# DRAFT FINAL
# Cleanup Action Plan

## Whitney's Chevrolet, Inc.
## 123 West Pioneer Avenue
## Montesano, Washington 98563

## Agreed Order No. DE 11121
## FSID # 36813164

**Prepared For:**

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## 1.0 INTRODUCTION

A draft Cleanup Action Plan (dCAP) was prepared under Agreed Order No. DE 2951 (Order) dated May 30, 2007 and as amended on April 25, 2011. The Order is between the Washington State Department of Ecology (Ecology) and Whitney's Chevrolet, Inc.; Caldwell Family Holdings, LLC; and Wynoochee Lodge #43 F&AM of Washington (collectively, the potentially liable persons [PLPs]). The Order was issued pursuant to the authority of the Model Toxics Control Act (MTCA), Revised Code of Washington (RCW), Chapter 70.105D.050(1).

The original Order required that the PLPs perform a Remedial Investigation (RI) and prepare a draft and final Remedial Investigation/Feasibility Study (RI/FS) report for the Site. Under the original order, RI activities were conducted during 2008 and 2009, which included an Initial RI and a Supplemental RI. The results of the Initial RI and the Supplemental RI were described in detail in the *Draft Remedial Investigation Report* (RI Report) dated March 24, 2010 (EPI 2010). During the course of the RI, six underground storage tanks (USTs) were identified, as well as soil and groundwater impacts that appeared to originate from one or more of the USTs. Based on the findings of the 2008 and 2009 RI activities and on comments received from Ecology regarding the RI Report, the Order was amended, by agreement of the parties, to include the following actions:

- Implementation of interim actions at the Site, including removal of the USTs and reasonably accessible contaminated soils;
- Completion of RI activities to address remaining data gaps;
- Performance of one year of performance groundwater monitoring;
- Completion of the FS; and
- Preparation of a draft Cleanup Action Plan (dCAP).

On behalf of the PLPs and in conformance with the amended Order, EPI conducted the interim action and data gap investigation (IADG) activities during 2011. Details and results of the IADG activities were documented in the *Interim Action and Data Gap Investigation Report* (IADG Report) dated February 23, 2012 (EPI 2012a). Upon finalization of the IADG Report, Ecology acknowledged that the RI requirements of the Order had been satisfied and requested preparation of the FS. Subsequently, EPI completed the FS during 2012, which selected a preferred remedial alternative for the Site that includes recovery of light non-aqueous phase liquid (LNAPL) and the use of air sparging (AS) and soil vapor extraction (SVE) technologies. Details of the FS are documented in the report titled *Final Feasibility Study, Whitney's Chevrolet, Inc.* (FS Report), dated January 9, 2013 (EPI 2013a).

To address uncertainties regarding specific methods of implementation and the potential effectiveness of the selected remedial technology, pilot testing was proposed to, and accepted by, Ecology in support of developing the dCAP. While not specifically required by the Order, Ecology and the PLPs agreed that pilot testing was necessary to complete the remedy selection process within the FS. Pilot testing and associated studies were performed August through December of 2013 in accordance with the *Pilot Testing Work Plan* (Work Plan), dated May 3, 2013 (EPI 2013b). The activities included an electrical resistivity imaging (ERI) survey, installation of remedial test wells, and performance of AS and SVE

tests and aquifer characteristic tests. Details and results of the pilot testing and associated studies are presented in the report titled *Pilot Study Results and Feasibility Study Addendum* (Pilot Study Report), dated May 22, 2014 (EPI 2014c), which includes an addendum to the FS.

The FS addendum confirms that AS/SVE technology is suitable and appropriate as a remedial action for the Site based on the pilot testing results, and indicates that both technologies are expected to have a greater area of influence than initially assumed. The FS addendum also provides a revised conceptual design for the selected alternative based on the findings of the pilot testing, which primarily includes fewer AS and SVE wells than previously anticipated and provides the basis for the dCAP and this FINAL CAP that is subject to implementation as a function of Agreed Order No. DE 11121.

## 2.0 BACKGROUND

### 2.1 Site Description

The Site is located in downtown Montesano, Grays Harbor County, Washington, in an area of commercial development and major thoroughfares. The property is at approximately 40 feet above mean sea level (MSL) and is located on the north slope of the Chehalis River valley, near the confluence of the Wynoochee River and Chehalis River. The general Site location is shown on Figure 1. Current property features and structures and the characterized extent of the Site are depicted on Figure 2.

The entire Site is covered with buildings, asphalt, or concrete. Only marginal areas of landscaping exist. The Site is generally flat with slopes of less than 2 percent. Apparent storm water flow is from north to south. There are a total of four properties that are either fully or partially encompassed by the Site; these are:

- Whitney's Chevrolet;
- Sterling Savings Bank
- Charlie's Bar/Veterans of Foreign Wars (VFW) Post #2455; and
- Tony's Short Stop.

The entire northern portion of the Whitney's Chevrolet facility is under roof and currently houses an automobile dealership, repair facility, and vehicle parts sales office. Repair activities include mechanical and auto body repairs. The Whitney's Chevrolet facility was built in stages, with the oldest portion of the building (i.e., northwestern corner) being built in the early 1900s.

The Sterling Savings Bank building has a basement in its western third with the remainder of the building being at grade. The current building was constructed in about 1973. The VFW building also has a basement in its western third with a crawlspace beneath the eastern portion. The VFW building was first constructed in the early 1900's.

The Tony's Short Stop property is subject to its own agreed order (Agreed Order DE-2954) for a pre-existing release of petroleum hydrocarbon fuels in the southeastern corner of that property. It does not appear that the Site and the impacts from the Tony's Short Stop release are commingled. The reviewer is referred to documentation associated with Agreed Order DE-2954 for property-specific details regarding the Tony's Short Stop property.

The surrounding adjoining properties are used for commercial purposes. A U.S. Post Office is located across South First Street to the west. Several commercial businesses, including an additional Whitney's Chevrolet automobile repair shop, are located across West Pioneer Avenue to the north. A commercial structure that includes several retail stores and a restaurant are located to the east. The Montesano Farm and Home Site is located farther to the southeast across Wynoochee Avenue West. None of the surrounding or adjacent properties are used for residential purposes.

Current and future land use in the vicinity of the Site will be limited to commercial uses and there is no realistic potential for ground floor residential development in the area of the Site. Such land uses are currently not allowed under current City of Montesano zoning or within the Master Plan for the downtown core.

### 2.2 Site History

The northwestern corner of the Whitney's Chevrolet facility contained a retail gasoline sales facility from about 1914 through 1995. From 1922 to the present, Whitney's Chevrolet has occupied the on-site building. Gasoline sales were discontinued in 1995. Utility companies owned a portion of the property immediately east of the former gasoline sales facility from 1915 until 1967. Historical maps from 1926 and 1936 depict two additional structures constructed in this area. The property south of the Whitney's Chevrolet facility has been utilized for automobile parking since about 1936.

A bank has operated on the north portion of the property east of the Whitney's Chevrolet facility since at least 1890. The current Sterling Savings Bank on the property was constructed in 1973 replacing an older bank building that was originally constructed in approximately 1890. The current VFW building on the property south of the bank was initially constructed in 1911 and has been occupied by a tobacco shop, restaurant, furniture store, movie theatre, harness shop, barber shop, and billiard hall. Since the mid-1970s, the building has been occupied by a VFW Hall and a tavern. The property south of the VFW building was used for hotels and dining facilities from at least 1889 until sometime between 1903 and 1926 when it was first utilized as a parking lot.

Detailed information pertaining to the Site's history was previously presented in the RI Report (EPI 2010) and in the report titled *Phase I Environmental Site Assessment and Supplemental Historical Review*, dated February 14, 2007 (EPI 2007). The reader is directed to these documents for additional information.

### 2.3 Summary of Environmental and Interim Actions Performed to Date

Several investigations and environmental activities that are relevant to the Site have been conducted since 1995. Details of the investigations and activities were previously documented in several reports. The activities conducted to date include the following:

- UST decommissioning activities and a limited environmental site assessment conducted by Fitt Environmental, Inc. during 1995 (Fitt 1995).

- Area-wide groundwater investigations in Montesano conducted by Ecology, with assistance from GeoEngineers, Inc., during 2004 and 2005 (GeoEngineers 2005). Ecology continued to monitor groundwater quality throughout Montesano on a routine basis through 2009 (Ecology 2006, 2009).

- A Phase I environmental site assessment conducted by EPI during 2007 (EPI 2007).

- Remedial investigation activities conducted by EPI during 2008 and 2009 (EPI 2010).

- Interim actions and a data gaps investigation conducted by EPI during 2011 (EPI 2012a). The interim actions included removal of USTs and excavation of impacted soil from the Site. The data gaps investigation was performed to complete the remedial investigation.

- Four quarters of performance groundwater monitoring conducted by EPI during 2011 (EPI 2012a) and 2012 (EPI 2012b, 2012c, 2013a).

- A feasibility study performed by EPI during 2012 to evaluate remedial alternatives for the Site (EPI 2013a).

- Remedial pilot testing and associated studies conducted by EPI during 2013 (EPI 2014c). Testing was performed to address uncertainties regarding the selected remedial alternative and complete the remedy selection process within the FS.

- Quarterly groundwater compliance monitoring performed by EPI. Groundwater compliance monitoring was established at the Site to provide protection monitoring under the requirements of MTCA (WAC 173-340-410) until active remediation can be implemented. The rationale and procedures for implementing the program were presented in the *Ground Water Compliance Monitoring Plan* (GCMP), dated May 3, 2013 (EPI 2013c). To date, EPI has performed four quarterly groundwater monitoring events in accordance with the GCMP during August and November 2013 (EPI 2013d, 2014a) and February and May 2014 (EPI 2014b, 2014d).

The reviewer is directed to the source documents for additional detail.

