

Staff Memorandum

Junction City LLC/Jerry Brown Co, LUST # 20-16-1600

From: Sarah Kingery

Through: Brad Shultz, Western Region Cleanup Manager and Nancy Sawka, Lead Worker

Date: May 13, 2026



Document information

This document was prepared by Oregon Department of Environmental Quality

Western Region Environmental Cleanup & Emergency Response

165 E 7th Avenue, Suite 100

Eugene, Oregon 97401-3049

[Visit our website for additional information.](#)

Non-discrimination statement

DEQ does not discriminate on the basis of race, color, national origin, disability, age, sex, religion, sexual orientation, gender identity, or marital status in the administration of its programs and activities.

Visit DEQ's [Civil Rights and Environmental Justice page](#).

Executive summary

This document presents the basis for the Oregon Department of Environmental Quality's (DEQ's) recommended conditional No Further Action (NFA) determination for the Junction City LLC/Jerry Brown Co site, in Junction City. As discussed in this report, contaminant concentrations in soil, groundwater, and soil vapor are below acceptable risk levels.

The proposed conditional NFA determination meets the requirements of Oregon Administrative Rules Chapter 340, Division 122, Sections 0205 to 360 and ORS 465.200 through 465.455.

Petroleum hydrocarbons and associated constituents were identified in soil, groundwater, and soil vapor during multiple investigations between 2016 and 2025. Soil contamination is present at depths not accessible to occupational workers, and groundwater used for domestic purposes north of the site contains contaminant concentrations below relevant RBCs. Vapor intrusion risk was identified as a potential concern only for future site development.

Because future construction could create complete vapor intrusion pathways, DEQ recommends issuing a conditional NFA requiring the property owner to record an Easement and Equitable Servitudes (EES). The EES will ensure that any future occupied structures incorporate DEQ-approved vapor mitigation measures or that additional cleanup or assessment is conducted to demonstrate that such controls are unnecessary.

The proposal is based on information documented in the administrative record for this site. A list of key documents used to prepare this memorandum is presented at the end of this document.

Table of contents

Document information	2
Non-discrimination statement	2
Executive summary	3
Background	5
Site location	5
Site setting	5
Physical setting	5
Site History	5
Beneficial Land and Water Use Determinations	5
Land use	5
Groundwater use	5
Surface water use	6
Investigation and Cleanup Work	6
Nature and extent of contamination	6
Risk Evaluation	7
Conceptual site model	7
Contaminant concentration	7
Human health risk	8
Ecological risk	9
Recommendation	9
Administrative Record	9
Attachments	10

Background

Site location

The site's location can be described as follows:

- Address: 93244 Highway 99 South, Junction City, Oregon 97448
- Latitude 44.1943 North, longitude -123.2033 West
- Tax lots 700 and 1600, Township 16 South, Range 4 West, Section 8

Site setting

The site is 2.7 acres of flat land located on the northwest corner of Highway 99 South and Mapleton-Junction City Highway (see Figure 1). There is a residence north of the site that has a domestic well. Land to the west is agricultural. The site is developed with six underground storage tanks (USTs) that contain gasoline and diesel, seventeen aboveground storage tanks (ASTs), a warehouse, fueling area and canopy, petroleum product storage, drive-through coffee kiosk, and a commercial building.

Physical setting

The site is located at an elevation of approximately 339 feet above mean sea level. Based on subsurface investigations at the site the underlying soils consist of sandy silt, silty sand and gravel from the ground surface to approximately 15 feet below ground surface (bgs). Depth to groundwater fluctuates seasonally and has been measured from 0.5 to 11 feet bgs. The groundwater flow direction is variable.

Site History

The site was undeveloped or used for agriculture until the late 1930's. The site has been occupied by fueling operations since the late 1930's. It has been in its current configuration since 2001 (see Figure 3).

Beneficial Land and Water Use Determinations

Land use

The site is zoned rural commercial and located inside the urban growth boundary. It is located in an area of mixed use. Property to the north is zoned as exclusive farm use however it is currently used as single family residential. Property to the east of the site is zoned light industrial and property to the west is zoned as rural residential. There is no zoning or use change expected.

