



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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September 3, 2015

Mr. Mark Chandler
TOC Holdings
2737 West Commodore
Seattle, WA 98199

Re: No Further Action at the Following Site:

- **Site Name:** Jackpot Food Mart Co 169
- **Site Address:** 851 N. Broadway, Everett
- **Cleanup Site No.:** 6261
- **Facility/Site No.:** 54678156
- **VCP Project No.:** NW2157

Dear Mr. Chandler:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Jackpot Food Mart Co 169 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

Is further remedial action necessary to clean up contamination at the Site?

NO. Ecology has determined that no further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the 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"). The analysis is provided below.

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:



- Gasoline-, diesel-, and oil-range hydrocarbons (GRPH, DRPH, ORPH), naphthalene, benzene, toluene, ethylbenzene, and xylenes (BTEX) into the Ground Water.
- GRPH, DRPH, ORPH, naphthalene and BTEX into the Soil.

Enclosure A includes a detailed description and diagram of the Site, as currently known to Ecology.

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. SoundEarth Strategies Inc., 2013, Remedial Investigation Report.
2. HydroCon, 2014, Exposure Pathway Assessment Report.
3. HydroCon, 2015, Addendum – Exposure Assessment Report.

Those documents are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by calling the NWRO resource contact at (425) 649-7235 or send an email request to NWRO_Public_Request@ecy.wa.gov.

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 **no further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A**.

The lateral and vertical extent of contamination in soil and ground water has been adequately defined at the Site. The extent of the Site is defined by the contaminants of concern identified during the Site investigation and based on known and suspected sources of contamination. The contaminants that define this Site include GRPH, ORPH, DRPH, naphthalene, and BTEX.

Groundwater is not considered to be an issue on the site based on results presented in the "Addendum – Exposure Pathway Assessment Report". All of the groundwater monitoring wells located outside of the excavation pit have been dry during multiple sampling events or there is water intermittently in some wells. The remediation wells that were used at the Site are all located in the coarse fill material within the tank pit excavation. Water in the fill material is confined by the low permeability natural material. Consequently, the excavation serves as a sort of "bath tub" structure in which infiltrating water is collected. A deep exploration boring drilled to a depth of 60 feet did not encounter a groundwater unit.

2. Establishment of cleanup standards.

Ecology has determined the cleanup levels and points of compliance you established for the Site meet the substantive requirements of MTCA.

Potential contamination consisting of GRPH, ORPH, DRPH, naphthalene, and BTEX was identified in soil at this Site. The Property is currently occupied by a convenience store and restaurant. The surrounding properties are used for commercial and residential purposes. Because of the land use considerations, cleanup levels are required to comply with either Method A or Method B cleanup levels for unrestricted land use.

A terrestrial ecological evaluation (TEE) is required to determine if there is risk of harming indigenous plants or wildlife (WAC 173-340-7490). In the instance where habitat exists, it may be necessary to apply a more stringent cleanup level. The Site is located in the City of Everett and there is no undeveloped land within 500 feet of the Site. Therefore, the Site qualifies for a TEE exclusion; no adjustment of the Site cleanup levels is required to account for habitat.

For soil, the standard point of compliance shall be established in the soil throughout the site from the ground surface to fifteen feet below the ground surface.

Because ground water is not considered to be impacted by contamination at the Site, Method B cleanup levels for soil direct contact were applied. The cleanup levels for contaminants in soil at this Site, using calculated Method B are shown in the following table:

Contaminant	Method B Cleanup Level (mg/kg)
TPH	2,106
Benzene	18.2
Ethyl Benzene	8,000
Toluene	6,400
Xylenes	16,000

3. Selection of cleanup action.

Ecology has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA.

Contamination at this Site consists of petroleum and petroleum additives released from four underground storage tanks (USTs) and associated piping in soil. The cleanup at this Site consisted of excavation and removal of the USTs, piping, and petroleum-contaminated soils (PCS). Some shallow ground water was encountered and reportedly existed primarily in the tank excavation backfill. To address residual contamination in this area, a dual phase extraction (DPE) system was installed during 2006 to remove water from the fill in the tank excavation and extract vapors from the soil.

4. Cleanup.

Ecology has determined the cleanup you performed meets the cleanup standards established for the Site

Source control consisted of removing the underground storage tanks and associated piping and excavation and off-Site treatment of 1,460 tons of petroleum-contaminated soils. Residual contamination in water within the tank cavity was remediated using a dual-phase extraction system.

