

DETERMINATION OF NONSIGNIFICANCE

Description of proposal: The purpose of the remedial action (excavation and off-site disposal) is to remove soils contamination that exceeds State of Washington Model Toxics Control Act (MTCA) Cleanup Levels (CULs). This action will result in the removal of all soil from the Site that exceeds CULs. The proposed excavation extent is based on concentrations of petroleum hydrocarbon constituents exceeding MTCA Method A CULs at soil boring locations GP-2, MW-6R, GP-5, GP-6, MW-11 and MW-12. Additional samples will be collected to define vertical and horizontal excavation limits. Sampling locations will be placed on 10 foot centers forming a 10 by 10 foot sampling grid surrounding the previously identified areas of impacted soil. Samples will be collected by advancing a direct push soil boring at the center of each grid location to a depth of 10 feet bgs. Excavation limits will be extended to sampling locations where concentrations are confirmed to be below MTCA Method A CULs. Soils from grids that exceed MTCA Method A CULs will be excavated and disposed of at an appropriate off-Site disposal facility. The soils from grid location MW-6R will be excavated to a depth of 6 feet bgs because the soil sample obtained previously from this location at the 6-6.5' interval was below MTCA Method A CULs. Soils from all grids that do not exceed the CULs will be stockpiled and reused as excavation backfill in addition to imported granular fill. Depending on the results of the confirmation sampling, a minimum of approximately 370 cubic yards (CY) and up to approximately 2,225 CY of impacted soil will be excavated and disposed of at an appropriate off-site disposal facility.

Proponent: Washington State Department of Ecology, Toxics Cleanup Program, Southwest Regional Office

Location of proposal, including street address, if any: The Industrial Petroleum Distributors Site is defined as two upland parcels (Parcel Nos. 0903-000-5000 and 0903-000-3000) on the west side and a lowland parcel (Parcel No. 0903-000-1000) on the east side of West Bay Drive. The SEPA checklist focuses on the lowland parcel, which is generally located at 1120 West Bay Drive in Olympia, Washington.

Lead agency: Washington State Department of Ecology

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030 (2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

There is no comment period for this DNS.

This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.

This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days from the date below. Comments must be submitted by October 6, 2014.

Comments should be directed to Steve Teel, Site Manager, at Steve.Teel@ecy.wa.gov or PO Box 47775, Olympia, WA 98504-7775.

Responsible official: Rebecca S. Lawson, P.E., LHG

Position/title: Section Manager, Toxics Cleanup Program/Southwest Regional Office, WA State Department of Ecology

Phone: (360) 407-6241

Address: P.O. Box 47775, Olympia, WA 98504-7775

Date 8/29/2014

Signature



SEPA ENVIRONMENTAL CHECKLIST

UPDATED 2014

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. background

1. Name of proposed project, if applicable:

Former Industrial Petroleum Distributors Bulk Terminal Remedial Action

2. Name of applicant:

ARCADIS U.S., Inc

3. Address and phone number of applicant and contact person:

Prajakta Ghatpande
Project Manager
1100 Olive Way, Suite 800
Seattle, WA 98101
T: 206-726-4762

4. Date checklist prepared:

August 13, 2014

5. Agency requesting checklist:

Washington State Department of Ecology (Ecology)

6. Proposed timing or schedule (including phasing, if applicable):

Field activities and construction will be scheduled following the combined public comment period for SEPA and the Cleanup Action Plan and once access is received from all involved parties – BNSF and Port of Olympia. It is estimated that field activities will occur Fall 2014.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

The following list are the most applicable environmental reports that have been prepared. A Cleanup Action Completion Report will also be prepared at the conclusion of the cleanup.

ARCADIS U.S., Inc. (ARCADIS) 2012. Remedial Investigation Report, Former ARCO Olympia Bulk Terminal, Industrial Petroleum Distributors Site (Facility Identification No. 1436), 1120 West Bay Drive, Olympia, Washington. January 30.
<https://fortress.wa.gov/ecy/gsp/CleanupSiteDocuments.aspx?csid=4240>

ARCADIS U.S., Inc. (ARCADIS) 2013. Feasibility Study Report, Former ARCO Olympia Bulk Terminal, Industrial Petroleum Distributors Site (Facility Identification No. 1436), 1120 West Bay Drive, Olympia, Washington. February 8.

ARCADIS U.S., Inc. (ARCADIS) 2014. Cleanup Action Plan, Former Industrial Petroleum Distributors Bulk Terminal, 1120 West Bay Drive, Olympia, Washington.

Associated Environmental Group, LLC (AEG) 2002a. Final Cleanup Action Plan, Former Industrial Petroleum Distributors, 1117 West Bay Drive, Olympia, Washington. January 15.

Associated Environmental Group, LLC (AEG) 2002b. Soil Excavation Work Plan, Former Industrial Petroleum Distributors, 1117 West Bay Drive, Olympia, Washington. March 26.

Associated Environmental Group, LLC (AEG) 2002c. Final Cleanup Report, Former Industrial Petroleum Distributors, 1117 West Bay Drive, Olympia, Washington. September 27.

Associated Environmental Group, LLC (AEG) 2002d. Quarterly Groundwater Monitoring Report, Former Industrial Petroleum Distributors, 1117 West Bay Drive, Olympia, Washington. December 5.

Associated Environmental Group, LLC (AEG) 2003. Quarterly Groundwater Monitoring Report, Former Industrial Petroleum Distributors, 1117 West Bay Drive, Olympia, Washington. May 22.

SECOR 2001. Final Remedial Investigation and Feasibility Study, Former Industrial Petroleum Distributors, 1117 West Bay Drive, Olympia, Washington. October 30.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Yes. Permitting process will begin once the cleanup action is approved after the public comment period.

10. List any government approvals or permits that will be needed for your proposal, if known.

The CAP will need to be issued by Ecology and the pre-excavation sampling work plan, construction plans and specifications, and Stormwater Pollution Prevention Plan (SWPPP) will need to be approved by the Department of Ecology. A Clearing and Grading Permit will need to be approved by City of Olympia.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The purpose of the remedial action is to remove soils contamination that exceeds State of Washington Model Toxics Control Act (MTCA) Cleanup Levels (CULs).

The Site consists of two parcels on West Bay Drive. An upland parcel (located west of the West Bay Drive) and a lowland parcel (located east of the West Bay drive). The upland parcel received a No further Action (NFA) letter from Ecology in June 2003. This SEPA checklist is prepared for the lowland parcel located at on the east side of West Bay Drive.

The Site was first developed in the early 1950s as a bulk fuel storage facility for the Richfield Oil Corporation. Aboveground storage tanks and pipelines carrying petroleum products (gasoline and oil) were present on the Site.

Several site investigations have been conducted on-Site since 2000. Remedial investigation/Feasibility Study (RI/FS) activities were conducted at the Site and the contaminants of concern include: total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene and total xylenes (BTEX), and carcinogenic polycyclic aromatic hydrocarbons (cPAHs).

The remedial action consists of excavation and off-site desposal. The proposed excavation extent is based on concentrations of petroleum hydrocarbon constituents exceeding MTCA Method A CULs at soil boring locations GP-2, MW-6R, GP-5, GP-6, MW-11 and MW-12 (Figure 5). Additional samples will be collected to define vertical and horizontal excavation limits. Sampling locations will be placed on 10 foot centers forming a 10 by 10 foot sampling grid surrounding the previously identified areas of impacted soil. Samples will be collected by advancing a direct push soil boring at the center of each grid location to a depth of 10 feet bgs. Excavation limits will be extended to sampling locations where concentrations are confirmed to be below MTCA Method A CULs. Soils from grids that exceed MTCA Method A CULs will be excavated and disposed of at an appropriate off-Site disposal facility. The soils from grid location MW-6R will be excavated to a depth of 6 feet bgs because the soil sample obtained previously from this location at the 6-6.5' interval was below MTCA Method A CULs. Soils from all grids that do not exceed the CULs will be stockpiled and reused as excavation backfill in addition to imported granular fill. Depending on the results of the confirmation sampling, a minimum of approximately 370 cubic yards (CY) and up to approximately 2,225 CY of impacted soil will be excavated and disposed of at an appropriate off-site disposal facility.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The Site is defined as two upland parcels (Parcel Nos. 0903-000-5000 and 0903-000-3000) on the west side and a lowland parcel (Parcel No. 0903-000-1000) on the east side of West Bay Drive. This SEPA checklist focuses on the lowland parcel, which is generally located at 1120 West Bay Drive in Olympia, Washington. A Site Vicinity Map is presented as **Figure 1**.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site

(circle one): Flat, rolling, hilly, steep slopes, mountainous,

b. What is the steepest slope on the site (approximate percent slope)?