Groundwater use

Drinking water to the site is provided by the Junction City Water Department (JCWD). The nearest groundwater supply well is located 270 feet north and hydrologically downgradient of

the site. This is a domestic well for the residence at 93300 Highway 99 South. The screened interval for this well is unknown. Another well was identified 400 feet northeast of the site. Oregon Water Resources (OWR) records identify this well as domestic and a second well at the location identified for gardening irrigation.

Surface water use

The nearest surface water to the site is Flat Creek located 650 feet north of the site. Flat Creek flows north to the Willamette River. Stormwater onsite is collected in catch basins and directed into a culvert that runs east beneath Highway 99 South. Some of the catch basins divert stormwater into an oil water separator prior to entering the culvert. The culvert empties into a ditch between highway 99 S and the railroad. The ditch flows north and into Flat creek.

Investigation and Cleanup Work

During a site investigation in 2016 petroleum contaminated soil and groundwater were encountered and reported to DEQ. Leaking underground storage tank (LUST) file 20-16-1600 was opened. A previous LUST file was opened at the site in 1990 (LUST 20-90-4029) and then closed with a no further action in 2004. In July 2016, the initial investigation focused on the 55-gallon drum storage area, oil/water separator, USTs, and ASTs. Additional borings drilled in September 2016 focused on the north portion of the site occupied by the ASTs and USTs. In 2017, six monitoring wells (MW-1 to MW-6) and six vapor wells (SV-1 to SV-6) were installed on the north half of the property. Two offsite monitoring wells (MW-7 and MW-8) were installed on the north property (93300 Highway 99 South) between the site and the domestic well.

Soil samples were analyzed for gasoline and diesel-range hydrocarbons by methods NWTPH-Gx and NWTPH-Dx respectively. Soil samples were also analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) and for methyl (t) butyl ether (MTBE) by EPA method 8260B.

Groundwater samples were analyzed by NWTPH-GX and NWTPH-DX, BTEX and MTBE by EPA method 8260B, polycyclic aromatic hydrocarbons (PAHs) by EPA method 8270D. Soil vapor samples were analyzed for volatile organic compounds by EPA Method TO-15.

Nature and extent of contamination

Contaminants of interest at the site are gasoline and diesel-range hydrocarbons, benzene, ethylbenzene, naphthalene, 1-methylnaphthalene and 2-methylnaphthalene.

Soil contaminated with gasoline-range hydrocarbons was present at 10 feet bgs near the ASTs. Diesel-range contamination was detected at 5 feet bgs near the USTs (MW-2) and at 8 feet bgs on the east side of the site (MW-6). Gasoline was detected at a concentration of 120 mg/kg and diesel at a maximum concentration of 339 mg/kg.

Groundwater beneath the northern portion of the site is contaminated with gasoline and diesel-range hydrocarbons at concentrations of 556 and 178 µg/l, respectively. BTEX is present in groundwater at concentrations less than one to the south of the USTs. MTBE is also present in groundwater in this area.

Soil vapor beneath the site is contaminated with gasoline range hydrocarbons, BTEX and other associated VOCs. Concentrations were highest on the east side of the site at sample location SV-6) where gasoline was detected at 115,000 µg/m³.

Risk Evaluation

Conceptual site model

Releases at the site are attributed to leaks from the underground piping of the ASTs and USTs. Contamination consists of gasoline and diesel-range hydrocarbons, and associated constituents.

Complete human pathways include:

- Soil dermal contact, ingestion and inhalation for construction and excavation workers.
- Groundwater in excavation for construction and excavation workers.
- Vapor intrusion into buildings
- Volatilization to outdoor air
- Ingestion and Inhalation from tapwater

The site is commercial with no ecological habitat therefore there are no complete ecological pathways.

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. Based on this, applicable RBCs are identified and used for risk screening.

The current and reasonably likely future site use is commercial. The adjacent property to the north is residential. Commercial receptors will be considered for onsite and residential receptors will be considered for the property to the north.

The conceptual site model is summarized on a Table in the attachments.