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 performed is

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substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

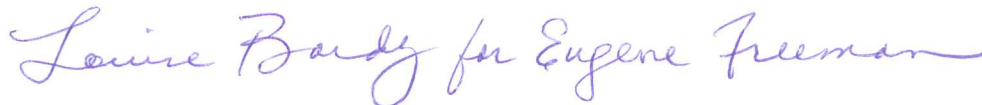
The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Termination of Agreement

Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project (NW2157).

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 or the termination of the Agreement, please contact me by phone at (425) 649-7191 or by e-mail at eufr461@ecy.wa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Louise Bandy for Eugene Freeman".

Eugene Freeman
Toxics Cleanup Program

Enclosures: A – Description and Diagrams of the Site

cc: Craig Holtgren, HydroCon LLC
Sonia Fernandez, VCP Coordinator, Ecology
Dolores Mitchell, VCP Financial Manager, Ecology

Enclosure A

Description and Diagrams of the Site

Site Description

Area/Property Description: The Property is identified as Jackpot Food Mart CO 169, located at 851 North Broadway in Everett, WA (Snohomish County parcel number 29051700200700). The Property is the location of a former retail gasoline service station. Contaminants of concern at the Site consist of gasoline (GRPH) and diesel range (DRPH) petroleum hydrocarbons, benzene, toluene, ethyl benzene, and xylene (BTEX), naphthalene, lead, and arsenic.

Property History and Current Use: Prior to 1959, the Property was undeveloped. From 1959 through 2003, a retail gasoline service station occupied the Property. The Property is located less than 2,000 feet from the former ASARCO Smelter Site in Everett. In 2003, four underground storage tanks (USTs) and associated equipment were removed from the Property and in 2008, the Property was redeveloped as a retail shopping center. The adjoining properties are zoned for commercial use. The parcel to the north and east of the Property is undeveloped. The parcel to the south is occupied by a paved parking area and two 1980 vintage buildings that are designated as medical and other health services. The west Property boundary borders Highway 99 North. The parcel on the other side of Highway 99 North is occupied by two 1985 vintage buildings occupied by Everett Community College and various state agencies. A parcel across Highway 99 North to the southwest is occupied by a retail shopping center and a Texaco brand retail gasoline service station.

Contaminant Source and History: In 1959, there was one 500-gallon waste oil UST, two 6,000-gallon gasoline USTs, and one 8,000-gallon gasoline UST. In 1978, an additional 12,000-gallon gasoline UST was installed. In 1990, the 500-gallon waste oil UST was removed and in 2003, the remaining four USTs and associated structures were removed from the Property.

In 2003, four USTs, two dispenser islands, and associated piping were removed from the Site. Soil samples from 23 locations in the excavation were collected. Soil samples from the north, west, and south regions of the excavation contained elevated levels of GRPH and BTEX above MTCA Method A. Naphthalene above MTCA Method A cleanup levels was observed in one sample from the northeast portion of the excavation. Methyl tert-butyl ether (MTBE), 1,2-dibromoethane (EDB), and 1,2-dichloroethane (EDC) were sampled for but not observed in any of the samples. In addition, 973 cubic yards of contaminated soil were removed and transported to Rinker materials in Everett for thermal desorption treatment. Contaminated soil was left at the north Property boundary, adjacent to the sidewalk and a water line along Highway 99 North, and inaccessible under a 48-inch diameter sewer line at the north property boundary.

In 2004, 12 borings (B01 through B12) were drilled to determine the lateral and vertical extent of contamination that was left in place. Soil borings collected from borings adjacent to the north, west-southwest perimeter of the former excavation and the north Broadway ROW contained concentrations of GRPH and/or benzene that exceeded MTCA Method A cleanup levels at depths between four and 17 feet below ground surface (bgs).

In 2006, remediation wells were installed for use as dual phase extraction (DPE) wells. Seven wells (RW01 through RW-07) were completed as extraction wells and two wells (OW01 and OW02) as monitoring wells. The DPE system was installed and started operation during 2006; the system operated until 2012. In 2006, six direct push borings were advanced from which soil

and ground water samples were recovered. The only contaminants above the MTCA levels in soil were metals that are likely associated with mill-area fill material derived from the Everett Smelter site.

In March 2009, 220 gallons of a sodium persulfate and hydrogen peroxide solution were injected into wells OW02 and RW06 as a polishing step to remediate any residual contamination in the tank cavity fill material.

In June 2009, eleven push probe borings were advanced to depths of 17.5 to 22 feet bgs in order to assess vertical and lateral extent of contamination in soil and groundwater. GRPH and benzene were found above MTCA cleanup levels in six borings. Concentrations of toluene, ethylbenzene, xylene and naphthalene exceeded MTCA cleanup levels in three borings.