1%

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.**

Subsurface material observed during site investigation activities generally consisted of silty clays and sandy silt to approximately 6 feet below ground surface (bgs) and fine to medium sand and fine gravel between 6 and 13 feet bgs. Wood debris and bark dust were observed between 3 and 9 feet bgs. Observed subsurface conditions are consistent with the location of the site adjacent to West Bay and are indicative of historical glacial deposition.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

No

- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.**

Depending on the results of the confirmation sampling, a minimum of approximately 370 cubic yards (CY) and up to approximately 2,225 CY of impacted soil will be excavated and disposed of at an appropriate off-site disposal facility. Excavated soils that are below MTCA Method A CULs will be used as backfill in addition to imported granular fill. Source of clean soil is yet to be determined.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.**

Erosion is not likely because the surface of the proposed excavation is predominately flat. Also, erosion control measures will be implemented by the Contractor according to the Ecology 2012 Stormwater Management Manual for Western Washington to ensure compliance with local and state government regulations.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

No additional impervious surfaces will be added to the Site as a result of this project.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**

Construction induced erosion is unlikely however Best Management Practices will be used during the project to minimize erosion.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Heavy equipment exhaust and minimal dust from excavation activities are expected. Standard construction dust control practices will be implemented to minimize dust.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Dust meters will be stationed at the property to monitor dust real-time. Air monitoring will be conducted using 5-gas meter, and dust meters will be used as appropriate and as required. Best Management Practice C105, Stabilization Construction Entrance/Exit shall be used to prevent track-out into West Bay Drive. Prior to trucks leaving site, tires will also be inspected, manually cleaned as necessary, and checked for covered loads prior to departing off-site. Dry soils will be watered to control fugitive dust. Contractors will be required to use ultra low sulfur diesel fuel in off-road equipment and will be instructed to turn off construction equipment when not in use.

3. Water

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes, the site is situated on West Bay, located on the southern end of Budd Inlet in Puget Sound. All project work for this proposal will occur in the upland area (above the tidal zone). However, work will occur within 200 feet of the shoreline. Elevations within the work area range from 24 feet above mean sea level (msl) to 60 feet msl.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes, as shown in **Figure 5**, work will occur within 200 feet of the shoreline. However, all work will occur in the upland area (above the tidal zone).

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No fill or dredge material will be removed from surface water or wetlands.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

According to the Department of Ecology Coastal Atlas, <https://fortress.wa.gov/ecy/coastalatlas/tools/FloodMap.aspx>, the flood risk for the Site is low to moderate.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

No

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.**

Excavation dewatering may be required and the removed liquids will be collected via vacuum truck, containerized, and hauled off site for disposal.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

None

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

Stormwater runoff is the only runoff source expected. Stormwater will be diverted around the excavation to its normal path of flow.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.**

No

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

No, except for temporary diversion during project work.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Best Management Practices will be used to handle stormwater runoff.

4. Plants

a. Check the types of vegetation found on the site:

deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other

shrub

grass

pasture

crop or grain

Orchards, vineyards or other permanent crops.

wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

water plants: water lily, eelgrass, milfoil, other

other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Grass – Sparse amounts

c. List threatened and endangered species known to be on or near the site.

None known

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The grass that is removed will be reseeded if necessary.

e. List all noxious weeds and invasive species known to be on or near the site.

None known

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include:

birds: hawk, heron, eagle, songbirds, other: Crows and Seagulls

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other _____

b. List any threatened and endangered species known to be on or near the site.

None known

c. Is the site part of a migration route? If so, explain.

The project site is located within the Pacific Flyway but is not likely to have suitable habitat to support migratory birds.

d. Proposed measures to preserve or enhance wildlife, if any:

None

e. List any invasive animal species known to be on or near the site.

None known

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

None.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None

7. Environmental health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

The purpose of the project is to remove and reduce exposure to toxic chemicals to acceptable levels. Petroleum Hydrocarbon Impacted Soil and cPAHs will be excavated and transferred offsite. Exposure to petroleum hydrocarbons could occur if a spill of soil occurs. Other potential hazards include exposure to construction workers during excavation.

1) Describe any known or possible contamination at the site from present or past uses.

Soil analytical results from the 16 borings were compared to the MTCA Method A Soil CULs for Unrestricted Land Uses as presented in Table 740-1 of Chapter 173-340 WAC. Naphthalenes, cPAHs, TPH-GRO, and TPH-DRO were detected above the applicable MTCA Method A CULs in soil samples collected from several locations in the northwest corner of the Site. Results of the soil analysis are presented in Table 1. Figures 2, 3 and 4 summarize the results of soil analytical data.

Groundwater analytical results for the Site are compared to the MTCA Method A CULs for Ground Water as presented in Table 720-1 of Chapter 173-340 WAC. Groundwater samples did not exhibit concentrations of analyzed chemicals in exceedance of the MTCA Method A groundwater CULs. Results of groundwater sample analyses for October 2010 through December 2011 are summarized in Table 2.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

The purpose of the project is to remove and reduce exposure to toxic chemicals at the Site to acceptable levels.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Petroleum Hydrocarbon and cPAH Impacted soils may be stockpiled on-site prior to disposal. Standard chemicals will also be used that are associated with the use of construction excavation equipment. A Spill Prevention and Countermeasures Prevention Plan will be created and implemented to address any potential risk of spills of oil or other hazardous substances from construction equipment. For example, spill kits will be available to control any releases of these chemicals.

4) Describe special emergency services that might be required.

There are no unusual risks associated with this proposal. All personnel will be required to read and abide by the Site Safety Plan. Emergency medical contact numbers and directions to the nearest hospital will be listed in the plan and posted at the Site during construction.

5) Proposed measures to reduce or control environmental health hazards, if any:

5-Gas meters will be used for air monitoring during operations. A site-specific Health and Safety Plan (HASP) will be implemented to ensure protection of environmental health hazards.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

There are no known sources of noise in the area that will affect the proposed project.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**

Some noise from construction activities will occur. Construction is expected to occur during daylight hours between 7:00 am and 5:00 pm.

- 3) Proposed measures to reduce or control noise impacts, if any:**

Site Operations will occur during the hours of 7:00 am and 5:00 pm, Monday – Friday.

8. Land and shoreline use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.**

The Site is a vacant property. The parcel located on the east side of West Bay Drive is owned by the Port of Olympia and is referred to as The Port property. Adjacent and/or nearby properties are vacant industrial land, office/professional, and residential. The project is not expected to adversely impact land uses on nearby or adjacent properties.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?**

No

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:**

No

- c. Describe any structures on the site.**

None

- d. Will any structures be demolished? If so, what?**

None

- e. What is the current zoning classification of the site?**

The Zoning is Industrial/ Urban Waterfront

- f. What is the current comprehensive plan designation of the site?**

The Comprehensive Plan designation is Commercial.

g. If applicable, what is the current shoreline master program designation of the site?

Site is located in an area designated as “SMA Marine” however, the Site is under agreed order and is exempted from Chapter 90.58 (Shoreline Management Act) per WAC 173-340-710(9).

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No

i. Approximately how many people would reside or work in the completed project?

None planned at this time.

j. Approximately how many people would the completed project displace?

None

k. Proposed measures to avoid or reduce displacement impacts, if any:

N/A

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

None

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

None

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None

c. Proposed measures to reduce or control housing impacts, if any:

N/A

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

No structures are proposed

- b. What views in the immediate vicinity would be altered or obstructed?**

No

- c. Proposed measures to reduce or control aesthetic impacts, if any:**

N/A

11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?**

None

- b. Could light or glare from the finished project be a safety hazard or interfere with views?**

No

- c. What existing off-site sources of light or glare may affect your proposal?**

None

- d. Proposed measures to reduce or control light and glare impacts, if any:**

N/A

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?**

The closest recreational area to the Site is West Bay Park, 700 West Bay Drive NW, 0.4 miles south of the Site. West Bay Park includes designated recreation opportunities including beach access areas, trails, hand boat launch, fishing, bird watching, picnicking, hiking, and walking.

- b. Would the proposed project displace any existing recreational uses? If so, describe.**

No

- c. **Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**

N/A

13. Historic and cultural preservation

- a. **Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.**

None known

- b. **Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.**

None known

- c. **Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.**

N/A

- d. **Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.**

N/A

14. Transportation

- a. **Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.**

West Bay Drive NW runs along the east border of the site and would be the principal access to the site.

- b. **Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?**

Not applicable.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

None

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

N/A

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No

- h. Proposed measures to reduce or control transportation impacts, if any:

A Traffic Control Plan (TCP) will be used by all construction vehicles. Drivers will be instructed to use extreme caution while driving on roadways to avoid motor vehicle and pedestrian traffic. A property-specific excavation and backfill route will be used as approved by the City.

15. Public services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No

- b. Proposed measures to reduce or control direct impacts on public services, if any.

N/A

16. Utilities

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

No utilities available for connection at the site. Overhead and underground utilities run within the right of way along the east side of West Bay Drive.