Contaminant concentration

Table 1: Soil Contamination

This table provides the maximum concentration detected and compares it to DEQ RBCs

Contaminant	Maximum concentration (mg/kg)	Was RBC exceeded?
Gasoline	120	Yes, leaching to groundwater
Diesel	339	Yes, leaching to groundwater

Table 2: Groundwater Contamination

This table provides the maximum concentrations detected on the most recent sampling event and compares it to DEQ RBCs

Contaminant	Maximum concentration (µg/l)	Was RBC exceeded?
Gasoline	556	Yes, inhalation and ingestion from tapwater.
Diesel	178	Yes, inhalation and ingestion from tapwater.
Benzene	0.993	Yes, inhalation and ingestion from tapwater.
Ethylbenzene	0.303	No
1-methylnaphthalene	1.79	Yes, inhalation and ingestion from tapwater.
2-methylnaphthalene	0.168	No
MTBE	Not detected in 2025	No

Table 3: Soil Vapor Contamination

This table provides the maximum concentrations detected in soil vapor and compares it to DEQ RBCs

Contaminant	Maximum concentration (µg/m³)	Was RBC exceeded?
TPH low fraction	115,000	Yes, commercial vapor intrusion
Benzene	3.89	No
Ethylbenzene	4.31	No
Total xylenes	100.4	No
Acetone	185	No
Additional VOCs	Mixed	No

Human health risk

Soil contamination is present at depths of 5 and 10 feet between the USTs and the ASTs. Contaminated soil at this depth is not accessible to occupational workers and remaining concentrations are below the RBCs for construction and excavation workers. Therefore, the soil ingestion, dermal contact and inhalation pathway is incomplete.

Remaining soil contamination exceeds the leaching to groundwater RBC. However, groundwater concentrations are less than the RBCs for ingestion and inhalation from tapwater.

Water is provided to the site by the local municipality therefore the ingestion & inhalation from tapwater is considered incomplete for onsite receptors.

Groundwater to the north of the site is used for domestic purposes. Testing of the domestic well detected concentrations of contaminants below the RBCs for drinking water and there is no unacceptable risk to human health.

Low fraction TPH exceeds the RBCs for vapor intrusion into buildings onsite at sample location SV-6. Buildings are located at a distance greater than 60 feet from the contamination making this pathway incomplete under current site use. The pathway is potentially complete for future site development.

Ecological risk

The site is a developed commercial property. There is no residual shallow soil contamination. There are, therefore, no unacceptable ecological risks identified for the site.

Recommendation

A conditional no further action (NFA) is recommended for this site because there is a potential future risk to human health if buildings were constructed or expanded on the site. To mitigate the risk an Easement and Equitable Servitude (EES), should be recorded on the property that requires the following conditions:

- Only with written approval of DEQ, the Owner may construct future buildings for human occupation on the property. Future buildings constructed at the site must incorporate DEQ-approved, professionally designed, and installed vapor mitigation engineering control(s) into the build design.
- Alternatively, additional cleanup and/or site assessment could be conducted in accordance with a DEQ-approved work plan adequate to demonstrate that residual contamination does not pose unacceptable vapor intrusion risks to future building occupants.
- The owner shall not construct future buildings or allow other parties to occupy and/or construct future buildings for human occupation unless the requirement has been satisfied, or it has been demonstrated to the satisfaction of DEQ that this prohibition on construction is no longer necessary to protect human health.

Based on sample results for soil, groundwater, and soil vapor, and following recording of the EES, acceptable risk levels are not exceeded, and a conditional No Further Action determination is recommended for this site. The conditional No Further Action determination should be recorded in DEQ's environmental data management system, also known as Your DEQ Online (YDO) under project number LUST20-16-1600.