Previous studies suggested that contaminant concentrations were not fully characterized to the north, east, and west of the UST excavation. In 2010 and 2011, 15 soil borings were advanced using a hollow stem auger. Soil samples were collected at 1.5 foot intervals to a maximum depth of 21.5 feet bgs. The purpose of the borings was to define the lateral extent of contamination at the Site. Figure 7 in the 2013 Remedial Action Report indicates that residual soil contamination consisting of soil that exceeds MTCA cleanup levels extends to the west, into the North Broadway right-of-way and along the edge of the north Property boundary.

In 2010, a pilot study was performed to evaluate dual phase extraction (DPE) as a remediation option of residual contamination. Three wells in the tank excavation area were used to evaluate the potential effectiveness of the system.

In June 2012, the DPE system was expanded to nine wells for the purpose of extracting contaminated ground water and soil vapor.

Physiographic Setting: The Site is located in the North-Central Puget Sound Lowlands and is bracketed to the east by the Cascade Mountains and to the west by the Olympic Mountains. The local area is level with a slight downward slope from northeast to southwest. The surface elevation is about 100 feet above mean sea level.

Ecological Setting: The Property is located in a commercial and residential area within the City of Everett. The Property is overlain by asphalt and has a building near the east boundary. The land surface of the area surrounding the Property is covered with commercial and residential properties.

Geology: The upper seven to 22 feet of the Site consists of fill material comprised of gravel, sand and silt. There are variable amounts of slag up to 8 feet thick in some areas of the fill. The fill material is likely derived in part from the former Everett Smelter. Beneath the fill is a native unit consisting of dense, silt and sand with intermittent gravel content, the Vashon till, located about 15 to 30 feet bgs. Beneath the Vashon till is a dense silt and sandy gravel that is identified as the Vashon advance outwash. This unit extends beyond 30 feet bgs.

Groundwater: According to the Ecology well log database, the depth to water in this area is about 70 to 90 feet bgs. Depth to pockets of water in soil at the Site ranged from six to 24 feet

bgs. Most of the ground water wells installed were either continuously dry or had intermittent water. The presence of ground water in the upper 50 feet was subsequently attributed to disconnected lenses of perched water. The most water produced was from wells within the UST excavation backfill. Water level data shows a radial flow direction originating in the UST fill, indicative of ground water mounding related to the more permeable backfill material. An exploration boring was drilled to a depth of 60 feet bgs at the Site to assess if groundwater is present at depth.

Surface Water: The Snohomish River, the closest surface water body to the Site, is located 4,100 feet to the northeast of the Property. Surface water runoff from the Site is collected by the City of Everett storm water system.