- c. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

N/A

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____ 

Name of signer PRANJITA GHATPANDE

Position and Agency/Organization PROJECT MANAGER, ARCADIS

Date Submitted: 08/13/14

ATTACHMENTS

FIGURES

Figure 1 – Site Vicinity Map

Figure 2 – GRO, DRO, and CPAH Concentrations in Soil (2-2.5 bgs) – August 2010

Figure 3 – GRO, DRO, and CPAH Concentrations in Soil (4-4.5 bgs) – August 2010

Figure 4 – GRO, DRO, and CPAH Concentrations in Soil (6-6.5 bgs) – August 2010

Figure 5 – Estimated Extent of Soil Excavation and Confirmation Sampling Grid



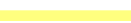
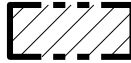
TABLES

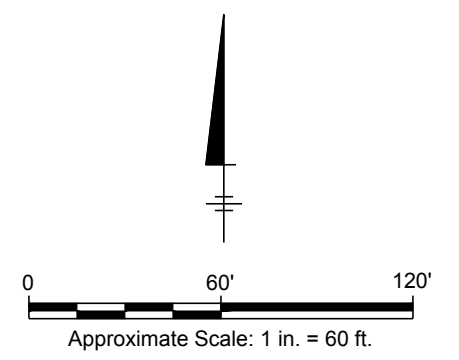
Table 1 – Soil Analytical Results – August 23-25, 2010 SEPA Checklist

Table 2 – Select Groundwater Analytical Results – October 2010 to September 2011 SEPA Checklist

CITY:(Read) DIV:(GROUP:Read) DB:(Read) LD:(Opt) PIC:(Opt) PM:(Read) TM:(Opt) LYR:(Opt)ON*:"OFF"="REF"
 G:\ENVCAD\Emeryville\ACT\G\09BPN\WA60\0000\SEPA Check\ist\DW\G\09BPN\WA60-B01.dwg LAYOUT: 1 SAVED: 8/6/2014 1:58 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 8/8/2014 1:59 PM BY: REYES, ALEC



- LEGEND**
-  SUBJECT PROPERTY LINE BOUNDARY
 -  MW-7 GROUND WATER MONITORING WELL LOCATION
 - 09030001000 INDUSTRIAL PETROLEUM DISTRIBUTORS PROPERTY PARCEL NUMBER
 -  PARCEL BOUNDARY
 -  SITE



FORMER INDUSTRIAL PETROLEUM DISTRIBUTORS
 BULK TERMINAL
 1120 WEST BAY DRIVE, OLYMPIA, WASHINGTON
SEPA CHECKLIST

SITE VICINITY MAP


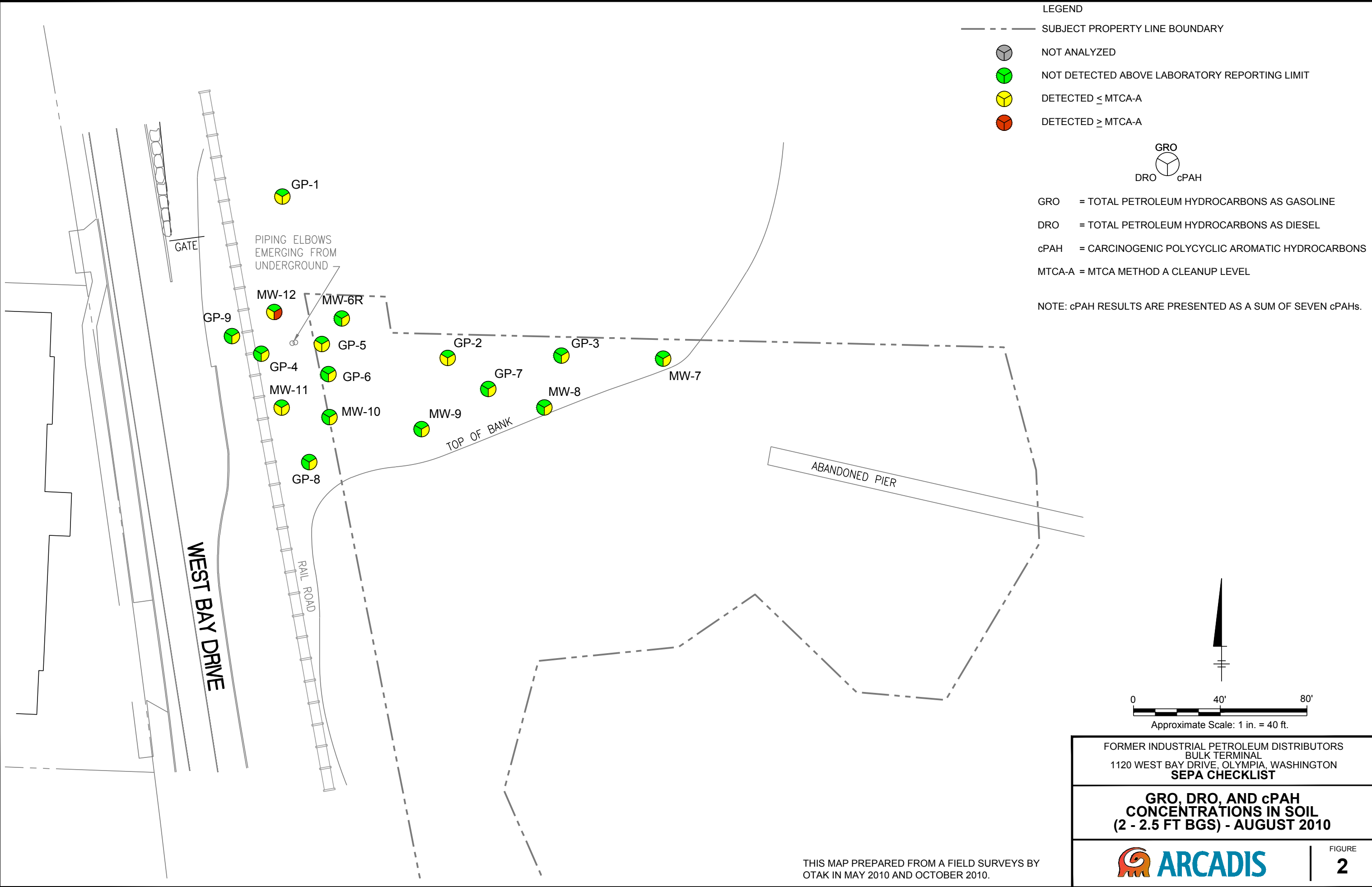


FIGURE
1

SOURCE IMAGE: THURSTON COUNTY GEODATA CENTER

THIS MAP PREPARED FROM A FIELD SURVEY BY OTAK ON OCTOBER 7, 2010

CITY:(Read) DIV:(GROUP:(Read) DB:(Read) LD:(Opt) PIC:(Opt) PM:(Read) TM:(Opt) LVR:(Opt)ON*:*OFF*REF*
 G:\ENVCAD\Emeryville\ACT\GF09BPN\WA60\Q000\SEPA Checklist\DW\GF09BPN\WA60-B02.3.4.dwg LAYOUT: 2 SAVED: 8/8/2014 2:01 PM ACADVER: 18.1S (LMS TECH) PAGES: 18 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 8/8/2014 2:03 PM BY: REYES, ALEC



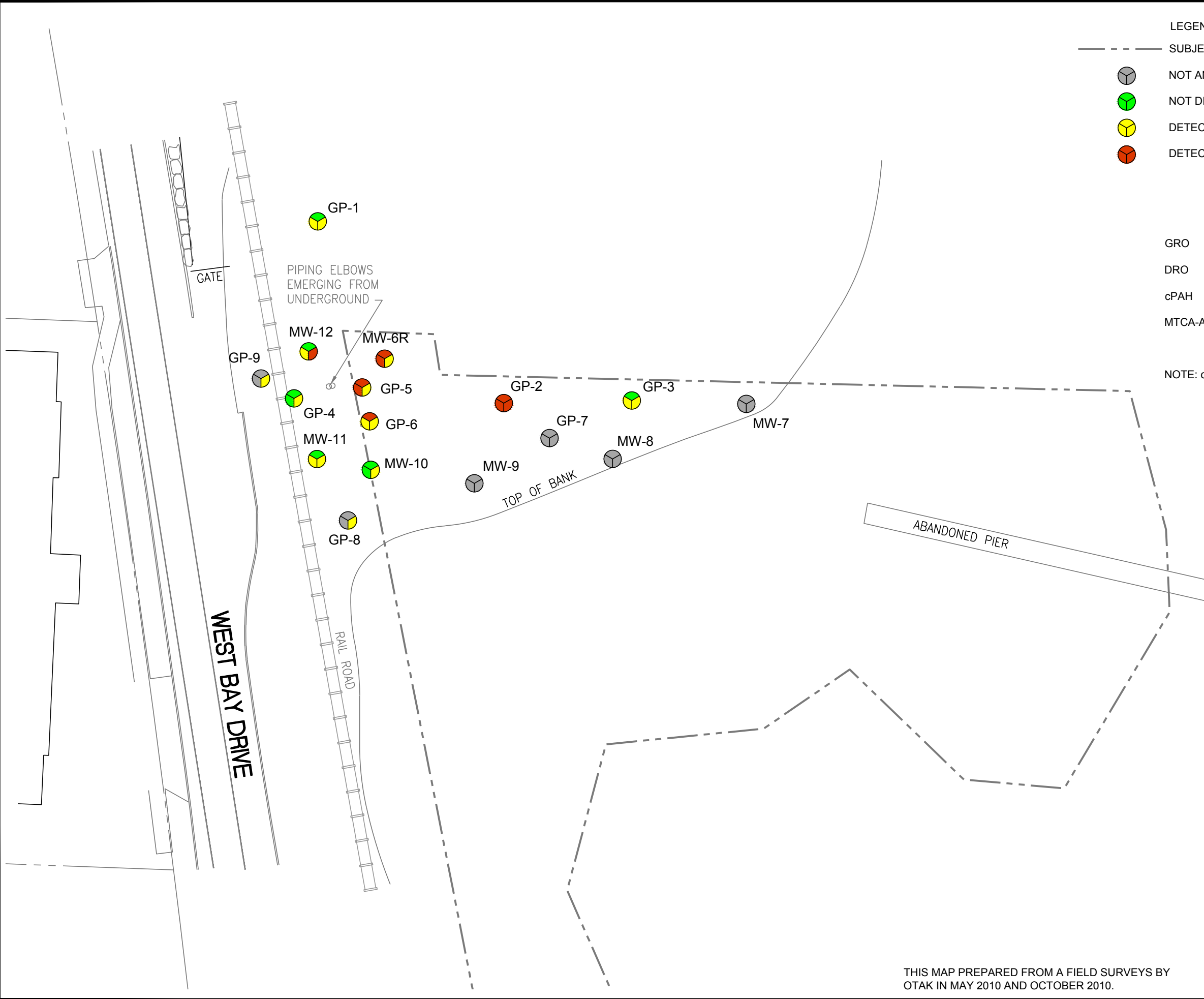
FORMER INDUSTRIAL PETROLEUM DISTRIBUTORS
 BULK TERMINAL
 1120 WEST BAY DRIVE, OLYMPIA, WASHINGTON
SEPA CHECKLIST