Administrative Record

2016-05-31_20-16-1600 Phase I Report.pdf

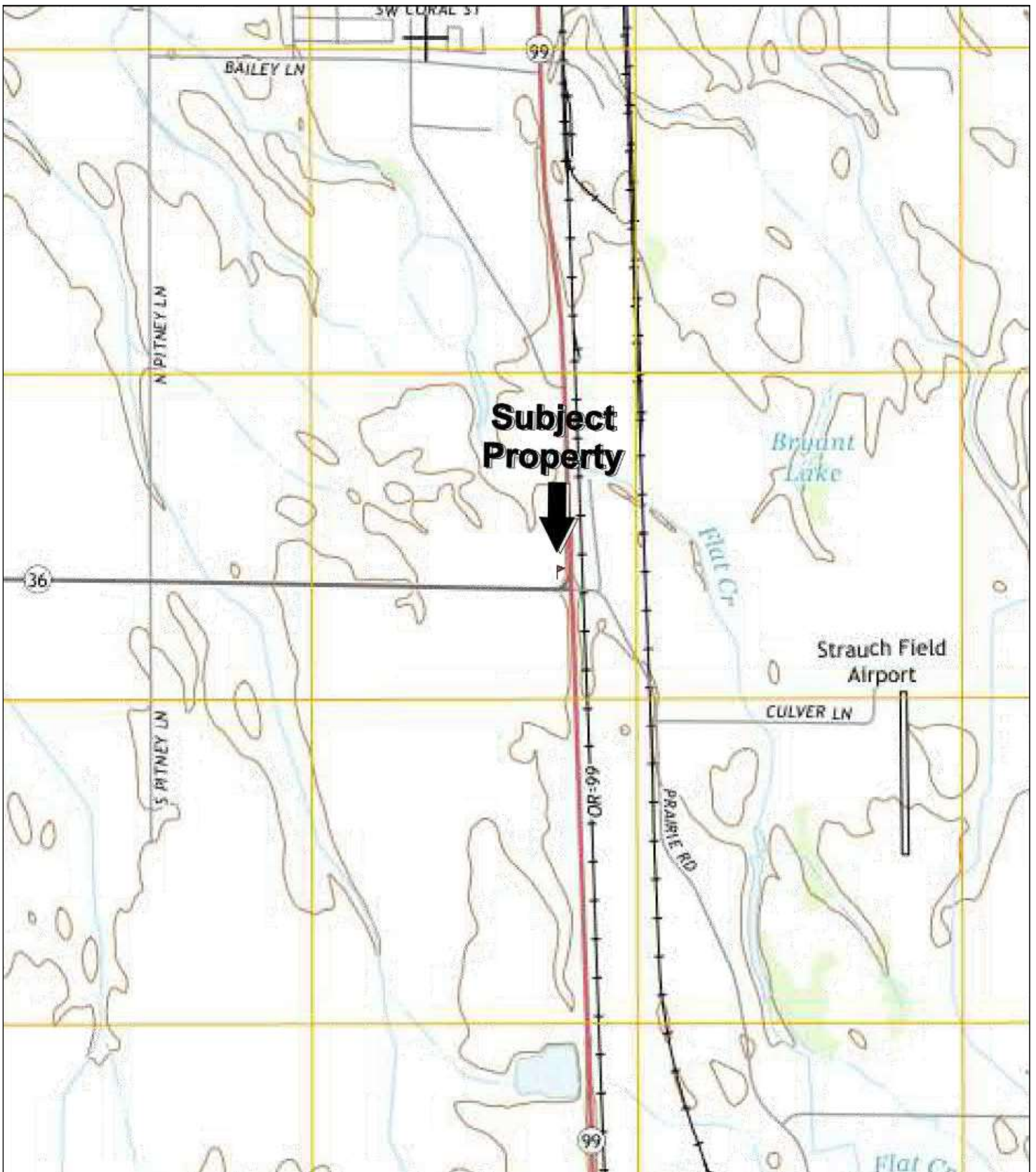
2016-09-12_20-16-1600 Phase II Report.pdf

2018-01-11_20-16-1600 MW Report.pdf
2018-12-28_20-16-1600_September 2018 GMW Report.pdf
2020-03-24_20-16-1600 RBE Report.pdf
2020-06-16_20-16-1600 DEQ response to NFA request.pdf
2020-08-07_20-16-1600 Additional GW Characterization Work Plan.pdf
2021-02-26_20-16-1600 Additional Groundwater Characterization Report.pdf
2021-06-08_20-16-1600_March 2021 GWM Report.pdf
2021-08-17_20-16-1600_June 2021 GWM Report.pdf
2021-11-19_20-16-1600 September 2021 GWM Report.pdf
2024-01-29_20-16-1600_October 2023 GWM Report.pdf
2024-06-10_20-06-1600_March 2024 GWM Report.pdf
2025-04-30_20-16-1600 March 2025 GWM Report.pdf
2025-07-22_20-16-1600 June 25 Domestic Sampling Report.pdf

These documents are available through our online records management system. Some documents created before 2023 may only be available in our paper files. The public can access paper documents through a public records request.