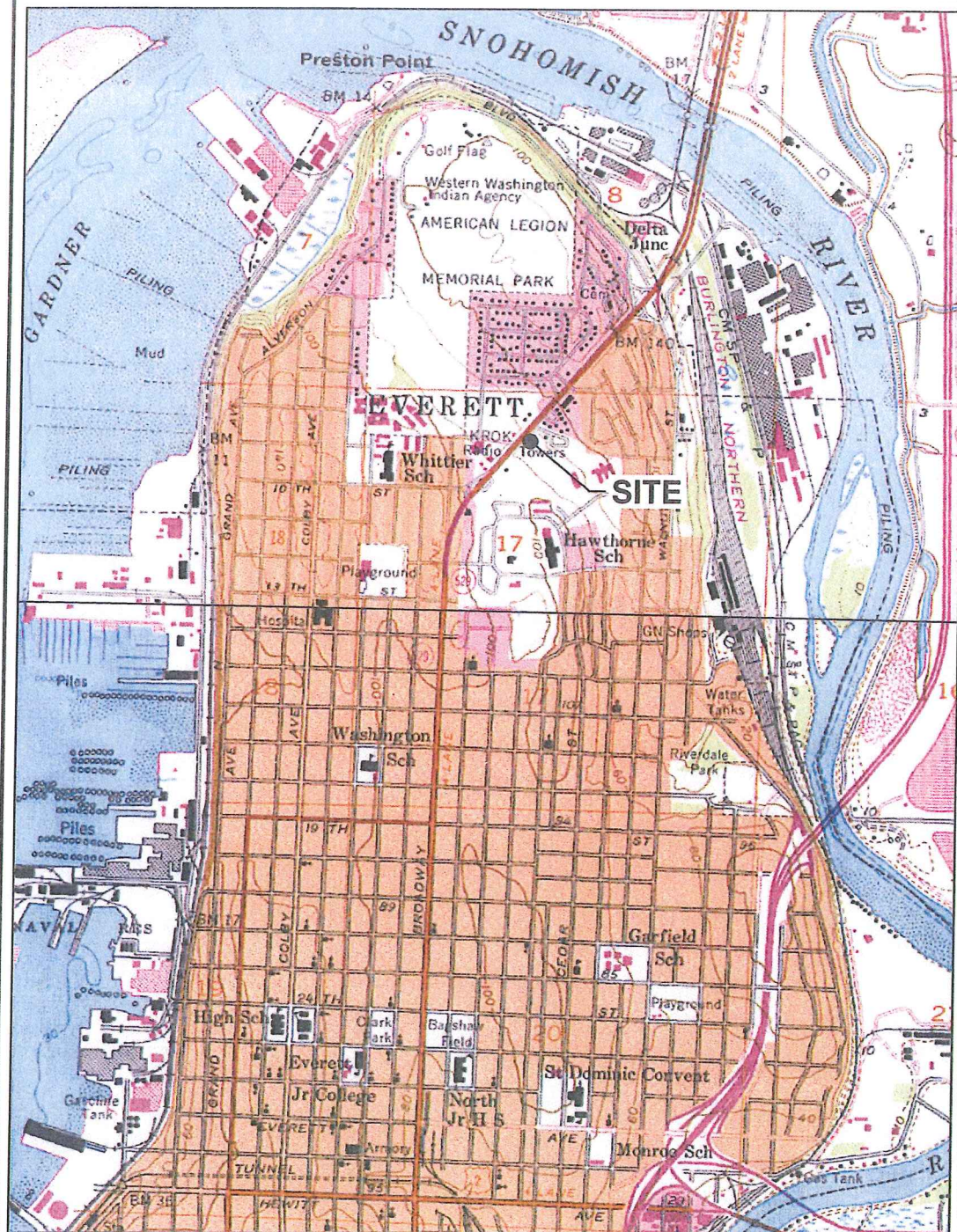
Water Use/Water Supply: A search of the Ecology well database indicates that there are no ground water supply wells within 0.5 miles of the Site. Water use at the Site and in the surrounding area is provided by the City of Everett municipal water supply.

Release and Extent of Contamination – Soil: Contaminant release to soil was from multiple USTs and associated distribution piping. During 2003, the tanks, piping and 1,460 tons of contaminated soil were excavated. The soil was transported to Rinker Materials in Everett for treatment by thermal desorption. Some soil contamination remains west of the Property in the ROW of North Broadway Avenue, along the north Property boundary, and beneath the building on the Property. The Method B cleanup level for direct contact in the soil was calculated using a fractionated petroleum sample collected at the Site. The total petroleum Method B value calculated using the MTCA TPH spreadsheet application is 2,106 mg/kg. Method B cleanup levels were also calculated for the other constituents (BTEX) using equation 740-2 (carcinogenic substance).

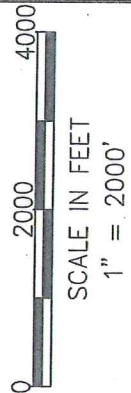
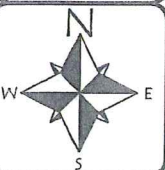
Lead and arsenic were discovered in a layer of slag that partially comprises fill material at the northwest area of the Site and extends to the west under North Broadway Avenue. The layer of slag is about 8 feet thick and extends onto the Property about five feet from the boundary. The slag is located about seven feet below ground surface. Because of the close proximity of the deposit next to Broadway, the fact that the slag is not impacting ground water, and the pervasive presence of slag in fill in this area, remediation of the slag was deemed unnecessary.

Extent of Contamination – Ground Water: Residual soil water contamination was observed intermittently in the fill water that accumulated in the UST backfill material. A dual phase extraction (DPE) system was installed in during 2012 to remove residual water and remediate soil vapors. There does not appear to be a ground water impact at this Site beyond intermittent water in the UST excavation. Borings advanced to 60 feet bgs did not encounter ground water and soil samples that have contamination present at depth. Therefore, the deep aquifer that is estimated to be at about 80 feet in depth is not believed to be impacted. Consequently, the soil to ground water pathway at the Site is not complete.

