjacent to the previous 1991 excavation) and one on the north side of the excavation. Sample results were non-detectable concentrations except for three low detections of lead, and one of toluene. There were apparently no confirmation soil samples acquired to document that the western extent of the contaminated soil was reached and removed. After the contaminated soil had been removed, a sample of water in the open remedial excavation was acquired on July 22, 2011 and analyzed for BTEX and lead. Concentrations of toluene and lead were double their respective Method A ground water cleanup levels. There were minimal detections of the other compounds. The excavation was then filled with gravel.

The soil reportedly from both the initial test pits and the remedial excavation (total of 119 cyds) was transported to a nearby area of the Property for treatment by land farming (aeration). The soil was spread out two feet in thickness on top of a plastic liner and tilled on warm sunny days from June 15, 2011 until August 2011. On August 1, 2011 three randomly-selected soil samples were acquired from the treated soil and analyzed for TPH-G, a suite of 78 volatile organic compounds (VOCs, which included BTEX), and lead. Sample results were all non-detectable except lead, which was detected at concentrations less than 20 ppm.

(2) Comments:

Confirmation soil sampling from the western side of the 2011 remedial excavation was necessary to demonstrate that soil contamination did not extend further to the west at that location. Soil sample A-2K1001 taken from an exploratory test pit near the east wall of the warehouse building contained 2,650 ppm TPH-G and 1 ppm benzene. The Method A soil cleanup levels for TPH-G (with benzene) and benzene are 30 ppm and 0.03 ppm respectively so these levels are exceedences. As per the Site diagrams, the western extent of the remedial excavation ended very near the location of this sample with elevated concentrations exceeding Method A.

Sampling of ground water in the natural water-bearing formation is necessary downgradient from the area of contaminated soil (source area). All of the water samples acquired at the Site thus far are from water that collected into upgradient excavations (including from the

monitoring well, which was installed within the 1991 excavation). The gravel-filled 1991 excavation likely functioned as a large collection sump for water, which highly diluted any impacts contaminated soil may have had on ground water entering the excavation. As has been demonstrated, the "clean" excavation water samples were not diagnostic as to whether or not contaminated soil remained at the Site. The samples of water from the 2011 remedial excavation are not representative of whether or not contamination in soil and ground water above cleanup levels persist at the Site.

Ecology considers that a general flow direction of ground water towards the South Fork of the Skagit River (approximately 1,600 feet to the west-southwest) is reasonable to assume. Furthermore, that presumed flow direction is also locally towards a wetland area approximately 130 feet from the Site. Given the many years that free product and/or contaminated soil were in contact with and likely partitioning to ground water, a plume of hydrocarbon contamination in the ground water would typically extend downgradient beneath the warehouse building, and potentially off the Property an unknown distance in the direction of ground water flow (presumed to be to the west-southwest). Since the USTs and hopefully most of the contaminated soil have been removed, contamination in ground water downgradient from the Site will eventually attenuate to below cleanup levels, but that degradation also needs to be confirmed by sampling ground water on and downgradient of the Site.

Opinion:

Additional soil and ground water sampling is required to demonstrate that the full extent of the soil contaminated above Method A was removed, and that ground water contamination above Method A cleanup levels is not present on the Property. This would initially require taking soil and ground water samples inside the warehouse building. There is limited-access "push probe" equipment available that can acquire soil and grab ground water samples from the shallow ground water (provided there is some room to work inside the building). There should be at least one ground water sample location as near to the railroad property to the west as possible.

The approach to cleanup and to establish a cleanup standard for soil at the Site was acceptable. The intent was to remove all contaminated soil to the extent defined by Method A cleanup levels for soil throughout the Property (standard point of compliance). A terrestrial ecological evaluation (TEE) does not influence soil cleanup levels given the lack of significant wildlife habitat in the vicinity of the Site, and also given the nature and concentrations of the contamination in the soil (TPII-G, TPII-D, and BTEX). The cleanup standard for ground water has yet to be established. You may wish to submit a work plan to Ecology for review through the VCP before undertaking any additional sampling. The in situ soil data acquired during 2011 and data from any future sampling should be entered electronically into Ecology's Environmental Information Management (EIM) database.

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This opinion does not represent a determination by Ecology that a proposed remedial action will be sufficient to characterize and address the specified contamination at the Site or that no further remedial action will be required at the Site upon completion of the proposed remedial action. To obtain either of these opinions, you must submit appropriate documentation to Ecology and request such an opinion under the VCP. This letter also does not provide an opinion regarding the sufficiency of any other remedial action proposed for or conducted at the Site.