## 3.0 PHYSICAL CONDITIONS

### 3.1 Geology

Based on the results of the RI, shallow soil underlying the surface paving and subgrade materials consists of Silty Sand to about 6 feet below grade. The silt and clay content of the soil increases to a depth of about 12 feet with intermittent and laterally discontinuous zones of soil with varying degrees of apparent permeability. Poorly-Graded Sand is consistently present from about 12 feet below grade to the maximum depth of exploration of 20 feet below grade.

### 3.2 Surface Water

The closest surface water body to the Site is the Chehalis River, which is approximately 0.5 miles to the south-southeast at its closest point and Lake Sylvia is approximately 1 mile to the north-northeast. Storm water is routed to catch basins around the perimeter of the property, which route storm water to the local storm sewer system. The storm sewer reportedly discharges to the Chehalis River through a permitted outfall managed by the City of Montesano. The Site is located upland of the 100-year flood plain for the Chehalis River and is in an area that receives minimal flooding.

### 3.3 Groundwater

Based on the RI results and quarterly monitoring data, depth to groundwater at the Site ranges from approximately 11.5 feet to 17.5 feet below grade. Groundwater consistently flows in a southeasterly direction across the Site at an average gradient of approximately 0.01 feet per foot (ft/ft). Seasonal fluctuations in the water table have been observed over the course of quarterly groundwater monitoring activities, with elevations generally 1 to 3 feet higher during the winter and spring than in the summer and fall.

Groundwater at the Site is not used for drinking water. The City of Montesano is served by municipal drinking water and current City codes restrict the installation of drinking water wells in the area of the Site. The potential for the on-Site groundwater to be used for potable purposes appears to be very limited.

## 4.0 NATURE AND EXTENT OF CONTAMINANTS

### 4.1 Sources and Affected Media

Impacts at the Site are present as a result of historic releases from former petroleum fuel USTs and potentially from vehicle maintenance and service activities. The previously completed interim action has remediated the primary sources of release of contaminants of concern at the Site and has removed, to the extent practicable, impacted soils associated with those releases.

A portion of the Site is impacted with light non-aqueous phase liquid (LNAPL), and Site soil and groundwater are impacted with petroleum hydrocarbons, volatile fuel components and the chlorinated solvent tetrachloroethene (PCE). Indoor air is also affected by the volatile constituents of hydrocarbon fuels and other volatile organic compounds. Specific constituents of concern for each media are discussed in greater detail in the following sections.

There are no impacts to surface water or sediment. The limits of the Site have been well characterized, as reflected in the final RI, and do not extend to any surface water bodies. The potential for preferential pathways (i.e., sewer lines) has been explored during the RI and has been ruled out as a contributing factor.

The probable transport mechanisms for the migration of contaminants include sorption to soil, desorption from soil to groundwater, dissolution of LNAPL to the aqueous phase in groundwater, migration with dispersion of dissolved-phase constituents in groundwater, naturally occurring attenuation processes (i.e., dilution, chemical diffusion, biological degradation) of the dissolved-phase in groundwater, and volatilization from soil and groundwater to soil gas and migration to indoor air.

### 4.2 LNAPL and Dissolved-Phase Plume

The extents of the LNAPL and dissolved-phase plumes are well characterized. The LNAPL consists of a gasoline-type fuel. Gasoline-range petroleum hydrocarbons (GRPH) and aromatic fuel compounds, including benzene, toluene, ethylbenzene, and xylenes (BTEX), are present in the dissolved-phase. An area of PCE in groundwater is also present, but is wholly co-located with the dissolved-phase GRPH and benzene. Figures 3, 4, and 5 depict the current extent of the Site, as defined by GRPH, benzene and PCE, respectively, in groundwater at concentrations exceeding MTCA Method A Groundwater Cleanup Levels (CULs). The presence of LNAPL and the dissolution of petroleum hydrocarbons from smear zone soils represents a continuing source of dissolved-phase contaminants to groundwater.

The distribution of LNAPL and the extent of dissolved-phase petroleum impacts suggest that these impacts result primarily from historic releases from the former USTs. LNAPL and the core of the dissolved-phase plume have migrated downgradient to the southeast from a source area(s) in the northwestern portion of the Site and the maximum LNAPL thickness is downgradient from the identifiable sources of release.

Measurable LNAPL has been intermittently present in groundwater at the core of the dissolved-phase plume with the thickest accumulations consistently observed at monitoring well KBMW-9. Lesser LNAPL thicknesses are typically observed in wells WCMW-2 and KBMW-2. The presence of LNAPL within these wells is likely related to specific hydrogeologic conditions that allow the accumulation of LNAPL. This finding indicates that an unknown mass of gasoline hydrocarbons is present within the core of the plume at concentrations in soil and groundwater near residual saturation. Depending upon the elevation of the seasonally fluctuating water table, some of these residual hydrocarbons may be exposed and drain, forming localized pockets of LNAPL during low water table conditions.

Quarterly groundwater monitoring data consistently indicate that dissolved contaminants originating from releases on the Whitney's Chevrolet Site decrease in concentration upgradient of the Tony's Short Stop property. While some detectable concentrations of contaminants originating from the Site may have migrated beyond the western, upgradient boundary of the Tony's Short Stop Site, these impacts are well below levels observed to be originating from Tony's Short Stop Site sources. It should be noted that remediation of the Whitney's Chevrolet Site sources will address any potential impacts to the Tony's Short Stop Site that originate from the Whitney's Chevrolet Site.

### 4.3 Residual Soil Impacts

Following completion of the interim actions in the source area, only limited areas of the Site still contain residual concentrations of contaminants in soil at concentrations slightly exceeding a MTCA Soil CUL. These impacts could not be removed because of access limitations. As illustrated on Figure 6, the areas containing residual soil impacts are primarily located within the northwest portion of the Site in the vicinity of former USTs, which is the primary source area of the groundwater plume. The impacts in this area are located in a limited depth horizon from about 10 to 16 feet below grade.

Constituents remaining in soil above the water table include GRPH, BTEX, oil-range petroleum hydrocarbons (ORPH), and naphthalene. Residual ORPH impacts also remain in soil beneath the central portion of the Whitney Chevrolet building at shallower depths between approximately 5 and 10.5 feet below grade. Impacted soil in this area also contains minor concentrations of GRPH and BTEX compounds.

The majority of impacts in soil are at and below the water table and include GRPH and BTEX compounds. Residual PCE is also present in isolated areas at the approximate depth of the water table (i.e., 16 feet below grade). Soil impacts at the water table are relatively thin (i.e., less than 5 feet) and likely represent a historic smear zone and are within the historic range of water table elevations. The residual impacts in soil below the water table represent a source of contaminant dissolution to groundwater.

The remaining soil impacts at the Site are inaccessible and are fully covered with buildings, concrete, or asphalt pavement. All known USTs at the Site and all accessible impacted soils have been removed.

### 4.4 Indoor Air Quality

An evaluation of indoor air quality was performed during the RI and included direct indoor air sampling and background air quality sampling, and then using an analytical model to assess the potential for vapor intrusion. Indoor air and soil gas samples were collected from the Whitney's Chevrolet building, Sterling Savings Bank building, and the VFW/Charlie's Bar building. The MTCA Method B Indoor Air CULs were used as screening levels for the evaluation. It should be noted that MTCA Method B Indoor Air CULs incorporate residential exposures to children and include an exposure frequency of 1 (i.e., 24 hours/day, 365 days/year). The Site is zoned commercial within the downtown commercial core of Montesano and such exposure assumptions are not appropriate for, nor applicable to, the Site. The

zoning serves as an institutional control and environmental covenant for the property restricting the use of ground floor residential uses into the foreseeable future. Minor exceedances of the screening levels were identified for fuel-related compounds benzene and ethylene dichloride (EDC) within the buildings located at the Site.

Benzene and EDC were both detected in indoor air within the Whitney's Chevrolet building, along with other fuel-related constituents and chlorinated compounds. However, vapor intrusion at the Whitney's Chevrolet facility is difficult to assess based upon interior background levels attributable to the current facility uses (i.e., vehicle sales and service) and the ventilation within the building (i.e., open service bays and breezeways). Many of the compounds that were detected remain in current use within the facility. The benzene and EDC data suggest that although some vapor intrusion of these compounds may be occurring, it is not possible to assess to what extent.

Indoor air at the Sterling Savings Bank building appears to be primarily affected by EDC concentrations that exceed the screening level. Benzene was also detected in indoor air samples from the building, but does not exceed the screening level when adjusted for background concentrations based on concurrent exterior ambient air sampling. Based on detections of benzene and EDC concentrations in indoor air, vapor intrusion appears to be occurring to a limited extent at the Sterling Savings Bank building. The building appears to provide at least a 0.1 attenuation factor between indoor air and soil gas if one assumes there are no interior background levels.

As indicated in the RI Report (EPI 2010), the source of the EDC in indoor air samples is unclear given that it has never been detected in groundwater and was present in only one soil gas sample located on the east side of the Whitney's Chevrolet facility.

Some minor vapor intrusion for benzene may be occurring at the VFW/Charlie's Bar building. While five different fuel-related compounds were present in soil gas from samples near the building at concentrations exceeding the corresponding compound-specific soil gas screening level, only benzene was detected in indoor air at a concentration exceeding the MTCA Method B Indoor Air CUL. This may be attributable to indoor anthropogenic sources such as smoking. Other compounds detected in the indoor air samples at the VFW/Charlie's Bar building are most likely the result of some on-property use of the detected compound. Given the current building use and, therefore, lack of juvenile exposure or residential exposure frequency, MTCA Method B indoor air cleanup levels for this structure are not appropriate.

The potential for the identified indoor air impacts to adversely affect human receptors appears highly limited. The cleanup levels provided within the guidance are based upon residential exposures and include juvenile exposures, neither of which are present at the Site and are not reasonably expected at the Site in the future. Vapor intrusion risks at the Site will be mitigated through remediation of the LNAPL and dissolved-phase contaminant plumes, and through remediation of residual contamination in the vadose zone using SVE.

