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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

January 2, 2020

Steve Burchett, PE
Budinger & Associates, Inc.
1101 North Fancher Road
Spokane Valley, WA 99212

Re: Opinion on Proposed Cleanup of the following Site:

- **Site Name:** City of Spokane Maintenance Shop
- **Site Address:** 127 West Mission Avenue, Spokane, WA 99201
- **Facility/Site No.:** 22442438
- **VCP Project No.:** EA0347

Dear Steve Burchett:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your proposed independent cleanup of the City of Spokane Maintenance Shop facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

The Remediation and Closure Plan (Budinger & Associates, Inc., September 27, 2019) proposes the following remedial actions to support redevelopment of the site:

- Removal of hazardous materials from floor drains and dry wells, followed by excavation of the floor drains and any contaminated soils from demolished buildings. Remaining buildings will have floor drains sealed.

- Excavation of contaminated soil from the cesspool area (west of the broom shed) and other isolated contaminated soils, with confirmation sampling.

- Removal of the pump island, along with the two active underground storage tanks (USTs) and any contaminated soils.

- Quarterly sampling of three groundwater monitoring wells for four consecutive quarters.

- Capping of any remaining contaminated soils with low-permeability engineered controls and implementing institutional controls to protect all remedial actions.

The following is an analysis of whether the proposed remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA").

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following releases:

- Metals, petroleum hydrocarbons, and volatile organic compounds (VOCs) into the soil.

- Metals into the groundwater.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. Budinger & Associates, Remediation and Closure Plan, Former Normandie Maintenance Facility, September 27, 2019.

2. Budinger & Associates, Environmental Site Characterization Report, Former Normandie Maintenance Facility, November 20, 2017.

3. Stantec Consulting Services, Inc., Phase I Environmental Site Assessment, Former Normandie Storage/Maintenance/Fueling Facility, August 16, 2016.

Those documents are kept in the Central Files of the Eastern Regional Office of Ecology (ERO) for review by appointment only. You can make an appointment by calling the ERO resource contact at (509) 329-3514.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that, upon completion of your proposed cleanup, **further remedial action** will likely be necessary to clean up contamination at the Site. Please consider the following requirements when proceeding with your cleanup:

1. **Site Characterization**

   Data collected from soil borings during the 2017 site characterization should be used to develop a conceptual site model (CSM). The CSM can be used to evaluate and address any data gaps remaining from previous remedial investigations. Some areas of the site where contaminants were confirmed or suspected have not been addressed. It is possible that the areas with data gaps will have confirmation samples collected following additional excavation, which should be detailed in a future report.

   In your next report, please provide the following information:

   - A comprehensive CSM identifying:
     - All previous releases and remedial actions,
     - The nature and extent of current contaminants, and
     - Updated site diagrams and representative cross-sections featuring geologic and hydrogeologic conditions and contaminant concentrations.

   - A detailed work plan that includes location-specific remediation plans and confirmation sample plans.

   Please note, the WATPH-HCID analytical method was used on 64 soil samples to quantify petroleum hydrocarbon concentrations. This method is intended to identify volatile and semi-volatile petroleum hydrocarbons, which is acceptable for screening. For confirmation sampling where petroleum hydrocarbons were identified at concentrations significantly exceeding the WATPH-HCID method detection limits, substance-specific analytical methods should be used to demonstrate compliance with MTCA cleanup levels. Please refer to Ecology's *Analytical Methods for Petroleum Hydrocarbons*, Publication No. ECY 97-602 (June 1997) for further guidance.

2. **Waste Disposal Characterization**

Please provide information on the excavation and remediation of the floor drains and drywells including diagrams, waste characterization procedures, and documentation of disposal.

3. **Additional Groundwater Monitoring**

Groundwater samples collected from temporary wells in November 2017 and monitoring wells in September 2019 indicate site-wide low-level arsenic contamination, with the sample west of the cesspool area (B-13) containing arsenic above the MTCA Method A groundwater cleanup level. The current monitoring wells are not sufficient to characterize groundwater flow and to demonstrate compliance with groundwater cleanup standards. Installation of additional groundwater monitoring wells is recommended.

4. **Underground Storage Tank Inventory**

According to the Phase I Environmental Site Assessment (Stantec, 2016), there have been a total of 17 USTs onsite: six have been excavated and removed, two were recently active and will be removed, and eight have been closed in place. The size, condition, and location of four of the closed tanks is unknown, and only one is identified on the current site diagram. A complete, definitive inventory of all remaining tanks, including the size, location, approximate depth, and contents will be required as part of the institutional controls for the site.

5. **Stormwater Management Plan and Permitting**

As-built diagrams for the placement and design of all stormwater infiltration structures should be submitted to both Ecology's Toxics Cleanup Program and Water Quality Program, along with a Construction Stormwater General Permit (CSWGP) and any other permits required under applicable state and federal laws. For guidance, please refer to Ecology's 2019 Stormwater Management Manual for Eastern Washington. https://fortress.wa.gov/ecy/ezshare/wq/Permits/Flare/2019SWMMEW/2019SWMMEW.htm

6. **Maintenance and Repair Plan**

If contaminated soils remain onsite following all remedial actions, a Maintenance and Repair Plan should be submitted to Ecology detailing post-cleanup protocols for inspection, maintenance, and repair of all engineered controls, including the asphalt cap and stormwater infiltration structures. Please include procedures for notifying workers of potential exposure hazards, identifying such hazards, handling and disposal of any investigation-derived waste (IDW), and notifying Ecology of any maintenance and repair activities.

