Memorandum

Re:	Additional Remedial Excavation Plan				
Project No:	NelSon-Granite Falls				
Date:	July 14, 2021				
From:	Kristin Anderson, Floyd Snider				
Copies:	Dianne K. Conway and Gordon Thomas, Honeywell LLP				
To:	Mark Nelson, Nel/Son Distributing, Inc.				

This memorandum was prepared on behalf of NelSon Distributing, Inc. (NelSon Distributing) doing business as Nelson Petroleum. It summarizes the proposed remedial excavation to remove petroleum-contaminated soils on private property owned by One Ballard LLC (One Ballard; the property is referred to herein as the One Ballard Property) adjacent to NelSon Distributing's former bulk-fuel facility in Granite Falls, Washington (the former NelSon Petroleum Property). The former NelSon Petroleum Property is currently enrolled in the Washington State Department of Ecology (Ecology) Voluntary Cleanup Program (VCP) under site ID number NW2982.

BACKGROUND

The former NelSon Petroleum Property is located at 201 W Stanley Street in Granite Falls, Washington. The southern portion of this property is the location of a former bulk-fuel facility that was operated and reconfigured under various ownership between 1938 and 2016 (SD&C 2008). The bulk-fuel facility was most recently operated by NelSon Distributing. It is bordered by private properties to the north, east and west and by a City of Granite Falls (City) right-of-way (ROW) to the south. The former NelSon Property location is shown on Figure 1.

A remedial excavation to remove the bulk fuel facility structures and on-property extents of petroleum-contaminated soil associated with the bulk fuel facility was completed in July 2016. Sidewall samples collected from the south and southwest portion of the excavation indicated that soil contamination likely extended off-property in these areas, however excavation on the One Ballard property to the west was limited by the presence of buried utilities. Excavation was not extended into the City ROW because W Stanley Street is the main arterial roadway and also contains multiple buried utilities.

Subsequent to the remedial investigation, soil and groundwater characterization to define the limits of residual contamination was performed at the former NelSon Petroleum Property, in the City ROW to the south, and on the One Ballard Property to the west. These investigations found



that petroleum constituents including benzene and gasoline-range organics (GRO) exceeding the Model Toxics Control Act (MTCA) Method A cleanup levels (CULs) are present in soil extending approximately 20 feet laterally on the west-adjacent One Ballard Property, at depths ranging from approximately 6 to 8 feet below ground surface (bgs). Groundwater in the downgradient direction to the south-southeast of this residual petroleum in soil was not impacted. The City ROW to the south of the Property and the One Ballard Property was also found to be impacted by petroleum.

The post-remediation soil and groundwater characterization findings were presented in a data summary memorandum to Ecology (Floyd|Snider 2021). This memorandum recommended that the former Nelson Petroleum Property was eligible for a No Further Action (NFA) determination dependent on the willingness of the City and One Ballard to agree to environmental covenants or covenant equivalents for the remaining soil contamination. Subsequent communication with One Ballard indicated that the owner is unwilling to agree to an environmental covenant, and therefore additional soil excavation on the One Ballard Property is proposed as the preferred approach to obtain a NFA determination. Given the importance of W Stanley Street to travel and commerce in Granite Falls, a covenant or covenant equivalent remains the preferred approach to address contamination in the City ROW.

PROPOSED ADDITIONAL REMEDIAL EXCAVATION APPROACH

The additional remedial excavation is proposed to remove the full lateral and vertical extents of soil with benzene and GRO exceeding MTCA Method A CULs on the One Ballard Property, as shown on Figure 2. The approximate volume of soil to be excavated is 130 cubic yards (CY).

Excavation will be performed by a qualified contractor employed by NelSon Distributing and overseen by a Floyd|Snider field engineer. The field engineer will verify and mark the extents of the excavation by survey or using a global positioning system receiver (GPS). The lateral extents of the excavation are defined by the One Ballard Property line to the south, previous soil borings without CUL exceedances to the west (i.e., FS-02, FS-03, FS-13), and the property line/prior excavation on the former NelSon Petroleum Property to the east. The northern extent of the excavation is inferred from previous confirmation sample results indicating limited northward migration of petroleum in soil outside of former operational areas.

Underground utilities in the vicinity of the excavation area include sewer and water lateral lines running onto the One Ballard Property from the City ROW as shown on Figure 2. The main lines supplying the laterals are known to be located to the south of and beneath the sidewalk, outside the proposed excavation area. The northern extent of the on-property lateral utility lines are not known. Utilities in the vicinity of the excavation area will be located in accordance with City requirements, using electromagnetic methodology and available as-built drawings, and verified by potholing prior to beginning mass excavation. Potholing will be performed using hand digging methods for utilities with an anticipated depth of less that 1.5 feet, and for utilities deeper than 1.5 feet an excavator will be used to remove overburden in excess of 1 feet above the anticipated

utility line depth before completing the pothole exploration using hand methods. Alternately, potholing may be accomplished using compressed air and a vactor tuck to remove overlying soil. The means of potholing will be determined in coordination with the contractor. One Ballard will be responsible for removing equipment stored in the work area. The framing associated with the former shed structure within the planned excavation area will also be removed by the contractor, and the fence along the eastern One Ballard Property line may be temporarily removed as needed to access the excavation area. Buried utilities lines will be supported as excavation is advanced below the utility depth. The contractor will not disturb any overhead utilities located in the W Stanley Street ROW to the south of the One Ballard Property.