## 5.0 SITE CLEANUP STANDARDS

Cleanup standards include cleanup levels, remediation levels (RELs), and action levels (ALs) that are adequately protective of human health and the environment, and the point(s) of compliance at which those levels must be met. The cleanup standards are used as the basis for developing media-specific remedial action objectives for the cleanup action. In addition to the cleanup standards identified for soil, groundwater, and indoor air, the LNAPL detected in the subsurface should be removed to the maximum extent practicable.

### 5.1 Applicable Regulations

The work documented herein is intended to comply with the laws and regulations of Washington State. The work to be performed during implementation of the selected remedy will be performed under the Agreed Order and must comply with MTCA (70.105D RCW) and its implementing regulations (WAC 173-340). Applicable or Relevant and Appropriate Regulations (ARARs) for the selected remedy will be MTCA and all potential exposure pathways will be addressed. Moreover, this dCAP contains a fully MTCA-compliant CUL development. Therefore, further consideration of ARARs is not warranted and MTCA has been selected as the regulation with primacy for this project.

### 5.2 Development of Cleanup Levels

CULs for soil, groundwater, and indoor air were evaluated in accordance with MTCA requirements and take into consideration exposure pathways and receptors based on current and likely future uses of the Site. Because the Site and surrounding area are currently developed for commercial use, zoned for that use by the City of Montesano, and will likely remain so into the foreseeable future, only exposure pathways for human receptors were taken into consideration. Under the current and future land uses, the potential pathways for exposure to on-Site contaminants include direct contact (i.e., dermal, ingestion, and inhalation exposures) with soil and groundwater by construction workers and indoor air inhalation (from vapor intrusion pathway) for a commercial worker exposure. Residual soil impacts are deeper than 6 feet below grade and are capped with asphalt and concrete within an urban setting which precludes the potential for terrestrial ecological exposures. Surface water and sediment exposures are not considered since surface water bodies are a substantial distance from the Site and a pathway of contaminated groundwater migration to surface water does not exist.

Although the Site is zoned and used as a commercial property, MTCA Method A CULs for soil and groundwater have been selected for the Site as prescribed in WAC 173-340-704. The MTCA Method A soil CULs are considered protective of groundwater to a drinking water exposure, based on the soil-to-groundwater leaching pathway.

Based on the exposure pathway identified for indoor air, CULs for indoor air were developed using MTCA Method B in accordance with WAC 173-340-750. As stated previously, the standard MTCA Method B CULs for indoor air are based on a residential exposure scenario that includes an exposure frequency of 1 (i.e., 24 hours/day, 365 days/year) and includes considerations for juvenile exposures.

Because the current and future use of the Site is limited to commercial uses, the residential exposure assumption is overly conservative and not appropriate for the Site. Therefore, RELs based on modified Method B (WAC 173-340-750[3][d]) and an assumed reasonable maximum exposure (RME) for a commercial worker of 40 hours/week for 52 weeks/year will be used for assessing protectiveness of indoor air. Using this RME, the RELs for indoor air are the Method B CULs adjusted for an exposure frequency of 0.24.

### 5.3 Points of Compliance

A point of compliance is that point or location on a Site where the CULs must be attained. The standard point of compliance within MTCA is all media throughout a Site. If a conditional point of compliance is appropriate it must be established as close to the source of the release as practicable.

For the purposes of this CAP, the point of compliance for evaluating the remedial effectiveness of the selected cleanup action will be all soil and groundwater throughout the Site. Effective remediation of Site soil and groundwater will be evaluated based on achieving the applicable MTCA Method A soil and groundwater CULs. Although not anticipated at this time, it may become necessary to establish conditional points of compliance during implementation of the cleanup action if any impacted areas at the Site are not fully accessible for direct treatment and can be demonstrated to not represent a threat to human health and the environment. In accordance with WAC 173-340-720(8)(c), a conditional point of compliance may be proposed where it can be demonstrated that achieving the CULs within a reasonable restoration timeframe is not practicable.

To address the vapor intrusion pathway, there will be three points of compliance for indoor air. Two will be located within the Sterling Savings Bank building, including one in the work area on the main floor and one in the basement storage room, and the third will be located within the VFW building in the bar area. These locations are areas in which occupants of the buildings may have exposure throughout a work day. The RELs developed for indoor air will be used for assessing compliance at these locations. As stated previously, it is not possible to accurately assess indoor air quality associated with vapor intrusion at the Whitney's Chevrolet building due to the chemical compounds that are currently in use at the facility. Therefore, a point of compliance for indoor air within the Whitney's Chevrolet building cannot be established at this time. Risks to on-site workers at Whitney's Chevrolet building are addressed through regulations appropriate for occupational exposures, not through vapor intrusion.

### 5.4 Contaminants of Concern

Contaminants of potential concern (COPCs) were identified during RI and interim action activities and included compounds that had been detected at concentrations exceeding respective screening levels that were based on MTCA Method A or Method B CULs. The COPCs identified for affected media at the Site were specified in the RI report (EPI 2010) and subsequent IADG report (EPI 2012a).

Final contaminants of concern (COCs) were identified in the FS (EPI 2013a). The final COCs were selected based upon the COPCs that remain in Site soil, groundwater, and indoor air at concentrations

exceeding the potentially applicable MTCA Method A or Method B CULs. As indicated above, the MTCA Method A CULs have been selected as the final applicable CULs for soil and groundwater at the Site. RELs based on modified Method B have been developed for COCs associated with indoor air. The final COCs for affected media and their respective CULs developed for this CAP are summarized below.

**Final COCs and Applicable MTCA CULs**

| Contaminant of Concern | Applicable MTCA Method | Final CUL Concentration |
|---|---|---|
| ***SOIL*** | | |
| ORPH | Method A | 2,000 mg/kg |
| GRPH | Method A[a] | 30 mg/kg |
| Benzene | Method A | 0.03 mg/kg |
| Toluene | Method A | 7 mg/kg |
| Ethylbenzene | Method A | 6 mg/kg |
| Total Xylenes | Method A | 9 mg/kg |
| Naphthalene | Method A | 5 mg/kg |
| ***GROUNDWATER*** | | |
| GRPH | Method A[b] | 800 µg/L |
| Benzene | Method A | 5 µg/L |
| Toluene | Method A | 1,000 µg/L |
| Ethylbenzene | Method A | 700 µg/L |
| Total Xylenes | Method A | 1,000 µg/L |
| Naphthalene | Method A | 160 µg/L |
| PCE | Method A | 5 µg/L |
| ***INDOOR AIR*** | | |
| Benzene | Modified Method B[c] | 1.3 $\mu g/m^3$ (REL) |
| EDC | Modified Method B[c] | 0.4 $\mu g/m^3$ (REL) |

**Notes:**

[a]MTCA Method A Soil CUL for GRPH when benzene is present.
[b]MTCA Method A Groundwater CUL when benzene is present.
[c]MTCA Method B, Carcinogen, Modified Formula Value for Indoor Air using adjusted exposure frequency of 0.24

## 6.0 REMEDIAL ALTERNATIVES EVALUATION AND SELECTION

Remedial actions at the Site are primarily focused on recovery of LNAPL and remediation of residual contaminants in groundwater and soil. The FS identified and screened several general response actions and applicable remedial technologies in developing appropriate alternatives for addressing contamination at the Site. Five remedial alternatives were developed in the FS and included one or more of the following applicable technologies:

- LNAPL recovery;
- groundwater extraction (GWE) and *ex situ* treatment;
- air sparging (AS);
- soil vapor extraction (SVE); and
- *in situ* chemical oxidation (ISCO).

Containment and institutional controls were also incorporated into each alternative, considering that 1) the entire Site is currently capped with asphalt and concrete, resulting in a significant component of containment, and 2) the land uses of the Site in the downtown Montesano urban core serves as a *de facto* deed restriction and institutional control on current and future land uses.

The FS presented the following remedial alternatives that are considered to be potentially applicable to address impacted soil and groundwater at the Site:

- Alternative 1 – Multi-Phase Extraction and *Ex Situ* Treatment
- Alternative 2 – LNAPL Recovery and Soil Vapor Extraction (SVE)
- Alternative 3 – LNAPL Recovery and AS/SVE
- Alternative 4 – LNAPL Recovery and ISCO
- Alternative 5 – GWE with *Ex Situ* Treatment and Re-Infiltration

While not expressly stated as a component of each of the alternatives, monitored natural attenuation (MNA) would also be a component of any implemented alternative. Based on limiting access issues due to current land uses and the presence of several structures, it is possible and likely that most remedial technologies would not be capable of treating every portion of the dissolved-phase or LNAPL plume as it is currently situated. Therefore, each of the alternatives would necessarily include a component of MNA as contaminant mass is removed from the subsurface and the contaminant load on natural biological processes is decreased thereby allowing those processes to become more prevalent.

The remedial alternatives were evaluated relative to the MTCA threshold requirements and other requirements specified in WAC 173-340-360. The remedial alternatives and screening criteria are presented in detail in the FS report (EPI 2013). Based on the FS, Alternative 3, LNAPL Recovery and AS/SVE, best meets the MTCA criteria for selection of a remedial action. This approach complies with applicable regulations, is protective of human health and the environment, is reasonably practicable and can be readily implemented at the Site. This alternative also provides the best cost-to-benefit ratio

of the available alternatives, as presented in the Remedial Alternatives Cost/Benefit Summary, Table 12, in the *Pilot Study Results and Feasibility Study Addendum*, EPI, May 22, 2014.

## 7.0 SELECTED CLEANUP ACTION

LNAPL recovery and AS/SVE has been selected as the preferred cleanup action for the Site (Alternative 3). The cleanup action will consist of physical removal and disposal of LNAPL, injection of air (air sparging) into Site groundwater, and soil vapor extraction and treatment of impacted soil vapors and volatilized contaminants generated from air sparging. A conceptual design for the proposed cleanup action is illustrated on Figure 7 and details are described in the following sections.