**GRO, DRO, AND cPAH
 CONCENTRATIONS IN SOIL
 (2 - 2.5 FT BGS) - AUGUST 2010**

FIGURE
2

THIS MAP PREPARED FROM A FIELD SURVEYS BY OTAK IN MAY 2010 AND OCTOBER 2010.

CITY:\Read\ DIV\GROUP\Read\ DB\Read\ LD\Opt\ PIC\Opt\ PM\Read\ TM\Opt\ LVR\Opt\ON\OFF=REF*
 G:\ENV\CAD\Emeryville\ACT\GF09BPN\WA60\0000\SEPA Checklist\DW\GF09BPN\WA60-B02.3.4.dwg LAYOUT: 3 SAVED: 8/8/2014 2:01 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 8/8/2014 2:03 PM BY: REYES, ALEC



LEGEND

- SUBJECT PROPERTY LINE BOUNDARY
- NOT ANALYZED
- NOT DETECTED ABOVE LABORATORY REPORTING LIMIT
- DETECTED ≤ MTCA-A
- DETECTED ≥ MTCA-A

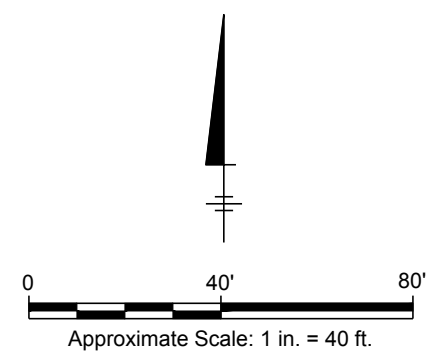
GRO

DRO

cPAH

GRO = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
 DRO = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
 cPAH = CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBONS
 MTCA-A = MTCA METHOD A CLEANUP LEVEL

NOTE: cPAH RESULTS ARE PRESENTED AS A SUM OF SEVEN cPAHs.



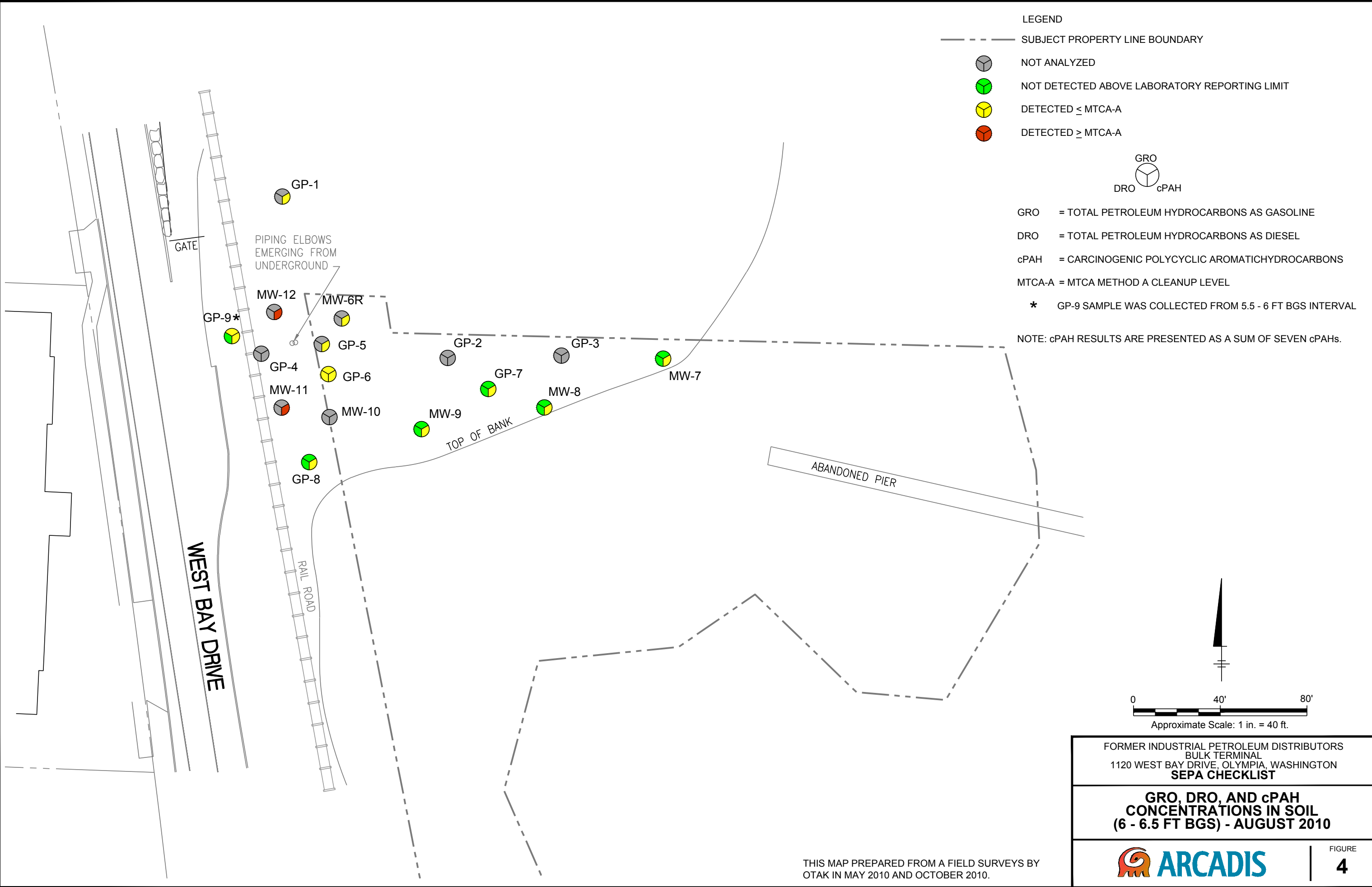
FORMER INDUSTRIAL PETROLEUM DISTRIBUTORS
 BULK TERMINAL
 1120 WEST BAY DRIVE, OLYMPIA, WASHINGTON
SEPA CHECKLIST

**GRO, DRO, AND cPAH
 CONCENTRATIONS IN SOIL
 (4 - 4.5 FT BGS) - AUGUST 2010**

FIGURE
3

THIS MAP PREPARED FROM A FIELD SURVEYS BY
 OTAK IN MAY 2010 AND OCTOBER 2010.