Excavation will be performed using standard equipment. The excavation will include areas of the crushed gravel parking area immediately north of the eastern property driveway, therefore vehicle traffic associated with tenant operations will be directed to the western driveway during construction. The southern extent of the excavation will begin approximately 1.5 feet north of the City sidewalk and cut back at a slope of 1h:1v to a depth of approximately 4.5 feet bgs at the property line without the use of shoring elements, and the remaining sidewalls may be sloped, benched, or shored dependent on field conditions and the contractor's preferred work practices. The excavation will be performed during the period of seasonal low water table in late-summer and dewatering is not anticipated.

The southern portion of the excavation will extend to approximately 4.5 feet bgs, as indicated by benzene and GRO concentrations less than CULs from a soil sample at 4.5 feet bgs at boring location FS-04, and will be sloped to 8 feet bgs to the north as indicated by results from a soil sample at boring FS-01, which only slightly exceeded the CUL for benzene in the sample collected from 6.5 to 7.5 feet bgs. During excavation, the field engineer will screen soil for indications of petroleum such as odors, staining, sheens and elevated headspace volatiles concentrations measured using a photoionization detector (PID). The excavation will be extended laterally and vertically as necessary at the direction of the field engineer to remove potentially contaminated soil.

Confirmation samples will be collected to verify that the extents of soil with benzene and GRO exceeding MTCA Method A CULs are fully removed from the One Ballard Property. The field engineer will collect confirmation samples at the frequency specified in the Ecology Guidance for Remediation of Petroleum Contaminated Sites (Ecology 2016), including one base sample per 400 square feet of lateral excavation area and one sidewall sample per 40 linear feet of excavation sidewall. Confirmation samples will be transferred under standard chain of custody procedures to an Ecology-accredited laboratory for analysis of GRO and benzene by NWTPH-Gx and US Environmental Protection Agency Method 8260, respectively. Sidewall samples collected during prior soil investigations (i.e., FS-02, FS-03, FS-13) will serve as sidewall samples for the western side of this excavation. The positions of confirmation samples will be documented by the field engineer by measurement from property features or using a GPS.

Permits

Permits necessary to conduct the proposed remedial excavation include the following:

- A City grading permit, which is required for excavations with cut or fill quantities greater than 100 CY (the anticipated excavation volume is 130 CY)
- A City right-of-way construction permit, which is required for any ground-disturbing activities conducted within the City ROW (the proposed excavation includes sloping of the southern sidewall into City ROW)

The appropriate permits will be acquired prior to construction, and the contractor and field engineer will ensure that all permit conditions are met. Although a Construction Stormwater General Permit (CSGP) is not required for this remedial excavation because the disturbed area will be less than 1 acre, stormwater controls will be implemented in general accordance with the applicable best management practices in the CSGP Stormwater Pollution Protection Plan as described in the Site Controls section below.

SITE CONTROLS

Site controls will be implemented to ensure public safety and prevent the spread of contamination during remediation activities.

Excavation and handling of contaminated soil will be performed within a clearly delineated exclusion zone. A support zone will be established surrounding the exclusion zone to encompass equipment staging areas and break areas for construction personnel. The support zone will be delineated by temporary or permanent fencing to prevent entry by members of the public. Fencing will be secured at the end of each work day.

Temporary erosion and sediment control measures will be implemented and inspected regularly to ensure that contaminated soil does not leave the property. Erosion controls will consist of the following:

- Storm drain inlets adjacent to the work area will be protected with filter inserts prior to beginning construction.
- The excavation will be sloped such that stormwater will not run out of the excavation area. The ground surface outside the excavation will not be disturbed except during potholing for utility location.
- Equipment access to the excavation area will be separated from the trucking and vehicle access routes to minimize tracking of soil outside the work area. The contractor may elect to construct a stabilized truck access point and/or equipment access point on the former NelSon Petroleum Property, or coordinate with the One Ballard Property owner and tenant to use existing property access driveways.

- Paved areas will be swept regularly to prevent track-out of potentially contaminated soil.
- Unpaved ground surfaces will be protected with plastic sheeting or other impermeable materials during contaminated soil handling activities.
- Materials are not expected to be stockpiled during construction, however any stockpiles of contaminated materials must be placed on plastic sheeting, bermed to prevent run-off, and covered securely at the end of each work day and/or when left unworked for more than 24 hours. Stockpiles of clean imported materials will be covered if left unworked for longer than 7 days.

The contractor will maintain a spill kit at the One Ballard Property containing sufficient sorbent materials and diking materials to contain the quantity of fuel on-property. Containers of fuel will not be stored on-property. Fueling is also not expected to be conducted on-property. However, if on-property fueling is necessary, the ground surface beneath the equipment will be protected to prevent releases of fuel to the environment and a spill kit will be kept nearby.