### 7.1 LNAPL Recovery

In-well skimming and pumping equipment will be used for recovery of LNAPL. Focused groundwater pumping and total fluids recovery will also be implemented in selected areas of the Site to facilitate LNAPL recovery within the core of the plume. Based on groundwater monitoring data for the Site, measurable LNAPL appears to be greatest when the groundwater table is at a depth ranging between 15 and 17 feet below grade. Therefore, focused groundwater pumping will be implemented to draw down the water table to such depths for maintaining optimum conditions for LNAPL recovery.

Skimmer pumps will be placed in selected monitoring wells where measureable LNAPL has been observed. These wells are expected to include monitoring wells WCMW-2, KBMW-2, and KBMW-9. Additional LNAPL recovery wells with skimmer pumps will also be installed near the three existing wells and selected areas within the core of the plume where LNAPL is believed to be present. A submersible groundwater pump will be placed below the skimmer pump in each of the wells, and/or placed in other wells surrounding the recovery wells, to maintain a localized depression in the water table for maximizing LNAPL recovery.

Recovered LNAPL will be pumped directly to a storage drum for subsequent offsite disposal at an appropriate waste facility. Recovered groundwater will be pumped to an aboveground tank for subsequent treatment through an air stripper prior to discharge to the sanitary sewer. While a sewer discharge permit is not required for this cleanup action as specified in WAC 173-340-710(9), treated water discharges to the sewer will be subject to the allowable water pollutant concentrations and loading volumes specified by the City of Montesano publicly owned treatment works (POTW) facility.

LNAPL recovery and groundwater extraction and treatment will be discontinued once LNAPL is no longer observable at the Site.

### 7.2 AS/SVE

AS consists of injecting air into groundwater below the water table to transfer volatile compounds from the dissolved-phase to the vapor phase. AS has the additional benefit of increasing the dissolved oxygen content of groundwater and facilitating aerobic biological degradation of petroleum

hydrocarbons and the cometabolic biodegradation of co-located chlorinated VOCs. SVE consists of applying a vacuum to unsaturated soils to remove and capture volatile compounds sorbed within the soil matrix or present within the soil gas. SVE can be implemented alone or in tandem with AS. AS almost always incorporates SVE to capture the contaminants liberated from groundwater and to prevent fugitive soil gas emissions.

The AS component of this cleanup action will be implemented concurrently with SVE, and the AS/SVE system will operate during LNAPL recovery and after LNAPL recovery is complete. A compressor will be used to supply air to a network of AS wells. The AS wells will be constructed of 1-inch diameter PVC, installed to an approximate depth of 25 feet below grade, with a 2-foot length of slotted screen at the bottom of the well. Based on the results of recent pilot testing, the AS wells are expected to have an effective radius of influence (ROI) of approximately 20 feet.

Regenerative blower equipment will be used to apply vacuum to a network of SVE wells to extract soil vapors. SVE will serve to remove impacted soil gas, facilitate mass removal from the vadose zone, and be protective of the indoor air pathway. Vapors generated from the AS component will be captured by the SVE component. The SVE wells will be constructed of 4-inch diameter PVC, installed to an approximate depth of 16 feet below grade, with a 10-foot length of slotted screen (i.e., 6 to 16 feet below grade). Based on the pilot testing results, the SVE wells are expected to have an effective ROI of at least 50 feet. If necessary, horizontal or angled SVE wells may also be installed beneath the Whitney's Chevrolet facility and/or the VFW building using directed drilling or angled drilling technology.

Extracted vapors from the AS/SVE system will be routed through aboveground treatment equipment, as described below, prior to being discharged to the atmosphere. The AS/SVE system will be operated until extracted vapor concentrations are consistently non-detectable and concentrations of COCs in Site groundwater achieve the CULs or decrease to asymptotic levels. It is anticipated that the AS/SVE system will be operated for approximately 5 to 6 years for the Site to achieve these levels.

### 7.3 Vapor Treatment

Concentrations of volatile constituents are expected to be significantly elevated in extracted vapors during the first 6 to 12 months of system operation. Therefore, extracted vapors from the AS/SVE system will initially be treated through a thermal or catalytic oxidizer to reduce concentrations prior to discharge to the atmosphere. The oxidizer will be replaced after a period of time with vapor-phase granular activated carbon (GAC) adsorbers once concentrations decrease to appropriate levels. During groundwater extraction and treatment associated with the LNAPL recovery component, the offgas vapors from the air stripper will be combined with the AS/SVE system vapors for treatment prior to atmospheric discharge. Although this cleanup action is exempt from permitting requirements of the local air pollution control agency as specified in WAC 173-340-710(9), vapor discharges from the proposed system will be subject to the substantive requirements of the permitting agency. The Olympic Region Clean Air Agency (ORCAA) is the governing agency for regulating discharges from air emissions sources within the City of Montesano. Therefore, the proposed system will be operated such

that discharges will not exceed the allowable thresholds for toxic air pollutants as specified in the ORCAA Regulations.

## 8.0 PERFORMANCE AND COMPLIANCE MONITORING

Performance monitoring will be conducted to assess remedial progress and compliance with applicable discharge permits. Performance monitoring will consist of monthly sampling and analysis of system influent and effluent (i.e., pre- and post-treatment water and vapors), monthly measurement of recovered LNAPL, and quarterly groundwater monitoring during active remediation. Quarterly groundwater monitoring will include in-well measurements of LNAPL and collection of groundwater samples from the Site's monitoring well network for analysis of COCs.

Compliance monitoring will be conducted for indoor air, groundwater, and soil. For indoor air, compliance monitoring will be conducted periodically during and after remedial actions by collecting 8-hour indoor air samples at the designated points of compliance, analyzing the samples for COCs and comparing the analytical results to the site-specific RELs. Ambient air samples will also be collected and analyzed to assess background concentrations. This sampling will be used to assess the ongoing protectiveness of the remedial actions during implementation.

Compliance monitoring for groundwater and soil will be conducted following completion of active remediation and will consist of sampling and analysis of Site groundwater and soil for assessing concentrations of COCs and confirming compliance with the CULs. The groundwater compliance monitoring will be performed on a quarterly basis for two years following shutdown of the remediation system, and will consist of sampling groundwater from selected monitoring wells for analysis of groundwater COCs. Compliance soil sampling will be conducted after 8 quarters of groundwater compliance monitoring have been completed, and will consist of collecting soil samples from selected locations across the Site using direct-push probing equipment and analyzing the samples for the soil COCs.

## 9.0 PERMITTING, DESIGN, AND PLANNING REQUIREMENTS

This section discusses the additional requirements that apply to the permitting, design, and planning for the remedial action.

### 9.1 Permits and Other Requirements

The cleanup action for the Whitney's Chevrolet Site will be conducted under the Agreed Order and, therefore, is exempt from the procedural requirements of certain state laws and local permits (WAC 173-340-710[9]), but must comply with the substantive requirements of these laws and permits. The exemption from procedural requirements applies to the following:

- Washington State Clean Air Act (70.94 RCW);
- Solid Waste Management Act (70.95 RCW);

- Hazardous Waste Management Act (70.105 RCW);
- Construction Projects in State Waters (75.20 RCW);
- Shoreline Management Act (90.58 RCW); and
- Any laws requiring or authorizing local government permits or approvals.

The exemption is not applicable if Ecology determines that the exemption would result in the loss of approval from a federal agency that may be necessary for the state to administer any federal law.

The cleanup action selected for the Site is expected to fully comply with all applicable federal, state, and local laws and regulations.

### 9.2 Engineering Design Report

An engineering design report (EDR) will be prepared for the cleanup action. As prescribed in WAC 173-340-400(a), the EDR will contain sufficient information for the development and review of construction plans and specifications. The EDR will include detailed installation requirements and procedures for implementing the remediation system and will document engineering concepts and design criteria used for the design of the cleanup action. The EDR will also include a plan for operation, maintenance, and monitoring for the remedy.

### 9.3 Construction Plans and Specifications

The construction plans and specifications will detail the construction of the cleanup action to be performed. As required by WAC 173-340-400(b), the documents will include the following information, as applicable:

- A description of the work to be performed and a summary of the design criteria from the EDR;
- Maps and figures showing the general location of the Site and existing Site conditions;
- Copies of applicable permit applications and approvals;
- Detailed plans, procedures and specifications necessary for construction of the cleanup action;
- Specific quality control tests to be performed to document the construction, including specifications for testing or reference to specific testing methods, frequency of testing, acceptable results, and other documentation methods;
- Startup procedures and criteria to demonstrate the cleanup action is prepared for routine operation;
- Information that addresses applicable state, federal, and local requirements including the substantive requirements for any exempted permits; and
- Provisions to ensure that health and safety requirements of WAC 173-340-810 are met.

All aspects of construction will be performed and documented in accordance with WAC 173-340-400(6). This will include approval of all of the plans listed above prior to commencement of work, oversight of construction by a professional engineer licensed in Washington State, and submittal of a completion report that documents the construction, installation, and startup of the cleanup action and includes as-

built drawings that document final construction of the system. As specified in WAC 173-340-400(6)(b)(iii), the completion report will also include an opinion from the engineer as to whether the cleanup was constructed in substantial compliance with the CAP, the EDR, and the construction plans and specifications.

## 10.0 SUMMARY

This CAP presents a remedial alternative that is compliant with MTCA and its implementing regulations. Implementation of the selected alternative will be fully protective of human health and the environment and is likely to result in remediation of the Site within a reasonable restoration timeframe. The alternative to be implemented also meets the requirements of Agreed Order No. DE 11121 and the legal requirements of PLPs.

## 11.0 REFERENCES

Ecology 2006. *Montesano Groundwater Investigation of Leaking Underground Storage Tanks, October 2004 and March 2005. Washington State Department of Ecology.* January.