Attachments

1. Figure 1: Vicinity map (Partner)
2. Figure 3: Sample Location Map (Partner)
3. Conceptual Site Model



LEGEND:

USGS JUNCTION CITY, OREGON QUADRANGLE
 VERSION: 2014 CURRENT AS OF: 2014



TITLE: SITE VICINITY MAP

FIGURE: 1	PREPARED BY: DM	DATE: OCTOBER 2019	PROJECT NUMBER: SM16-161208
--------------	--------------------	-----------------------	--------------------------------

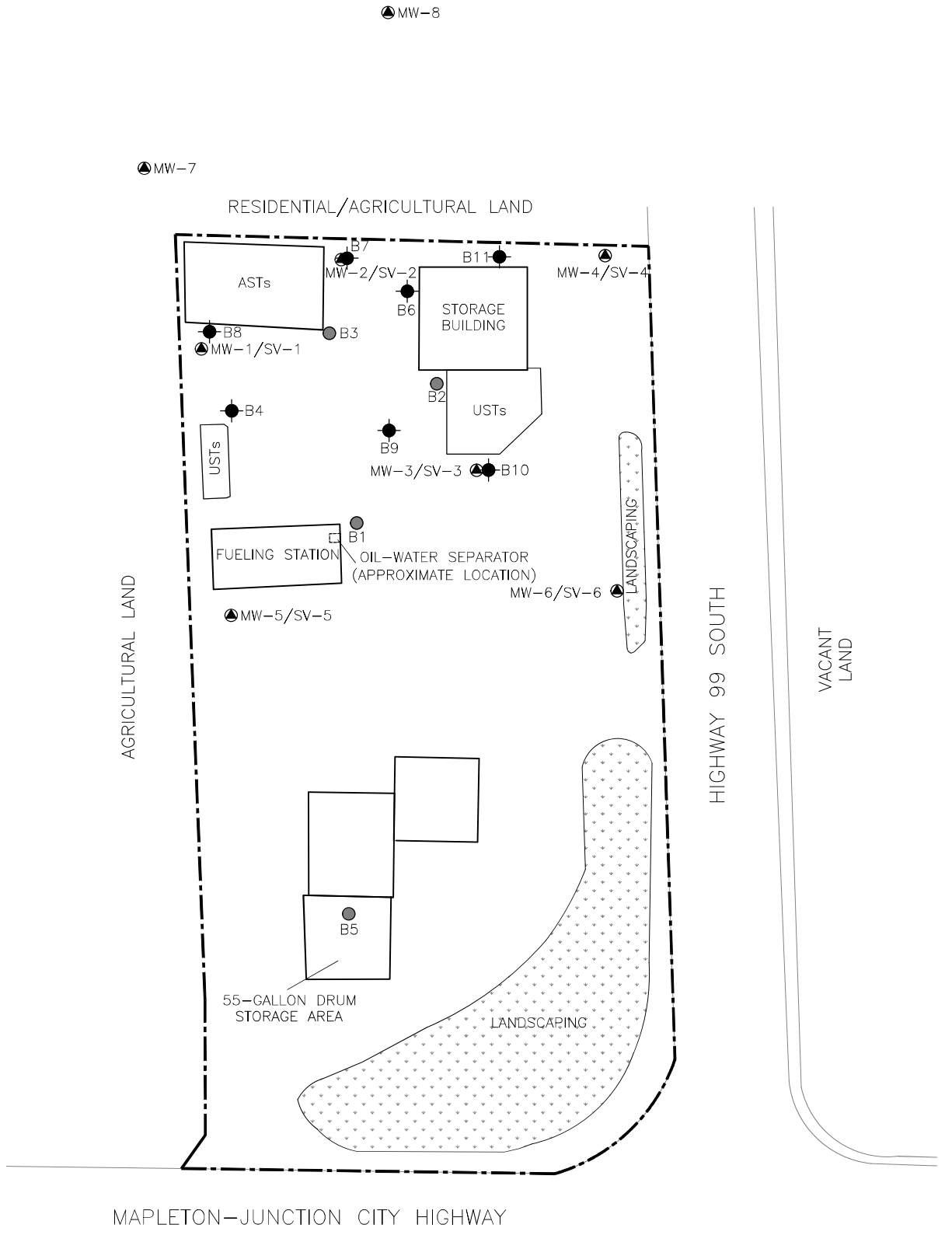
ADDRESS:
 93244 HIGHWAY 99
 JUNCTION CITY, OREGON 97488

PARTNER
 Engineering and Science, Inc.