7. **Data Submittal Requirements**

All environmental data must be submitted to Ecology's Environmental Information Management (EIM) database. For guidance please refer to Ecology's website:
https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database/EIM-submit-data

Limitations of the Opinion

1. **Opinion does not settle liability with the state.**

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. **Opinion does not constitute a determination of substantial equivalence.**

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you proposed will be substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. **Opinion is limited to proposed cleanup.**

This letter does not provide an opinion on whether further remedial action will actually be necessary at the Site upon completion of your proposed cleanup. To obtain such an opinion, you must submit a report to Ecology upon completion of your cleanup and request an opinion under the VCP.

4. **State is immune from liability.**

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). As you conduct your cleanup, please do not hesitate to request additional services. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me by phone at (509) 329-3522 or e-mail at ted.uecker@ecy.wa.gov.

Sincerely,

Ted M. Uecker
ERO Toxics Cleanup Program

tmu: HG

Enclosures (1): A – Description and Diagram of the Site

cc: Chris Batten, NODO Spokane LLC
502 W Riverside Suite 103
Spokane, WA 99201

Enclosure A

Description of the Site

The 5.37-acre property (tax parcel 35181.0201) is located north of downtown Spokane and has been used as a maintenance facility since the early 1900s. Remedial investigation and cleanup actions at the site have been ongoing since 1989, and include the removal of six USTs, while eight additional USTs have been closed in-place. Petroleum-contaminated soil (PCS) has been left in place at the site in several areas, both above and below cleanup levels (CULs). The most recent record of residual contamination involves a drain removal excavation in 1997 that resulted in PCS and a 5,000-gallon UST being left in place due to concerns for utilities and the structural integrity of the building.

In 1989, a 1,000-gallon UST was removed near the NW corner of Sinto and Atlantic. The UST had been used for fuel, then waste oil. Samples of the sludge within the tank contained 5400 parts per million (ppm) Trichloroethene (TCE). Ecology performed an initial investigation, and found oil-stained soils and groundwater in the excavation pit, approximately 15 feet below ground surface (bgs). Soil samples collected from below the excavation supposedly confirmed that metals, total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), and PAHs were below the respective cleanup levels, but there is no record of the chemical analyses.

From 1991-1992, there was a release of approximately 2,000 gallons of diesel-range petroleum hydrocarbons (DRPH) from a pump island in the middle of the property. Approximately 40 cubic yards of PCS were removed, and a previously closed-in-place UST was discovered during excavation. In 1997, diesel contamination was discovered during removal of 3 gasoline and 1 diesel USTs, and approximately 447 tons of PCS were removed. In 1998, PCS was discovered during a sewer line repair. This soil was excavated along with a brick-lined cesspool at the end of the drain line. In 2000, approximately 22.3 tons of PCS were excavated from a grassy swale at the north end of the property. In 2011, Ecology issued NFA determinations for two of the Leaking Underground Storage Tank (LUST) releases based on review of historic cleanup actions.

In 2016, a Phase I ESA was conducted in preparation for the City of Spokane to sell the property for residential and commercial development. Areas of concern identified in the report included dry wells and floor drains, the former drain excavation area, the eight closed-in-place USTs, and the two active USTs.

In 2017, 42 soil borings were drilled in areas of concern identified in the Phase I report. Ninety-six soil samples were collected and analyzed for TPH, metals, and volatile organic compounds

(VOCs). Seven borings (B3, B13, B22, B24, B26, B29, and B42) ranging from 1-21 feet bgs contained total chromium ranging from 19 to 78 mg/kg, and one boring (B29) contained diesel, heavy oil, and methylene chloride above cleanup levels. Groundwater was encountered in 18 borings ranging from 20-30 feet bgs. Boring B13 (west of the Broom Shed) contained arsenic and lead in groundwater at concentrations exceeding MTCA Method A cleanup levels. Localized cadmium and areas of suspected contamination were identified but not addressed.

In September 2019, three groundwater monitoring wells were installed in the southeast portion of the site where a 10,000 gallon waste oil tank was removed in 1989 (north of the Fleet Building). Soil samples collected during installation of the wells did not contain any contaminants of concern above MTCA cleanup levels, and groundwater samples collected in September did not contain any contaminants above cleanup levels.

In November 2019, the active 10,000-gallon diesel and 20,000-gallon gasoline USTs were removed from the south-central area of the site, along with the pump island. Soil samples collected during the excavation contained cPAHs with a TEF above the cleanup level (2.54 mg/kg), but did not contain diesel- or gasoline-range petroleum hydrocarbons above the cleanup level.

Diagram of the Site