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NOTE(S):
USGS, MARYSVILLE QUADRANGLE
WASHINGTON-SNOHOMISH CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

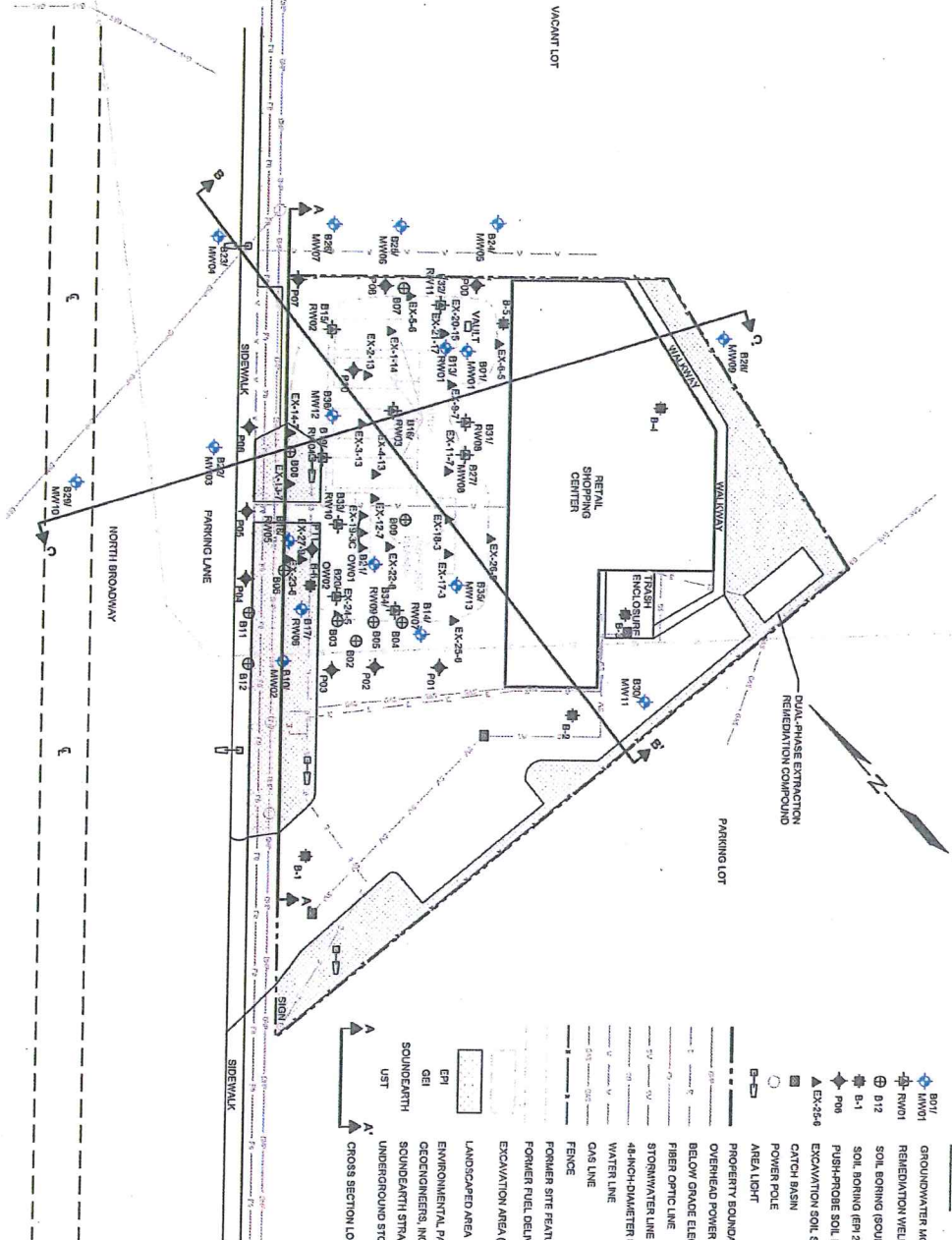


DATE: 7-22-14
DWN: JJT
CHK:
APPROVED: CH
PRJ. MGR: CH
PROJECT NO: 14-810

FIGURE 1
SITE LOCATION MAP

TOC HOLDINGS CO. FACILITY NO. 01-169
851 N. BROADWAY
EVERETT, WA.

SOURCE DRAWINGS PROVIDED BY:
SOUNDEARTH STRATEGIES, INC.



0 30 60
SCALE IN FEET
1" = 30'



DATE: 7-22-14
DWN: JJT
CHK:
APPROVED:
PRJ. MGR: CH
PROJECT NO:
01-169

FIGURE 4
EXPLORATION LOCATION PLAN WITH
GEOLOGIC CROSS SECTION LOCATIONS
TOC HOLDINGS CO, FACILITY NO. 01-169
851 N BROADWAY
EVERETT, WA.