Ecology 2009. *Montesano Groundwater Investigation of Leaking Underground Storage Tanks, September 2008 and April 2009*. November.

EPI 2007. *Phase I Environmental Site Assessment and Supplemental Historical Review, Whitney's Chevrolet, 123 West Pioneer Avenue, Montesano, Washington, Parcel No. 07200020-1101 and Parcel No. 07200020-0050.* Environmental Partners, Inc. February 14.

EPI 2010. *Draft Remedial Investigation Report, Whitney's Chevrolet, Inc., 123 West Pioneer Avenue, Montesano, Washington 98563*. March 24.

EPI 2012a. *Interim Action and Data Gap Investigation Report, Whitney's Chevrolet, Inc., 123 Pioneer Avenue, Montesano, Washington 98563*. February 23.

EPI 2012b. Letter Report: *Quarterly Ground Water Monitoring Report – February 2012, Whitney's Chevrolet, Inc., Agreed Order No. DE 2951, 123 West Pioneer Avenue, Montesano, Washington*. August 2.

EPI 2012c. Letter Report: *Quarterly Ground Water Monitoring Report – May 2012, Whitney's Chevrolet, Inc., Agreed Order No. DE 2951, 123 West Pioneer Avenue, Montesano, Washington*. August 17.

EPI 2013a. *Final Feasibility Study, Whitney's Chevrolet, Inc., 123 Pioneer Avenue, Montesano, Washington 98563*. Environmental Partners, Inc. January 9.

EPI 2013b. *Pilot Testing Work Plan, Whitney's Chevrolet, Inc., 123 Pioneer Avenue, Montesano, Washington 98563*. Environmental Partners, Inc. May 3.

EPI 2013c. *Ground Water Compliance Monitoring Plan, Agreed Order No. 2951, Whitney's Chevrolet, Inc., 123 West Pioneer Avenue, Montesano, Washington*. Environmental Partners, Inc. May 3.

EPI 2013d. Letter Report: *Quarterly Ground Water Monitoring Report – August 2013, Whitney's Chevrolet, Inc., Agreed Order No. DE 2951, 123 West Pioneer Avenue, Montesano, Washington*. October 28.

EPI 2014a. Letter Report: *Quarterly Groundwater Monitoring Report – November 2013, Whitney's Chevrolet, Inc., Agreed Order No. DE 2951, 123 West Pioneer Avenue, Montesano, Washington*. January 29.

EPI 2014b. Letter Report: *Quarterly Groundwater Monitoring Report – February 2014, Whitney's Chevrolet, Inc., Agreed Order No. DE 2951, 123 West Pioneer Avenue, Montesano, Washington*. April 22.

EPI 2014c. *Pilot Study Results and Feasibility Study Addendum, Whitney's Chevrolet, Inc., 123 Pioneer Avenue, Montesano, Washington 98563*. Environmental Partners, Inc. May 22.

EPI 2014d. Letter Report: *Quarterly Groundwater Monitoring Report – May 2014, Whitney's Chevrolet, Inc., Agreed Order No. DE 2951, 123 West Pioneer Avenue, Montesano, Washington*. July 7.

EPI 2014e, *DRAFT Cleanup Action Plan, Whitney's Chevrolet, Inc., 123 Pioneer Avenue, Montesano, Washington 98563,* Environmental Partners, Inc. October 21.

Fitt 1995. *Underground Storage Tank Decommissioning at 123 West Pioneer Avenue, Montesano, Washington*. Fitt Environmental, Inc. August 28.

GeoEngineers 2005. *Ground water Investigation, Downtown Montesano*. GeoEngineers, Inc. August 5.

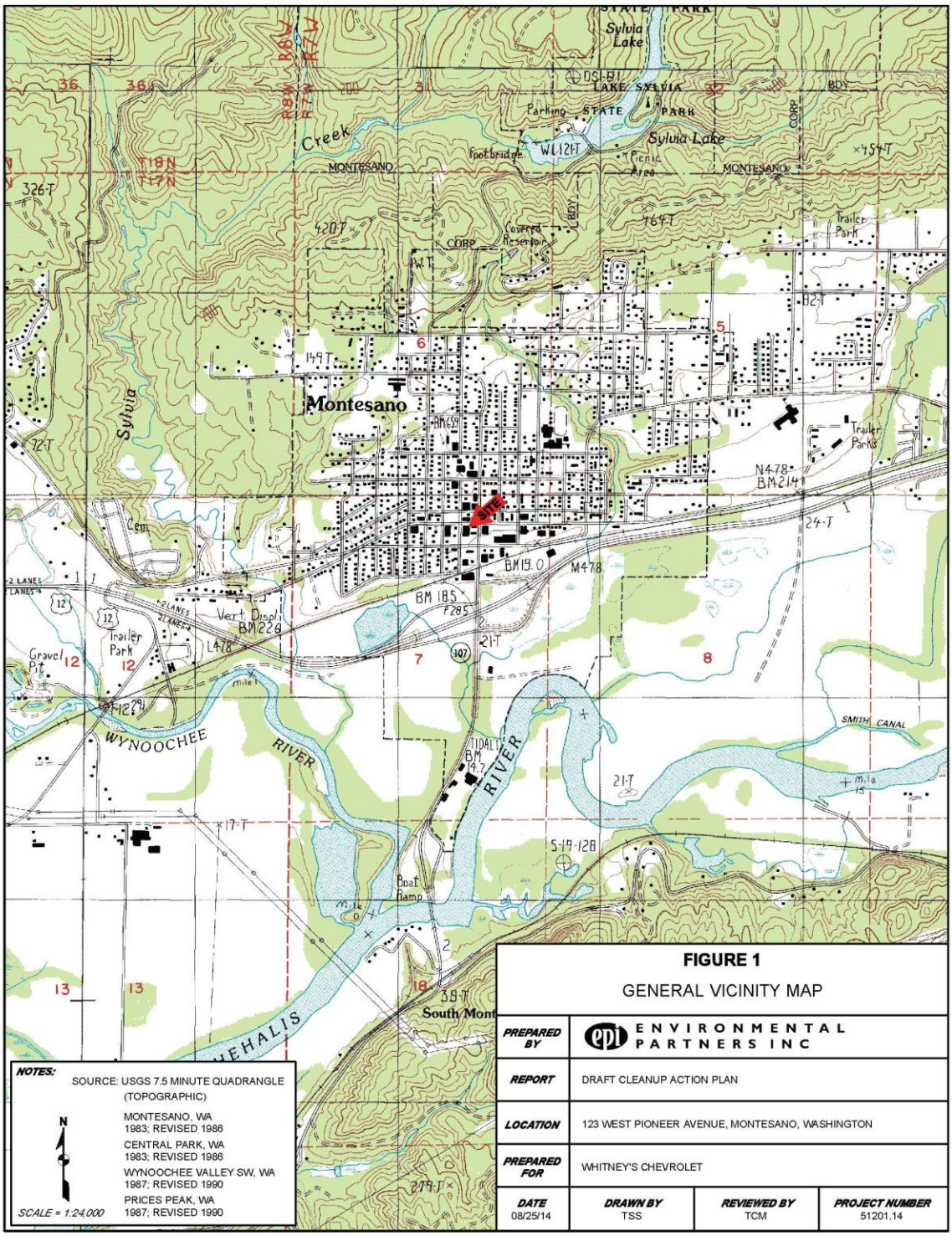



**FIGURE 1**

GENERAL VICINITY MAP

| | | | |
|---|---|---|---|
| **PREPARED BY** | ENVIRONMENTAL PARTNERS INC | | |
| **REPORT** | DRAFT CLEANUP ACTION PLAN | | |
| **LOCATION** | 123 WEST PIONEER AVENUE, MONTESANO, WASHINGTON | | |
| **PREPARED FOR** | WHITNEY'S CHEVROLET | | |
| **DATE** 08/25/14 | **DRAWN BY** TSS | **REVIEWED BY** TCM | **PROJECT NUMBER** 51201.14 |