CITY:(Read) DIV:(GROUP:(Read) DB:(Read) LD:(Opt) PIC:(Opt) PM:(Read) TM:(Opt) LVR:(Opt)ON*:*OFF*REF*
 G:\ENVCAD\Emeryville\ACT\GF09BPN\WA60\Q000\SEPA Checklist\DW\GF09BPN\WA60-B02.3.4.dwg LAYOUT: 4 SAVED: 8/8/2014 2:01 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 8/8/2014 2:04 PM BY: REYES, ALEC



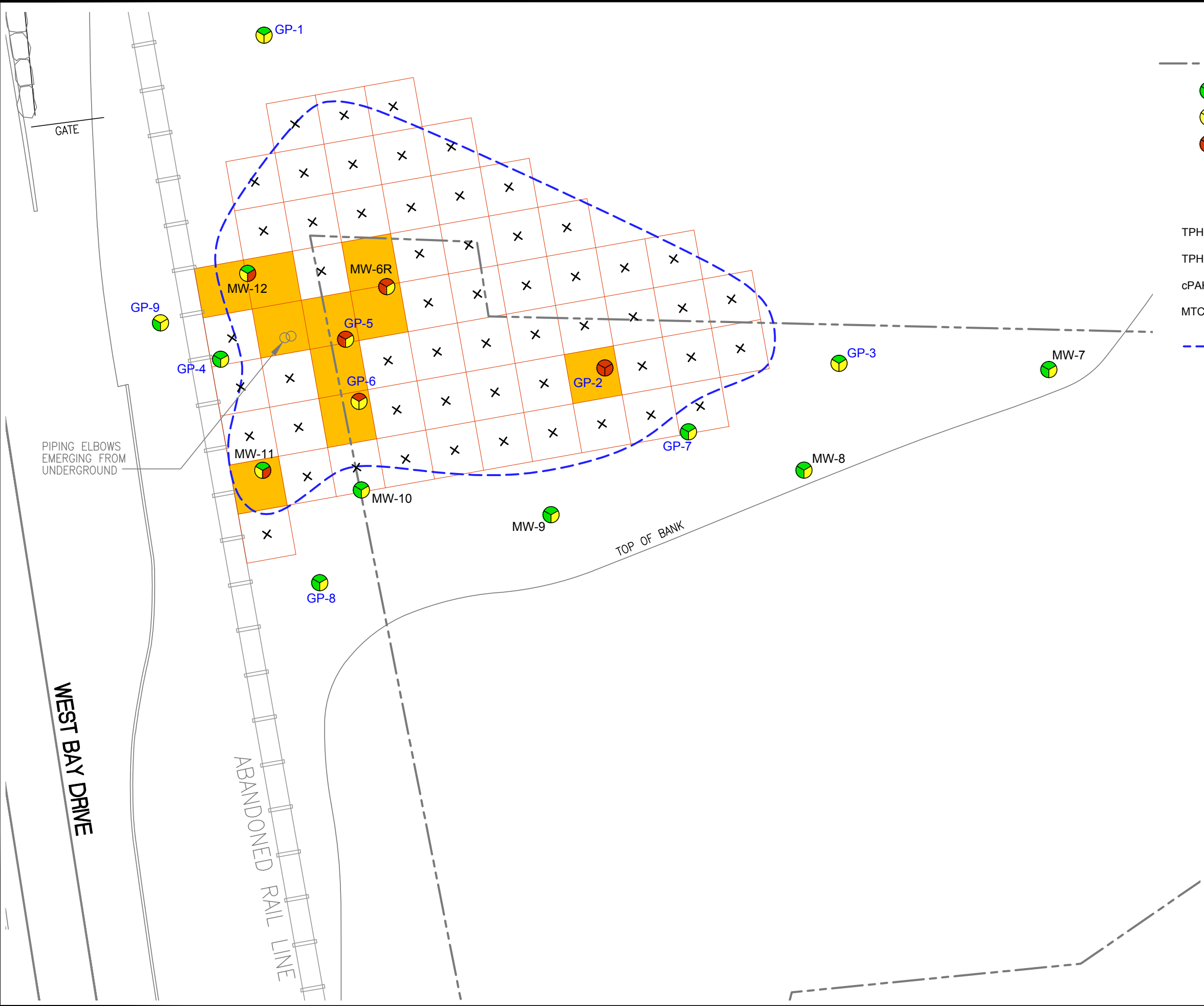
FORMER INDUSTRIAL PETROLEUM DISTRIBUTORS
 BULK TERMINAL
 1120 WEST BAY DRIVE, OLYMPIA, WASHINGTON
SEPA CHECKLIST

**GRO, DRO, AND cPAH
 CONCENTRATIONS IN SOIL
 (6 - 6.5 FT BGS) - AUGUST 2010**

THIS MAP PREPARED FROM A FIELD SURVEYS BY
 OTAK IN MAY 2010 AND OCTOBER 2010.

FIGURE
4

CITY:(Read) DIV:(GROUP:(Read) DB:(Read) LD:(Opt) PIC:(Opt) PM:(Read) TM:(Opt) LVR:(Opt)ON="OFF"REF*
 G:\ENVCAD\Emeryville\ACT\GP09BPN\WA60\Q000\SEPA Checklist\DW\GP09BPN\WA60-B05.dwg LAYOUT: 5 SAVED: 10/31/2013 11:10 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ACAD2.CTB PLOTTED: 8/2/2014 2:04 PM BY: REYES, ALEC

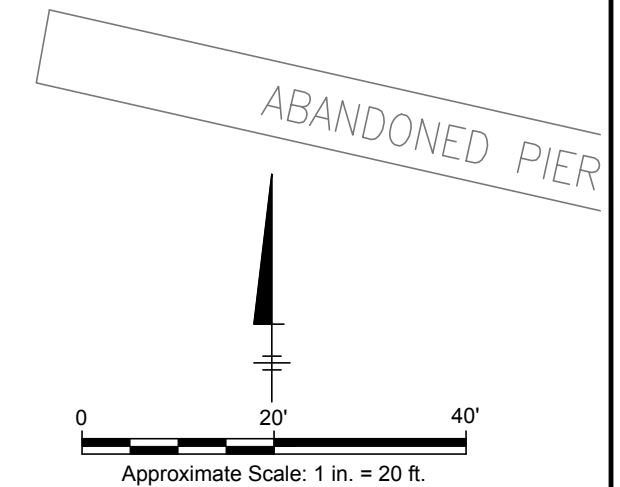


LEGEND

- SUBJECT PROPERTY LINE BOUNDARY
- NOT DETECTED ABOVE LABORATORY REPORTING LIMIT
- DETECTED ≤ MTCA-A
- DETECTED ≥ MTCA-A
- TPH-G
- TPH-D
- CPAH

TPH-G = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
 TPH-D = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
 CPAH = CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBONS
 MTCA-A = MTCA METHOD A CLEANUP LEVEL

- - - ESTIMATED EXTENT SOIL IMPACTED ≥ MTCA
- MINIMUM EXCAVATION GRIDS
- X PROPOSED SAMPLING LOCATIONS



THIS MAP PREPARED FROM FIELD SURVEYS BY OTAK IN MAY 2010 AND OCTOBER 2010.

FORMER INDUSTRIAL PETROLEUM DISTRIBUTORS
 BULK TERMINAL
 1120 WEST BAY DRIVE, OLYMPIA, WASHINGTON
SEPA CHECKLIST
**ESTIMATED EXTENT OF SOIL
 EXCAVATION AND CONFIRMATION
 SAMPLING GRID**



TABLE 1

SOIL ANALYTICAL RESULTS - AUGUST 23-25, 2010
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTC A Method A Cleanup Levels	Sample ID (Depth below ground surface in feet)						
		Date Collected						
		GP-1 (2-2.5) 8/25/2010	GP-1 (4-4.5) 8/25/2010	GP-1 (6-6.5) 8/25/2010	GP-2 (2-2.5) 8/25/2010	GP-2 (4-4.5) 8/25/2010	GP-3 (2-2.5) 8/24/2010	GP-3 (4-4.5) 8/24/2010
Volatile Organic Compounds	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	0.03	<0.0047	<0.019	--	<0.0042	<0.0086	<0.0034	<0.0038
Ethylbenzene	6	<0.0047	<0.019	--	<0.0042	<0.0086	<0.0034	<0.0038
Toluene	7	<0.0047	0.0342	--	<0.0042	<0.0086	<0.0034	<0.0038
Total Xylenes	9	<0.014	<0.0567	--	<0.0126	<0.0259	<0.0101	<0.0113
Total Petroleum Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Gasoline Range Hydrocarbons	30	<8.6	<47*	--	<9.8	264	<6.2	<8.6
Diesel Range Organics	2,000	30.4	60.9	--	732	3,120	<21.8	31.1
Residual Range/Heavy Oil Organics	2,000	198	481	--	<124	296	<87.1	<103
RCRA 8 Metals	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	20	<12.3	<4.8	--	<13.3	<4.4	<10.9	<12.4
Barium	NE	80.6	52.7	--	53.6	50.0	107	101
Cadmium	2	<6.2*	<2.4*	--	<6.6*	<2.2*	<5.5*	<6.2*
Chromium (total)	(a)	26.7	10.4	--	24.6	17.5	34.5	40.4
Lead	250	4.7	5.2	--	4.1	4.9	5.2	4.0
Mercury	2	<0.12	<0.27	--	<0.15	<0.24	<0.11	<0.12
Selenium	NE	<6.2	<2.4	--	<6.6	<2.2	<5.5	<6.2
Silver	NE	<6.2	<2.4	--	<6.6	<2.2	<5.5	<6.2
c-Polyaromatic Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Naphthalene	(b)	0.0087	<0.0178	<0.0451	<0.0104	0.192	<0.0075	<0.0087
1-Methylnaphthalene	(b)	<0.0087	<0.0178	<0.0451	0.0217	0.449	<0.0075	0.0143
2-Methylnaphthalene	(b)	0.0111	<0.0178	<0.0451	0.0228	0.463	<0.0075	0.0199
<i>Naphthalenes</i>	5	<i>0.0242</i>	<i>0.0267</i>	<i>0.0677</i>	<i>0.0497</i>	<i>1.10</i>	<i>0.011</i>	<i>0.039</i>
Acenaphthene	NE	<0.0087	<0.0178	<0.0451	<0.0104	0.0896	<0.0075	<0.0087
Acenaphthylene	NE	<0.0087	<0.0178	<0.0451	0.0107	0.0688	<0.0075	<0.0087
Anthracene	NE	<0.0087	<0.0178	<0.0451	<0.0104	0.194	<0.0075	<0.0087
Benzo (a) anthracene	(c)	<0.0087	<0.0178	<0.0451	<0.0104	0.315	<0.0075	<0.0087
Benzo (a) pyrene	0.1	<0.0087	<0.0178	<0.0451	<0.0104	0.233	<0.0075	<0.0087
Benzo (b) fluoranthene	(c)	<0.0087	<0.0178	<0.0451	<0.0104	0.165	<0.0075	<0.0087
Benzo (g,h,i) perylene	NE	<0.0087	<0.0178	<0.0451	<0.0104	0.0429	<0.0075	<0.0087
Benzo (k) fluoranthene	(c)	<0.0087	<0.0178	<0.0451	<0.0104	0.205	<0.0075	<0.0087
Chrysene	(c)	<0.0087	<0.0178	<0.0451	<0.0104	0.338	<0.0075	<0.0087
Dibenzo (a,h) anthracene	(c)	<0.0087	<0.0178	<0.0451	<0.0104	0.0498	<0.0075	<0.0087
Fluoranthene	NE	<0.0087	0.0237	0.0540	<0.0104	0.488	<0.0075	<0.0087
Fluorene	NE	<0.0087	<0.0178	<0.0451	0.0136	0.294	<0.0075	<0.0087
Indeno (1,2,3-cd) pyrene	(c)	<0.0087	<0.0178	<0.0451	<0.0104	0.0550	<0.0075	<0.0087
Phenanthrene	NE	0.0114	0.0302	<0.0451	0.0383	0.999	<0.0075	0.0103
Pyrene	NE	<0.0087	<0.0178	0.0625	<0.0104	0.522	<0.0075	<0.0087
<i>cPAH B(a)P Equivalents</i>	0.1	0.0044	0.0089	0.0226	0.00785	0.315	0.0038	0.0044