Please note that this opinion is based solely on the information contained in the documents listed above. Therefore, if any of the information contained in those documents is materially false or misleading, then this opinion will automatically be rendered null and void.

The state, Ecology, and its officers and employees make no guarantees or assurances by providing this opinion, and no cause of action against the state, Ecology, its officers or employees may arise from any act or omission in providing this opinion.

Again, Ecology appreciates your initiative in conducting independent remedial action and requesting technical consultation under the VCP. As the cleanup of the Site progresses, you may request additional consultative services under the VCP, including assistance in identifying applicable regulatory requirements and opinions regarding whether remedial actions proposed for or conducted at the Site meet those requirements.

If you have any questions regarding this opinion, please contact me at (425) 649-7251, or by e-mail at roger.nye@ecy.wa.gov.

Sincerely,



Roger K. Nye
NWRO Toxics Cleanup Program

Enclosure: (1) A- Site Description and Diagrams

cc: Douglas Dillenger, Northwest HydroGeo Consultants, Inc.
Sonia Fernandez, VCP Coordinator, NWRO Ecology

Enclosure A
Site / Property Description and Diagrams

This section provides Ecology's understanding and interpretation of Property conditions and is the basis for the opinion expressed in the body of the letter.

Site: Petroleum hydrocarbons (TPH-G, TPH-D, and BTEX) were released into the soil and ground water within a Property owned by CFI Properties, LLC which is located at 2110 Jones Road in Conway, Washington. The extent of these releases into the soil and ground water comprises the Site. The extent of the soil contamination has been defined except possibly to the west of the source area. The extent of potentially-impacted ground water contamination has not been defined. The Site is located particularly in the northern portion of the Property near the intersection of Main Street and Jones Road.

Property and Area Description: The Property is approximately rectangular in shape and 3.84 acres in size (Skagit County Parcel No. P117953). An animal feed mill facility (Conway Feed), which manufactures various types of feeds from grain for livestock, occupies the entire 3.84 acres of the Property. The animal feed mill consists of a several buildings, silos and other appurtenances related to the manufacturing process. Railroad tracks (Burlington Northern) extend north-south adjacent to the west edge of the Property. Small businesses, a post office, and residences are further to the west. A large log storage/processing facility is located southwest of the Property. More residences are located northwest of the Property. Two automobile service stations are located northeast of the Property (300 feet and 500 feet away). Neither station is identified as a contaminated site. Jones Road borders the east edge of the Property and Pioneer Highway is located 300 feet to the east. The land further east and southeast of the Property is actively-worked agricultural land.

Property History and Current Use: The Conway Feed animal feed manufacturing mill has operated on the Property since 1919. Use of the Property prior to 1919 is unknown.

Sources of Contamination: The soil and ground water contamination was caused by long-term releases of gasoline and diesel fuel from two USTs formerly utilized at the Property. It appears that the release from the gasoline UST primarily caused the contamination observed on the Site. The two USTs were both removed in 1991.

Physiographic Setting: The Property is located within the flood plain of the Skagit River. The land is flat and the elevation of the Site is at an approximate elevation of 10 feet above mean sea level. The South Fork of the Skagit River lies approximately 1,600 feet to the west-southwest.

Ecological Setting: There is not significant habitat for terrestrial ecological receptors in the area on and near the Site. The land surface is covered by commercial structures, buildings, paved or gravel surfaces, roads, railroad tracks, and actively-worked agricultural land. A small wetland area is located near the Site that is possibly a remnant from a larger area that was filled in.

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Geology: The Site is underlain by flood-plain deposits consisting of an assortment of low-permeability fine sands, silts and clays to the maximum depth of exploration (about 7 feet).


Ground Water: Ground water was encountered at 4 to 6 feet bgs. The flow direction is presumably to the west-southwest towards a wetland area and towards the Skagit River.

Extent of Soil and Ground Water Contamination: The lateral extent of soil contamination was defined except to the west. The vertical extent was limited to approximately 6 feet bgs. The extent of possible ground water contamination on and potentially downgradient of the Property is unknown.



Conway Feed Site Location
Conway, Washington

Conway Feed – Approximate Extent of the Site

Soil contamination: 

Potential area of ground water contamination
(undefined): 