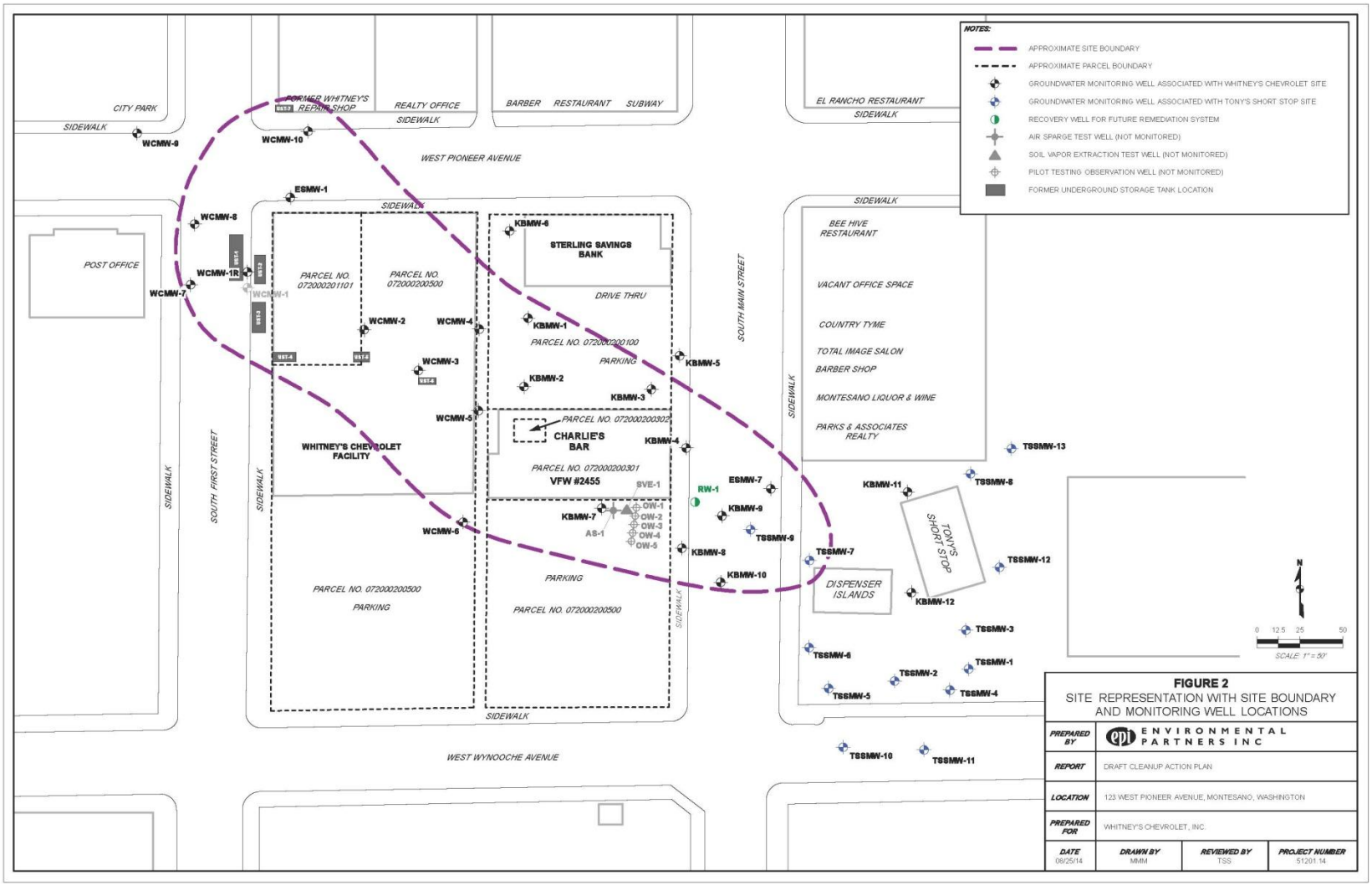
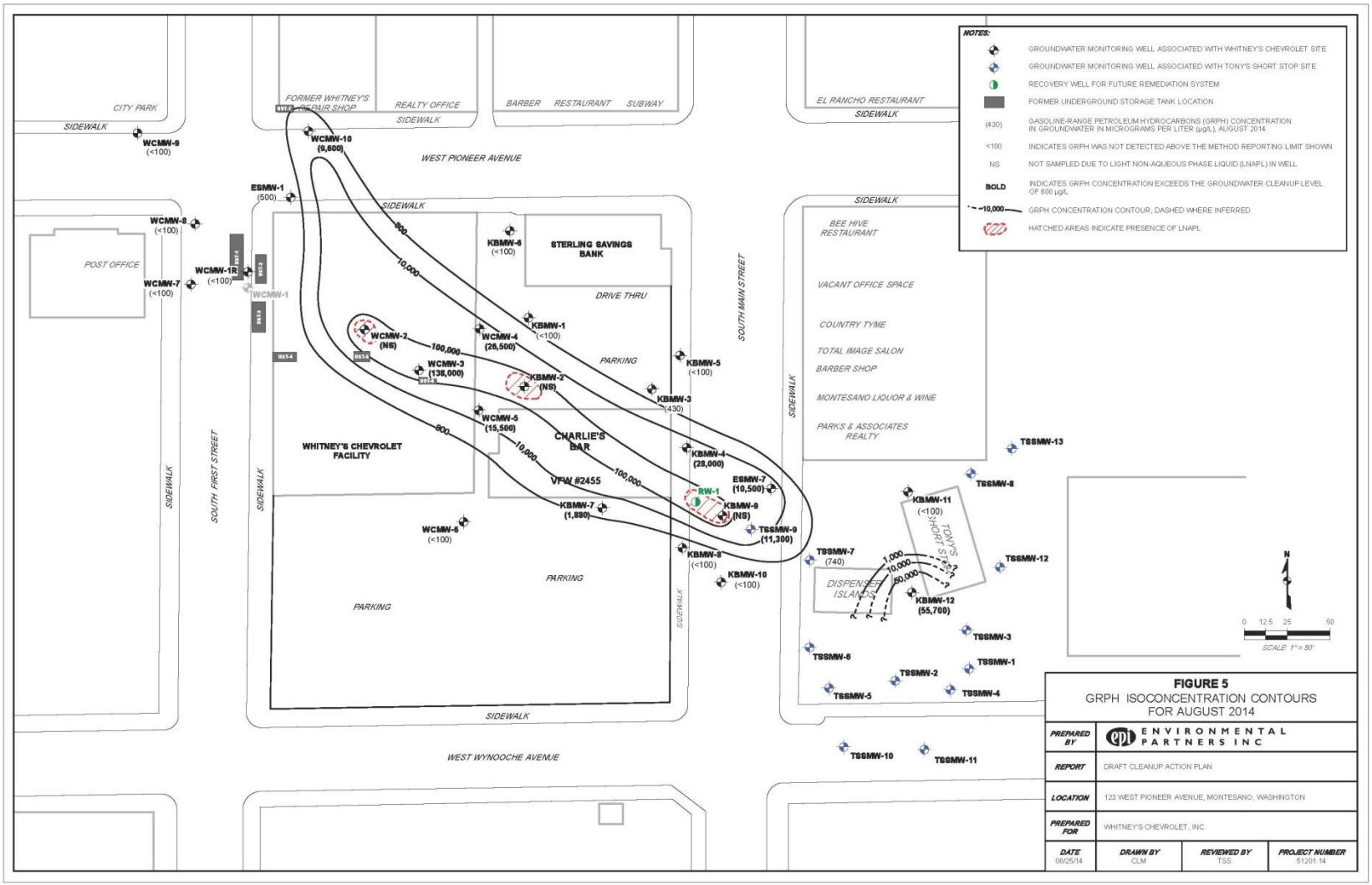



**FIGURE 2**
SITE REPRESENTATION WITH SITE BOUNDARY AND MONITORING WELL LOCATIONS

| | |
|---|---|
| PREPARED BY | ENVIRONMENTAL PARTNERS INC |
| REPORT | DRAFT CLEANUP ACTION PLAN |
| LOCATION | 123 WEST PIONEER AVENUE, MONTESANO, WASHINGTON |
| PREPARED FOR | WHITNEY'S CHEVROLET, INC. |

| DATE | DRAWN BY | REVIEWED BY | PROJECT NUMBER |
|---|---|---|---|
| 06/25/14 | MMM | TSS | 51201.14 |


NOTES:
GROUNDWATER MONITORING WELL ASSOCIATED WITH WHITNEY'S CHEVROLET SITE
GROUNDWATER MONITORING WELL ASSOCIATED WITH TONY'S SHORT STOP SITE
RECOVERY WELL FOR FUTURE REMEDIATION SYSTEM
FORMER UNDERGROUND STORAGE TANK LOCATION
(430) GASOLINE-RANGE PETROLEUM HYDROCARBONS (GRPH) CONCENTRATION IN GROUNDWATER IN MICROGRAMS PER LITER (µg/L), AUGUST 2014
<100 INDICATES GRPH WAS NOT DETECTED ABOVE THE METHOD REPORTING LIMIT SHOWN
NS NOT SAMPLED DUE TO LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL) IN WELL
BOLD INDICATES GRPH CONCENTRATION EXCEEDS THE GROUNDWATER CLEANUP LEVEL OF 800 µg/L
10,000 GRPH CONCENTRATION CONTOUR, DASHED WHERE INFERRED
HATCHED AREAS INDICATE PRESENCE OF LNAPL
CITY PARK
SIDEWALK
FORMER WHITNEY'S REPAIR SHOP
REALTY OFFICE
BARBER
RESTAURANT
SUBWAY
EL RANCHO RESTAURANT
WEST PIONEER AVENUE
POST OFFICE
STERLING SAVINGS BANK
DRIVE THRU
PARKING
SOUTH MAIN STREET
BEE HIVE RESTAURANT
VACANT OFFICE SPACE
COUNTRY TYME
TOTAL IMAGE SALON
BARBER SHOP
MONTESANO LIQUOR & WINE
PARKS & ASSOCIATES REALTY
SOUTH FIRST STREET
WHITNEY'S CHEVROLET FACILITY
CHARLIE'S BAR
VFW #2455
TONYS SHORT STOP
DISPENSER ISLAND
WEST WYNOOCHE AVENUE
WCMW-9 (<100)
WCMW-10 (9,600)
ESMW-1 (500)
WCMW-8 (<100)
WCMW-1R (<100)
WCMW-7 (<100)
WCMW-1
WCMW-2 (NS)
WCMW-4 (26,500)
WCMW-3 (138,000)
WCMW-5 (15,500)
WCMW-6 (<100)
KBMW-6 (<100)
KBMW-1 (<100)
KBMW-2 (NS)
KBMW-5 (<100)
KBMW-3 (430)
KBMW-4 (28,000)
KBMW-7 (1,880)
KBMW-8 (<100)
KBMW-10 (<100)
KBMW-11 (<100)
KBMW-12 (55,700)
RW-1
ESMW-7 (10,500)
KBMW-9 (NS)
TSSMW-9 (11,300)
TSSMW-7 (740)
TSSMW-13
TSSMW-8
TSSMW-12
TSSMW-3
TSSMW-6
TSSMW-1
TSSMW-2
TSSMW-5
TSSMW-4
TSSMW-10
TSSMW-11
800
10,000
100,000
1,000
10,000
50,000
N
0 12.5 25 50
SCALE 1" = 50'
FIGURE 5
GRPH ISOCONCENTRATION CONTOURS FOR AUGUST 2014
PREPARED BY
ENVIRONMENTAL PARTNERS INC
REPORT
DRAFT CLEANUP ACTION PLAN
LOCATION
123 WEST PIONEER AVENUE, MONTESANO, WASHINGTON
PREPARED FOR
WHITNEY'S CHEVROLET, INC.
DATE
06/25/14
DRAWN BY
CLM
REVIEWED BY
TSS
PROJECT NUMBER
51201.14