Decontamination protocols for personnel (i.e., work boots) will be followed after any contact with contaminated soil. Decontamination protocols for equipment will be followed after completion of contaminated soil handling or whenever switching from handling contaminated soil to handling clean imported materials. Dry decontamination will be performed using a stiff brush to achieve a visually debris-free surface. If dry decontamination cannot achieve a debris-free surface, or if oily residue is present, dry decontamination will be followed by scrubbing with a soap solution and rinsing with clean water. Decontamination wash water will be collected and commingled with contaminated soil for disposal.

HEALTH AND SAFETY

Remedial construction activities involving contaminated soil handling and excavation oversight will be performed by personnel with Occupational Safety and Health Administration (OSHA) Hazardous Waste and Emergency Response (HAZWOPER) 40-hour training certification. The contractor and field engineer will each develop a Health and Safety Plan (HASP) consistent with OSHA and Washington Industrial Safety and Health Act requirements. The HASPs will be kept on-property at all times during construction. At least one site personnel member will hold current training certification in first aid and cardiopulmonary resuscitation.

During contaminated soil excavation, the field engineer will monitor volatiles concentrations in the breathing space of the exclusion and support zones using a PID and will implement corrective actions if volatile concentrations to exceed action levels specified in the HASP.

SOIL HANDLING AND DISPOSAL

All excavated soil will be transported to a licensed disposal facility. Loading will take place in a designated paved area or over plastic sheeting placed on unpaved ground surfaces below the swing of the excavator bucket. Soil with free liquids will be allowed to drain or stabilized with a

sorbent material prior to loading such that free liquid will not escape the truck during transport. The operator will take care not to overfill the bucket when transferring soil. All truckloads of contaminated soil will be covered during transport.

Available chemical analytical data demonstrate that this soil is suitable for disposal as Class 2 petroleum contaminated soil for landfill disposal or Class 3 petroleum contaminated soil for thermal desorption at Iron Mountain Quarry landfill in Granite Falls, which is the permitted disposal facility where contaminated soil from the 2016 excavation on the Property was disposed. Disposal authorization will be obtained from Iron Mountain by NelSon Distributing (as the generator of the waste soil) prior to construction. Preliminary determination of soil as Class 2 or Class 3 will be performed by the field engineer and verified by Iron Mountain. All loads will be accompanied by a manifest signed by NelSon Distributing or a designee.

PROPERTY RESTORATION

After receipt of confirmation samples demonstrating that the CULs have been met, the excavation will be backfilled with clean fill from a quarry source. Sample results verifying that the backfill material meets all applicable MTCA Method A CULs for unrestricted property use will be provided by contractor or quarry prior to importation. The backfill will be placed in lifts and compacted using a vibratory plate compactor or roller in accordance with City standards.

The existing property fence will be restored if removed for construction and the City ROW will be restored in accordance with current development standards. On the One Ballard Property, crushed gravel surfacing will be restored to match the existing ground surface. All equipment will be demobilized from the property after completion of the property restoration.

REPORTING

A summary report documenting the completion of the remedial excavation will be provided to Ecology after completion of construction and site restoration. The summary report will include the final extent of excavation, locations and analytical results of excavation confirmation samples, and documentation of contaminated soil disposal. The summary report will support a NFA determination for the former NelSon Petroleum Property.

REFERENCES

- Floyd|Snider. 2021. *Data Summary for the Former NelSon Petroleum Property*. Memorandum from Kristin Anderson, Floyd|Snider, to Mark Nelson, Nel/Son Distributing, Inc. 26 April.
- Washington State Department of Ecology (Ecology). 2016. *Guidance for Remediation of Petroleum Contaminated Sites*. Publication NO. 10-09-057. June.

LIST OF ATTACHMENTS

- Figure 1 Property Location Map
- Figure 2 Summary of Soil Data and Excavation Plan

Figures



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				FSTP-05 Depth Benzene 4-4 0.020 U	GRO 170
Notes: 1. Property boundary based on visible fence lines in the east and west and on parcel data from Snohomish County in the north and south. • Depths are presented in feet and Benzene and GRO results are presented in mg/kg. • Results shown in RED BOLD indicate a result that exceeds the MTCA Method A cleanup level	Abbreviations: AST = Abovegrou GRO = Gasoline- MTCA = Model Ti mg/kg = Milligran Qualifiers: (1) Sample conta	und storage tank -range organics oxics Control Act ns per kilogram			W STANLEY ST
for benzene (0.030 mg/kg) or GRO (30 mg/kg). Orthoimagery obtained from Nearmap, 2020. FLOYD SNID strategy science enginee	Ù = Analyte was i ER er in g	not detected at the given reporting limit. Additional Remedial Former NelSon Pet Granite Fa	Excavation Plan roleum Property Ils, WA		Figure 2 Summary of Soil Data and Excavation Plan

I:\GIS\Projects\NelSon-Granite Falls\MXD\Excavation Plan Memo\Figure 2 Summary of Soil Data and Excavation Plan.mxd 2/4/2021