TABLE 1

SOIL ANALYTICAL RESULTS - AUGUST 23-25, 2010
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTCA Method A Cleanup Levels	Sample ID (Depth below ground surface in feet)						
		Date Collected						
		GP-4 (2-2.5) 8/23/2010	GP-4 (4-4.5) 8/23/2010	GP-5 (2-2.5) 8/23/2010	GP-5 (4-4.5) 8/23/2010	GP-5 (6-6.5) 8/23/2010	GP-6 (2-2.5) 8/25/2010	GP-6 (4-4.5) 8/25/2010
Volatile Organic Compounds	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	0.03	<0.0033	<0.0033	<0.0034	<0.0095	--	<0.0031	<0.0029
Ethylbenzene	6	<0.0033	<0.0033	<0.0034	<0.0095	--	<0.0031	<0.0029
Toluene	7	<0.0033	<0.0033	<0.0034	<0.0095	--	<0.0031	<0.0029
Total Xylenes	9	<0.0099	<0.0099	<0.0102	0.107	--	<0.0094	<0.0087
Total Petroleum Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Gasoline Range Hydrocarbons	30	<7.6	<7.4	<7.2	875	--	<6.6	486
Diesel Range Organics	2,000	<24.7	<26.2	31.8	3,780	--	<23.3	899
Residual Range/Heavy Oil Organics	2,000	<98.6	<105	<98.8	1,040	--	<93.1	<98.7
RCRA 8 Metals	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	20	<13.1	<12.6	<12.4	<21.0*	--	<11.5	<12.1
Barium	NE	120	115	107	130	--	127	139
Cadmium	2	<6.5*	<6.3*	<6.2*	<10.5*	--	<5.7*	<6.1*
Chromium (total)	(a)	48.1	48.3	35.1	40.7	--	41.5	42.4
Lead	250	4.6	7.1	8.6	31.0	--	6.4	6.3
Mercury	2	<0.13	<0.13	<0.11	<0.17	--	<0.093	<0.11
Selenium	NE	<6.5	<6.3	<6.2	<10.5	--	<5.7	<6.1
Silver	NE	<6.5	<6.3	<6.2	<10.5	--	<5.7	<6.1
c-Polyaromatic Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Naphthalene	(b)	<0.0086	<0.0089	0.0556	4.090	0.988	<0.0079	0.141
1-Methylnaphthalene	(b)	<0.0086	<0.0089	0.0397	9.56	2.580	<0.0079	0.532
2-Methylnaphthalene	(b)	<0.0086	<0.0089	0.0771	12.300	2.840	<0.0079	0.627
<i>Naphthalenes</i>	5	<i>0.013</i>	<i>0.013</i>	<i>0.172</i>	25.95	6.408	<i>0.019</i>	<i>1.30</i>
Acenaphthene	NE	<0.0086	<0.0089	<0.0083	0.205	0.0646	<0.0079	0.0331
Acenaphthylene	NE	<0.0086	<0.0089	0.0105	0.155	0.0524	<0.0079	0.0323
Anthracene	NE	<0.0086	<0.0089	0.0214	0.0802	<0.0288	<0.0079	0.0113
Benzo (a) anthracene	(c)	<0.0086	<0.0089	0.0227	0.0231	<0.0288	<0.0079	0.0177
Benzo (a) pyrene	0.1	<0.0086	<0.0089	0.0216	<0.0147	<0.0288	<0.0079	0.0124
Benzo (b) fluoranthene	(c)	<0.0086	<0.0089	0.0269	0.0152	<0.0288	<0.0079	0.0081
Benzo (g,h,i) perylene	NE	<0.0086	<0.0089	0.0185	<0.0147	<0.0288	<0.0079	<0.0077
Benzo (k) fluoranthene	(c)	<0.0086	<0.0089	0.0219	<0.0147	<0.0288	<0.0079	0.0120
Chrysene	(c)	<0.0086	<0.0089	0.0312	0.0352	<0.0288	<0.0079	0.0202
Dibenzo (a,h) anthracene	(c)	<0.0086	<0.0089	<0.0083	<0.0147	<0.0288	<0.0079	<0.0077
Fluoranthene	NE	<0.0086	<0.0089	0.0645	0.0864	0.0517	0.0140	0.0359
Fluorene	NE	<0.0086	<0.0089	<0.0083	0.856	0.262	<0.0079	0.113
Indeno (1,2,3-cd) pyrene	(c)	<0.0086	<0.0089	0.0164	<0.0147	<0.0288	<0.0079	<0.0077
Phenanthrene	NE	<0.0086	<0.0089	0.0594	1.460	0.289	0.0109	0.152
Pyrene	NE	<0.0086	<0.0089	0.0530	0.125	0.048	0.0100	0.0426
<i>cPAH B(a)P Equivalents</i>	0.1	0.0043	0.0045	0.0307	0.0123	0.022	0.0056	0.016