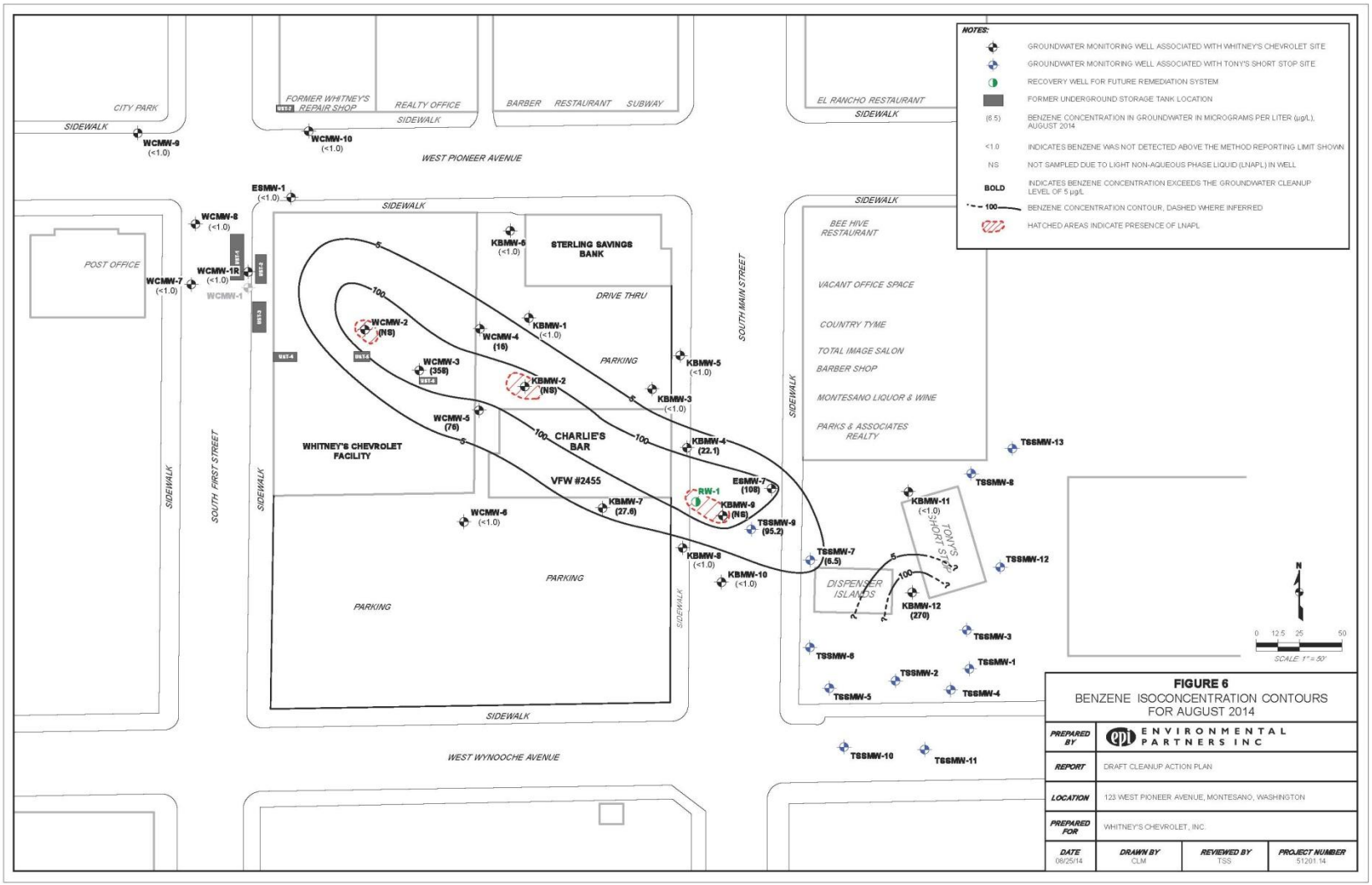



**FIGURE 6**
BENZENE ISOCONCENTRATION CONTOURS
FOR AUGUST 2014

| | |
|---|---|
| PREPARED BY | ENVIRONMENTAL PARTNERS INC |
| REPORT | DRAFT CLEANUP ACTION PLAN |
| LOCATION | 123 WEST PIONEER AVENUE, MONTESANO, WASHINGTON |
| PREPARED FOR | WHITNEY'S CHEVROLET, INC. |

| DATE | DRAWN BY | REVIEWED BY | PROJECT NUMBER |
|---|---|---|---|
| 09/25/14 | CLM | TSS | 51201.14 |

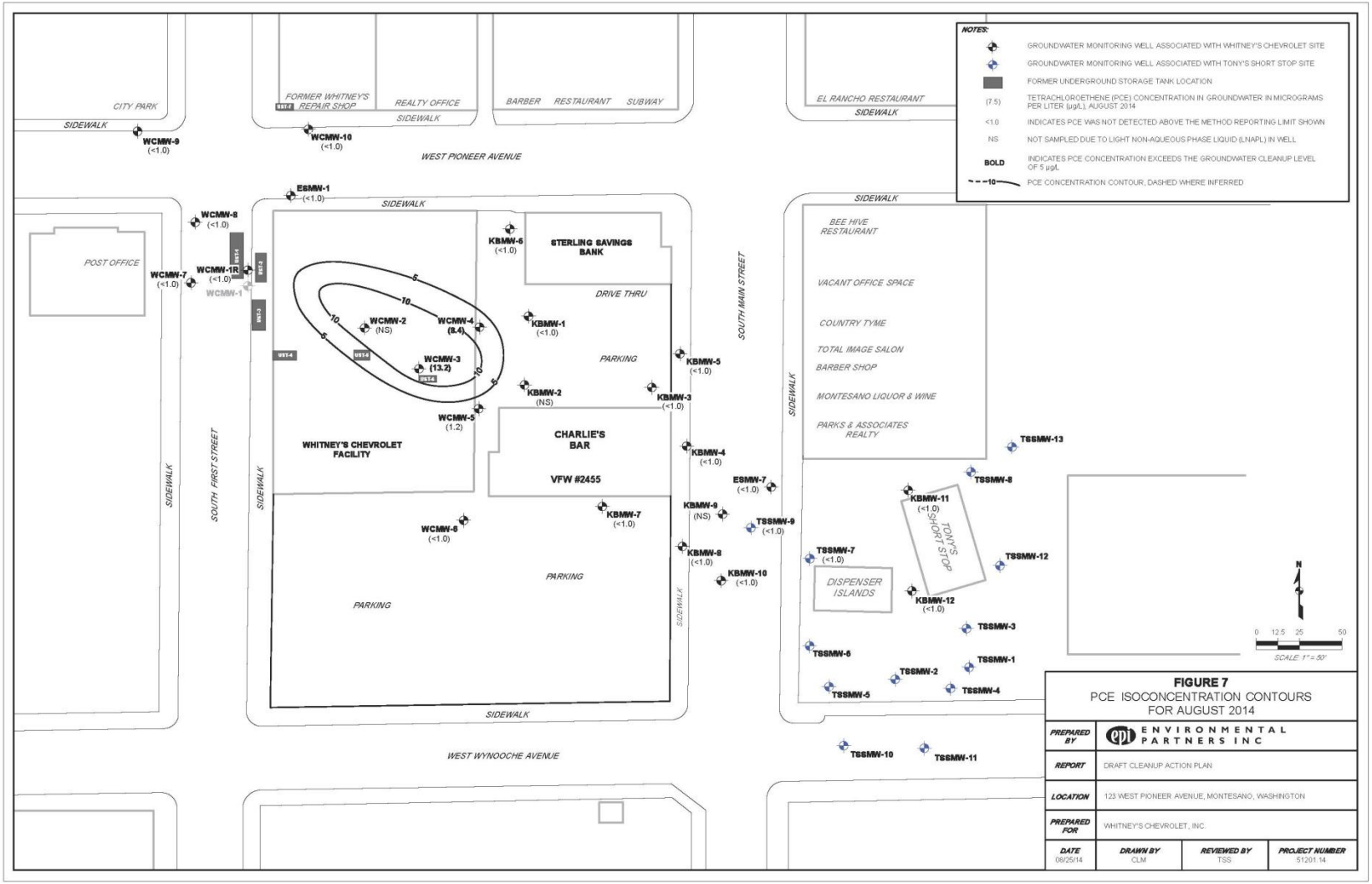
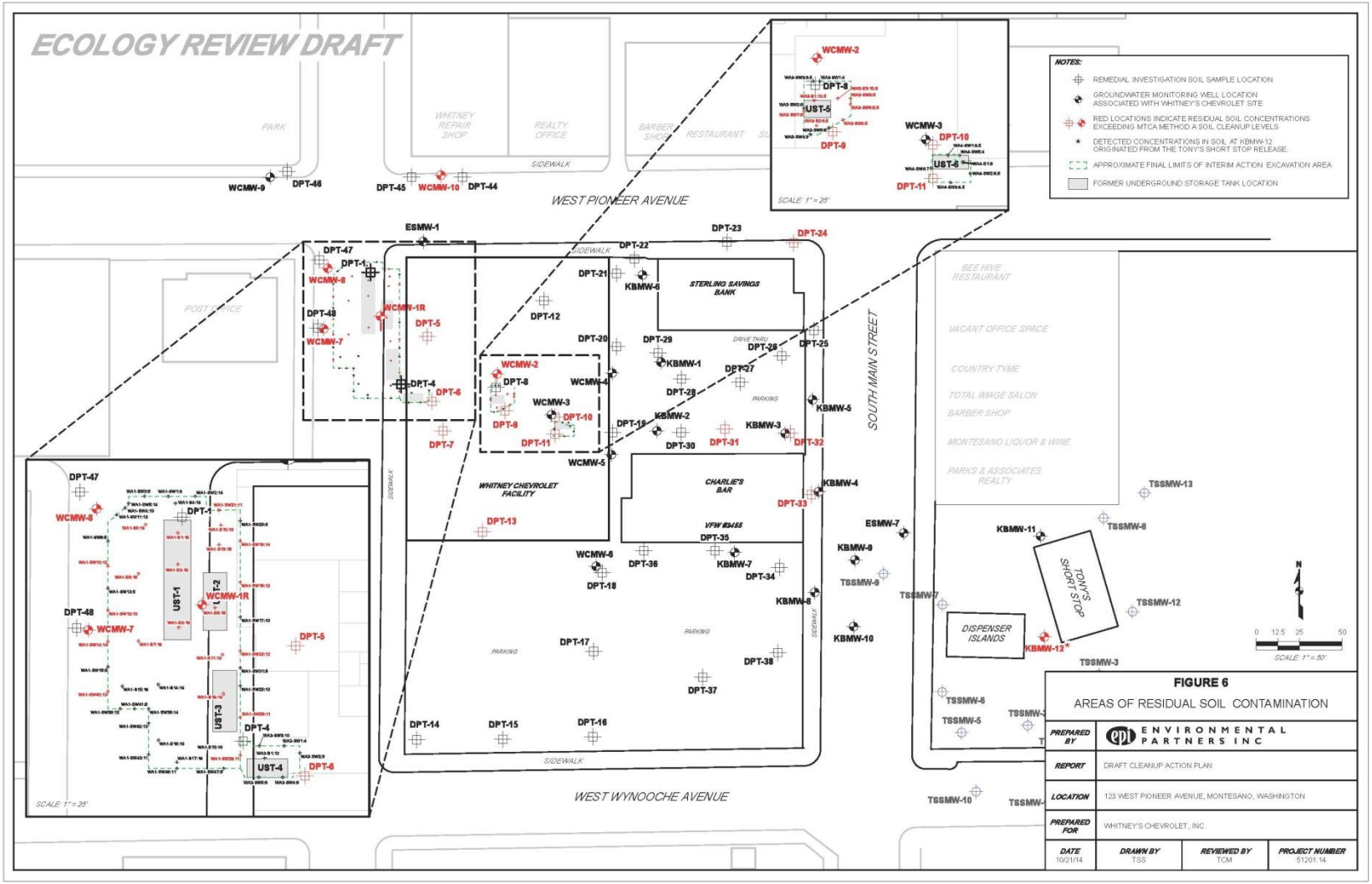