2154 TORRANCE BOULEVARD, SUITE 200
 TORRANCE, CALIFORNIA 90501

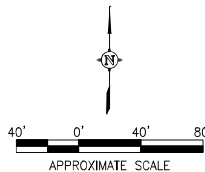
NOTES:

- AST = ABOVEGROUND STORAGE TANK
- UST = UNDERGROUND STORAGE TANK



LEGEND:

- PROPERTY LINE
- MONITORING WELL LOCATIONS
- STEP-OUT BORING LOCATIONS (SEPTEMBER 2016)
- PREVIOUS BORING LOCATIONS (JULY 2016)



TITLE: SAMPLE LOCATION MAP			
FIGURE: 3	PREPARED BY: AS	DATE: FEBRUARY 2021	PROJECT NUMBER: SM16-161208
ADDRESS: 93244 HIGHWAY 99 JUNCTION CITY, OREGON 97488			
2154 TORRANCE BOULEVARD, SUITE 200 TORRANCE, CALIFORNIA 90501			

Table 1: Conceptual Site Model

This table identifies the applicable risk-based concentrations (RBCs) based on pertinent pathways and receptors. Notes referred to in the table are as follows:

1. Concentrations detected do not exceed the applicable RBCs.
2. Groundwater is not used for drinking onsite. This pathway is therefore not considered, in accordance with Section B.3.2.4 of DEQ’s RBDM guidance for occupational receptors.
3. This pathway was not assessed because concentrations in other media did not exceed the RBCs or the pathway.

Pathway	Receptor	Applicable RBC yes or no	Basis for Selection or Exclusion
Soil-Ingestion, dermal contact and inhalation	Residential	No	This is a commercial site and soil contamination does not extend offsite.
Soil-Ingestion, dermal contact and inhalation	Occupational	No	Soil contamination is at depths greater than 3 feet.
Soil-Ingestion, dermal contact and inhalation	Construction worker	Yes	Soil contamination is present at depths greater than 3 feet.
Soil-Ingestion, dermal contact and inhalation	Excavation worker	Yes	Soil contamination is present at depths greater than 3 feet.
Soil-volatilization to outdoor air	Residential	No	This is a commercial site
Soil-volatilization to outdoor air	Occupational	Yes	Note 1
Soil-Leaching to Groundwater	Residential	Yes	Domestic well adjacent to site
Soil-Leaching to Groundwater	Occupational	No	Note 2
Groundwater-ingestion & inhalation from tapwater	Residential	Yes	Groundwater contamination extends offsite and there is a domestic well adjacent to site
Groundwater-ingestion & inhalation from tapwater	Occupational	No	Note 2
Groundwater-volatilization to outdoor air	Residential	Yes	Note 1
Groundwater-volatilization to outdoor air	Occupational	Yes	Note 1
Groundwater-vapor intrusion into buildings	Residential	Yes	Note 1
Groundwater-vapor intrusion into buildings	Occupational	Yes	Additional soil vapor assessment conducted.
Groundwater in excavation	Construction worker	Yes	Note 1

Pathway	Receptor	Applicable RBC yes or no	Basis for Selection or Exclusion
Groundwater in excavation	Excavation worker	Yes	Note 1
Soil vapor intrusion into buildings	Residential	No	Note 1
Soil vapor intrusion into buildings	Commercial	Yes	Buildings onsite are greater than 60 feet from contamination.
Air inhalation	Residential	Not analyzed	Note 3
Air inhalation	Commercial	Not analyzed	Note 3

Non-discrimination statement

DEQ does not discriminate on the basis of race, color, national origin, disability, age, sex, religion, sexual orientation, gender identity, or marital status in the administration of its programs and activities. For translations or alternate formats, visit DEQ's [Civil Rights and Environmental Justice page](#).