TABLE 1

SOIL ANALYTICAL RESULTS - AUGUST 23-25, 2010
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTCA Method A Cleanup Levels	Sample ID (Depth below ground surface in feet)						
		Date Collected						
		GP-6 (6-6.5) 8/25/2010	GP-7 (2-2.5) 8/24/2010	GP-7 (6-6.5) 8/24/2010	GP-8 (2-2.5) 8/25/2010	GP-8 (4-4.5) 8/25/2010	GP-8 (6-6.5) 8/25/2010	GP-9 (2-2.5) 8/24/2010
Volatile Organic Compounds	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	0.03	<0.0038	<0.0041	<0.0031	<0.003	--	<0.0031	<0.0031
Ethylbenzene	6	<0.0038	<0.0041	<0.0031	<0.003	--	<0.0031	<0.0031
Toluene	7	<0.0038	<0.0041	<0.0031	<0.003	--	<0.0031	<0.0031
Total Xylenes	9	<0.0114	<0.0122	<0.0093	<0.009	--	<0.0093	<0.0092
Total Petroleum Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Gasoline Range Hydrocarbons	30	94.4	<7.3	<7.2	<6.2	--	<6.6	<7.2
Diesel Range Organics	2,000	57.1	<23	<24.5	<19.3	--	<22.3	<24.9
Residual Range/Heavy Oil Organics	2,000	<108	<92.1	<98.2	<77.1	--	<89.3	<99.6
RCRA 8 Metals	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	20	<13.9	<11.5	<12.7	<10.3	--	<11.8	12.4
Barium	NE	112	154	113	51	--	71.8	129
Cadmium	2	<7.0*	<5.8*	<6.3*	<5.2*	--	<5.9*	<6.2*
Chromium (total)	(a)	44.2	45	39.9	26.7	--	32.8	42.7
Lead	250	7.1	6.8	4.3	8.8	--	10.1	7.3
Mercury	2	<0.11	<0.11	<0.12	<0.096	--	<0.10	<0.12
Selenium	NE	<7.0	<5.8	<6.3	<5.2	--	<5.9	<6.2
Silver	NE	<7.0	<5.8	<6.3	<5.2	--	<5.9	<6.2
c-Polyaromatic Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Naphthalene	(b)	0.0135	<0.0081	<0.0085	0.0092	0.0089	0.0112	0.0181
1-Methylnaphthalene	(b)	0.0218	<0.0081	<0.0085	0.0090	0.0075	0.0102	0.0162
2-Methylnaphthalene	(b)	0.0217	<0.0081	<0.0085	0.0125	0.0109	0.0148	0.0248
<i>Naphthalenes</i>	5	<i>0.0570</i>	<i>0.012</i>	<i>0.013</i>	<i>0.031</i>	<i>0.027</i>	<i>0.0362</i>	<i>0.0591</i>
Acenaphthene	NE	<0.0097	<0.0081	<0.0085	<0.0070	<0.0071	<0.0077	<0.0084
Acenaphthylene	NE	<0.0097	<0.0081	<0.0085	<0.0070	<0.0071	<0.0077	<0.0084
Anthracene	NE	<0.0097	<0.0081	<0.0085	<0.0070	<0.0071	<0.0077	0.0126
Benzo (a) anthracene	(c)	<0.0097	<0.0081	<0.0085	<0.0070	<0.0071	<0.0077	0.0162
Benzo (a) pyrene	0.1	<0.0097	<0.0081	<0.0085	<0.0070	<0.0071	<0.0077	0.0147
Benzo (b) fluoranthene	(c)	<0.0097	<0.0081	<0.0085	0.0105	0.0085	0.0089	0.0239
Benzo (g,h,i) perylene	NE	<0.0097	<0.0081	<0.0085	<0.0070	<0.0071	<0.0077	0.0113
Benzo (k) fluoranthene	(c)	<0.0097	<0.0081	<0.0085	0.0078	<0.0071	<0.0077	0.0139
Chrysene	(c)	<0.0097	<0.0081	<0.0085	0.0111	0.0089	0.0092	0.0220
Dibenzo (a,h) anthracene	(c)	<0.0097	<0.0081	<0.0085	<0.0070	<0.0071	<0.0077	<0.0084
Fluoranthene	NE	<0.0097	<0.0081	<0.0085	0.0158	0.0143	0.0142	0.0424
Fluorene	NE	<0.0097	<0.0081	<0.0085	<0.0070	<0.0071	<0.0077	<0.0084
Indeno (1,2,3-cd) pyrene	(c)	<0.0097	<0.0081	<0.0085	<0.0070	<0.0071	<0.0077	0.0112
Phenanthrene	NE	<0.0097	<0.0081	<0.0085	0.0127	0.0122	0.0134	0.0323
Pyrene	NE	<0.0097	<0.0081	<0.0085	0.0124	0.0120	0.0110	0.0290
<i>cPAH B(a)P Equivalents</i>	0.1	0.0064	0.0041	0.0043	0.0054	0.0048	0.0052	0.0214

TABLE 1

SOIL ANALYTICAL RESULTS - AUGUST 23-25, 2010
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTCA Method A Cleanup Levels	Sample ID (Depth below ground surface in feet)						
		Date Collected						
		GP-9 (4-4.5) 8/24/2010	GP-9 (5.5-6) 8/24/2010	MW-6R (2-2.5) 8/23/2010	MW-6R (4-4.5) 8/23/2010	MW-6R (6-6.5) 8/23/2010	MW-7 (2-2.5) 8/24/2010	MW-7 (6-6.5) 8/24/2010
Volatile Organic Compounds	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	0.03	--	<0.0031	<0.0031	<0.0215	--	<0.0030	<0.0031
Ethylbenzene	6	--	<0.0031	<0.0031	<0.0215	--	<0.0030	<0.0031
Toluene	7	--	<0.0031	<0.0031	<0.0215	--	<0.0030	<0.0031
Total Xylenes	9	--	<0.0092	<0.0094	<0.0644	--	<0.0090	<0.0094
Total Petroleum Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Gasoline Range Hydrocarbons	30	--	13.8	<6.5	665	--	<4.9	<6.8
Diesel Range Organics	2,000	--	<25.0	<22.5	7,060	--	<20.3	<24.3
Residual Range/Heavy Oil Organics	2,000	--	<100	<89.9	1,360	--	<81.0	<97.4
RCRA 8 Metals	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	20	--	<13.0	<12.0	<10.0	--	<10.5	<12.5
Barium	NE	--	102	110	<100	--	84.1	123
Cadmium	2	--	<6.5*	<6.0*	<5.0*	--	<5.2*	<6.2*
Chromium (total)	(a)	--	36.5	39.4	5.0	--	22.8	34.4
Lead	250	--	10.7	4.3	12.6	--	6.6	10.7
Mercury	2	--	<0.11	<0.11	<0.43	--	<0.11	<0.12
Selenium	NE	--	<6.5	<6.0	<5.0	--	<5.2	<6.2
Silver	NE	--	<6.5	<6.0	<5.0	--	<5.2	<6.2
c-Polyaromatic Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Naphthalene	(b)	0.0110	0.0184	<0.0080	2.4800	0.0177	<0.0072	0.0092
1-Methylnaphthalene	(b)	<0.0089	0.0108	<0.0080	13.0000	0.0623	<0.0072	<0.0085
2-Methylnaphthalene	(b)	0.0123	0.018	<0.0080	16.7000	0.0568	<0.0072	<0.0085
Naphthalenes	5	0.028	0.047	0.012	32.18	0.137	0.0108	0.0170
Acenaphthene	NE	<0.0089	<0.0086	<0.0080	0.4860	<0.0101	<0.0072	<0.0085
Acenaphthylene	NE	<0.0089	0.0086	<0.0080	0.3300	<0.0101	<0.0072	<0.0085
Anthracene	NE	<0.0089	0.0205	<0.0080	0.1190	<0.0101	<0.0072	<0.0085
Benzo (a) anthracene	(c)	0.0143	0.0339	<0.0080	<0.0358	<0.0101	<0.0072	<0.0085
Benzo (a) pyrene	0.1	0.0142	0.0317	<0.0080	<0.0358	<0.0101	<0.0072	<0.0085
Benzo (b) fluoranthene	(c)	0.0163	0.0277	<0.0080	<0.0358	<0.0101	<0.0072	<0.0085
Benzo (g,h,i) perylene	NE	<0.0089	0.0177	<0.0080	<0.0358	<0.0101	<0.0072	<0.0085
Benzo (k) fluoranthene	(c)	0.0148	0.029	<0.0080	<0.0358	<0.0101	<0.0072	<0.0085
Chrysene	(c)	0.0184	0.0334	<0.0080	0.0395	<0.0101	<0.0072	<0.0085
Dibenzo (a,h) anthracene	(c)	<0.0089	<0.0086	<0.0080	<0.0358	<0.0101	<0.0072	<0.0085
Fluoranthene	NE	0.0405	0.0932	<0.0080	0.0544	<0.0101	<0.0072	<0.0085
Fluorene	NE	<0.0089	0.0167	<0.0080	1.6900	<0.0101	<0.0072	<0.0085
Indeno (1,2,3-cd) pyrene	(c)	0.0093	0.0172	<0.0080	<0.0358	<0.0101	<0.0072	<0.0085
Phenanthrene	NE	0.0253	0.0877	<0.0080	2.9000	<0.0101	<0.0072	<0.0085
Pyrene	NE	0.0290	0.0652	<0.0080	0.2120	<0.0101	<0.0072	<0.0085
cPAH B(a)P Equivalents	0.1	0.0199	0.0428	0.0040	0.0183	0.00510	0.0036	0.0043