**FIGURE 7**
PCE ISOCONCENTRATION CONTOURS
FOR AUGUST 2014

| | |
|---|---|
| PREPARED BY | ENVIRONMENTAL PARTNERS INC |
| REPORT | DRAFT CLEANUP ACTION PLAN |
| LOCATION | 123 WEST PIONEER AVENUE, MONTESANO, WASHINGTON |
| PREPARED FOR | WHITNEY'S CHEVROLET, INC. |

| DATE | DRAWN BY | REVIEWED BY | PROJECT NUMBER |
|---|---|---|---|
| 09/25/14 | CLM | TSS | 51201.14 |


ECOLOGY REVIEW DRAFT
NOTES:
REMEDIAL INVESTIGATION SOIL SAMPLE LOCATION
GROUNDWATER MONITORING WELL LOCATION ASSOCIATED WITH WHITNEY'S CHEVROLET SITE
RED LOCATIONS INDICATE RESIDUAL SOIL CONCENTRATIONS EXCEEDING MTCA METHOD A SOIL CLEANUP LEVELS
DETECTED CONCENTRATIONS IN SOIL AT KBMW-12 ORIGINATED FROM THE TONY'S SHORT STOP RELEASE.
APPROXIMATE FINAL LIMITS OF INTERIM ACTION EXCAVATION AREA
FORMER UNDERGROUND STORAGE TANK LOCATION
WEST PIONEER AVENUE
WEST WYNOOCHE AVENUE
SOUTH MAIN STREET
SIDEWALK
PARK
POST OFFICE
WHITNEY REPAIR SHOP
REALTY OFFICE
BARBER SHOP
RESTAURANT
STERLING SAVINGS BANK
DRIVE THRU
PARKING
WHITNEY CHEVROLET FACILITY
CHARLIE'S BAR
VFW #3455
BEE HIVE RESTAURANT
VACANT OFFICE SPACE
COUNTRY TYME
TOTAL IMAGE SALON
BARBER SHOP
MONTESANO LIQUOR & WINE
PARKS & ASSOCIATES REALTY
TONY'S SHORT STOP
DISPENSER ISLANDS
UST-1
UST-2
UST-3
UST-4
UST-5
UST-6
SCALE: 1" = 25'
SCALE: 1" = 50'
0 12.5 25 50
N
FIGURE 6
AREAS OF RESIDUAL SOIL CONTAMINATION
PREPARED BY
ENVIRONMENTAL PARTNERS INC
REPORT
DRAFT CLEANUP ACTION PLAN
LOCATION
123 WEST PIONEER AVENUE, MONTESANO, WASHINGTON
PREPARED FOR
WHITNEY'S CHEVROLET, INC.
DATE
10/21/14
DRAWN BY
TSS
REVIEWED BY
TCM
PROJECT NUMBER
51201.14

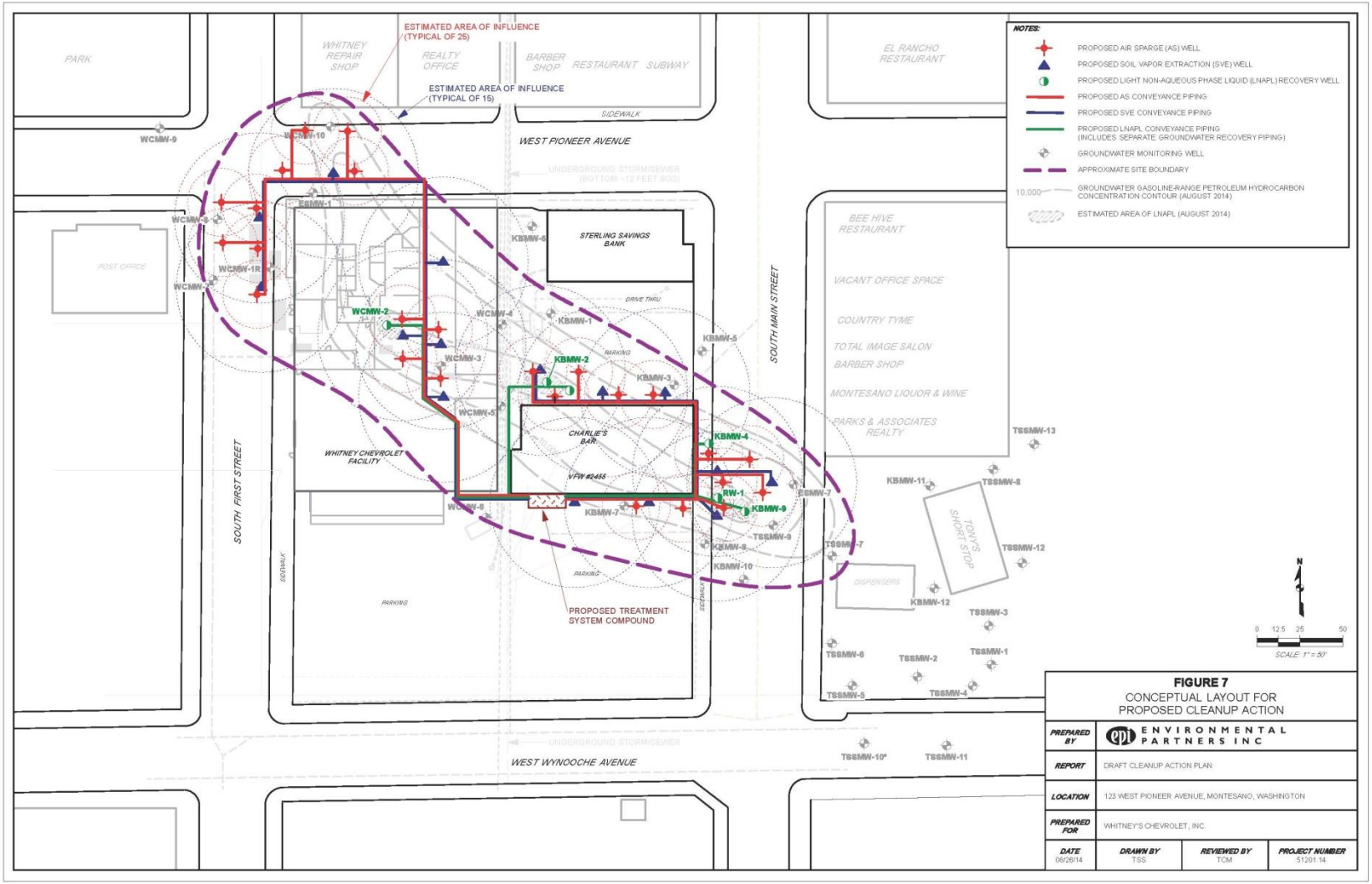



**FIGURE 7**
CONCEPTUAL LAYOUT FOR
PROPOSED CLEANUP ACTION

| | |
|---|---|
| PREPARED BY | EPI ENVIRONMENTAL PARTNERS INC |
| REPORT | DRAFT CLEANUP ACTION PLAN |
| LOCATION | 123 WEST PIONEER AVENUE, MONTESANO, WASHINGTON |
| PREPARED FOR | WHITNEY'S CHEVROLET, INC. |

| DATE | DRAWN BY | REVIEWED BY | PROJECT NUMBER |
|---|---|---|---|
| 06/26/14 | TSS | TCM | 51201.14 |