TABLE 1

SOIL ANALYTICAL RESULTS - AUGUST 23-25, 2010
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTCA Method A Cleanup Levels	Sample ID (Depth below ground surface in feet)						
		Date Collected						
		MW-8 (2-2.5) 8/24/2010	MW-8 (6-6.5) 8/24/2010	MW-9 (2-2.5) 8/24/2010	MW-9 (6-6.5) 8/24/2010	MW-10 (2-2.5) 8/24/2010	MW-10 (4-4.5) 8/24/2010	MW-11 (2-2.5) 8/25/2010
Volatile Organic Compounds	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	0.03	<0.0036	<0.0036	<0.0042	<0.0032	<0.0039	<0.0033	<0.0033
Ethylbenzene	6	<0.0036	<0.0036	<0.0042	<0.0032	<0.0039	<0.0033	<0.0033
Toluene	7	<0.0036	<0.0036	<0.0042	<0.0032	<0.0039	<0.0033	<0.0033
Total Xylenes	9	<0.011	<0.0109	<0.013	<0.0097	<0.0116	<0.010	<0.010
Total Petroleum Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Gasoline Range Hydrocarbons	30	<7.0	<7.9	<9.0	<8.36	<8.1	<7.8	<7.0
Diesel Range Organics	2,000	<21.6	<25.4	<24.7	<25.6	<23.4	<26.9	72.3
Residual Range/Heavy Oil Organics	2,000	<86.3	<102	<98.7	<102	<93.4	<107	176
RCRA 8 Metals	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	20	<10.9	<13.1	<10.0	<11.1	<12.4	<13.2	<11.2
Barium	NE	131	140	156	126	118	126	131
Cadmium	2	<5.5*	<6.6*	<5.0*	<5.6*	<6.2*	<6.6*	<5.6*
Chromium (total)	(a)	41.7	41.9	49.0	46.0	45.8	42.0	28
Lead	250	5	4.1	7.7	6.1	4.9	14.0	58.3
Mercury	2	<0.11	<0.12	<0.13	<0.11	<0.12	<0.14	0.12
Selenium	NE	<5.5	<6.6	<5.0	<5.6	<6.2	<6.6	<5.6
Silver	NE	<5.5	<6.6	<5.0	<5.6	<6.2	<6.6	<5.6
c-Polyaromatic Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Naphthalene	(b)	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.106
1-Methylnaphthalene	(b)	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.146
2-Methylnaphthalene	(b)	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.180
<i>Naphthalenes</i>	5	<i>0.011</i>	<i>0.014</i>	<i>0.013</i>	<i>0.014</i>	<i>0.012</i>	<i>0.014</i>	<i>0.432</i>
Acenaphthene	NE	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	<0.0076
Acenaphthylene	NE	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0147
Anthracene	NE	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0277
Benzo (a) anthracene	(c)	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0461
Benzo (a) pyrene	0.1	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0460
Benzo (b) fluoranthene	(c)	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0566
Benzo (g,h,i) perylene	NE	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0231
Benzo (k) fluoranthene	(c)	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0356
Chrysene	(c)	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0701
Dibenzo (a,h) anthracene	(c)	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0087
Fluoranthene	NE	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0943
Fluorene	NE	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0120
Indeno (1,2,3-cd) pyrene	(c)	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0210
Phenanthrene	NE	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.125
Pyrene	NE	<0.0074	<0.0090	<0.0087	<0.0089	<0.0081	<0.0089	0.0860
<i>cPAH B(a)P Equivalents</i>	0.1	0.0037	0.0045	0.0044	0.0045	0.0041	0.0045	0.0635

TABLE 1

SOIL ANALYTICAL RESULTS - AUGUST 23-25, 2010
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTCA Method A Cleanup Levels	Sample ID (Depth below ground surface in feet)				
		Date Collected				
		MW-11 (4-4.5) 8/25/2010	MW-11 (6-6.5) 8/25/2010	MW-12 (2-2.5) 8/25/2010	MW-12 (4-4.5) 8/25/2010	MW-12 (6-6.5) 8/25/2010
Volatile Organic Compounds	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	0.03	<0.0036	--	<0.0034	<0.0035	--
Ethylbenzene	6	<0.0036	--	<0.0034	<0.0035	--
Toluene	7	<0.0036	--	<0.0034	<0.0035	--
Total Xylenes	9	<0.0108	--	<0.010	<0.011	--
Total Petroleum Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Gasoline Range Hydrocarbons	30	<7.4	--	<6.9	<7.2	--
Diesel Range Organics	2,000	52.9	--	75.7	43.1	--
Residual Range/Heavy Oil Organics	2,000	142	--	153	154	--
RCRA 8 Metals	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	20	<11.5	--	<12.3	<11.4	--
Barium	NE	132	--	146	103	--
Cadmium	2	<5.8*	--	<6.2*	<5.7*	--
Chromium (total)	(a)	31.6	--	39.9	27.9	--
Lead	250	55.2	--	17.0	49.7	--
Mercury	2	0.2	--	<0.12	<0.11	--
Selenium	NE	<5.8	--	<6.2	<5.7	--
Silver	NE	<5.8	--	<6.2	<5.7	--
c-Polyaromatic Hydrocarbons	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Naphthalene	(b)	0.0585	0.0891	0.147	0.101	0.0785
1-Methylnaphthalene	(b)	0.0814	0.105	0.141	0.110	0.0282
2-Methylnaphthalene	(b)	0.101	0.134	0.194	0.149	0.0458
<i>Naphthalenes</i>	5	<i>0.241</i>	<i>0.3281</i>	<i>0.482</i>	<i>0.360</i>	<i>0.153</i>
Acenaphthene	NE	<0.0078	0.0726	0.0186	0.0093	<0.0117
Acenaphthylene	NE	0.0105	0.0210	0.0205	0.0232	<0.0117
Anthracene	NE	0.0209	0.112	0.0517	0.0561	0.0225
Benzo (a) anthracene	(c)	0.0314	0.154	0.0871	0.0849	0.108
Benzo (a) pyrene	0.1	0.0328	0.168	0.0941	0.0861	0.114
Benzo (b) fluoranthene	(c)	0.0445	0.181	0.118	0.136	0.106
Benzo (g,h,i) perylene	NE	0.0181	0.0745	0.0504	0.0472	0.0548
Benzo (k) fluoranthene	(c)	0.0352	0.120	0.0866	0.0877	0.0882
Chrysene	(c)	0.0477	0.171	0.146	0.134	0.116
Dibenzo (a,h) anthracene	(c)	<0.0078	0.0270	0.0198	0.0174	0.0231
Fluoranthene	NE	0.0690	0.415	0.292	0.219	0.244
Fluorene	NE	<0.0078	0.0367	0.0206	0.0136	0.0126
Indeno (1,2,3-cd) pyrene	(c)	0.0173	0.0708	0.0480	0.0492	0.0532
Phenanthrene	NE	0.0733	0.426	0.257	0.143	0.0945
Pyrene	NE	0.0564	0.358	0.228	0.165	0.195
<i>cPAH B(a)P Equivalents</i>	0.1	0.0465	0.225	0.132	0.125	0.153

TABLE 1

SOIL ANALYTICAL RESULTS - AUGUST 23-25, 2010 SEPA CHECKLIST Former Industrial Petroleum Distributors Bulk Terminal 1120 West Bay Drive Olympia, Washington

Notes:

Concentrations compared to the Model Toxics Control Act (MTCA) Method A soil cleanup levels for unrestricted land uses presented in Table 740-1 of Chapter 173-340 of the Washington Administrative Code (WAC)

The MTCA cleanup level for gasoline range total petroleum hydrocarbons is 100-mg/kg without benzene and 30-mg/kg with benzene present. Benzene was observed in groundwater collected from sample ID-4 in 2001, thus the cleanup level of 30-mg/kg was utilized.

ft = Feet

bgs = Below ground surface

mg/kg = milligram per kilogram

NE = Cleanup level not established under MTCA

-- = not applicable or analyzed

cPAH = Carcinogenic polyaromatic hydrocarbons

B(a)P = Benzo(a)pyrene

< = Chemical not detected above the laboratory reporting limit

* = Laboratory practical quantitation limit is elevated above the MTCA Method A cleanup level, but chemical was not observed above the laboratory method detection limit

Italics = Value calculated for comparison to MTCA cleanup level

Bold = Chemical detected at a concentration above the laboratory reporting limit

Bolded and highlighted font indicates results above the MTCA Method A cleanup level

(a) = Analysis is for total chromium. No MTCA cleanup level has been established for total chromium.

(b) = MTCA cleanup level is 5-mg/kg for total concentration of naphthalene, 1-methylnaphthalene and 2-methylnaphthalene

(c) = See MTCA cleanup level for B(a)P. Total concentration of cPAHs calculated using the toxicity equivalency method in WAC 173-340-708(8)

Lab QA/QC surrogate recovery was outside control limits due to matrix interference for samples GP1-4-4.5, GP1-6-6.5, GP2-4-4.5, GP5-4-4.5, GP6-4-4.5, GP6-6-6.5

TABLE 2
SELECT GROUNDWATER ANALYTICAL RESULTS - OCTOBER 2010 TO SEPTEMBER 2011
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTCA Method A Groundwater Cleanup Levels	MW-6R					
		Date Collected					
		10/1/2010	12/30/2010	3/17/2011	6/11/2011	9/22/2011	12/22/2011
Volatile Organic Compounds	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Benzene	5	<1.0	<0.20	<1.0	<0.20	<0.20	<0.20
Toluene	1,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	700	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	1,000	<2.0	<3.0	<2.0	<3.0	<3.0	<3.0
Total Petroleum Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Gasoline Range Organics	800	<50	<50.0	<50	<50.0	<50.0	<50.0
Diesel Range Organics	500	<120	<76	<120	<85	<75	<91
Residual Range/Heavy Oil Organics	500	<240	<380	<240 [^]	<430	<380	<450
Metals	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Lead (Total)	15	<2.0 [^]	<10.0	5.4	<10.0	<10.0	<10.0
Lead (Dissolved)	NE	<2.0 [^]	<10.0	<2.0	<10.0	<10.0	<10.0
c-Polyaromatic Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Naphthalene	(a)	0.010	<0.095	<0.47	<0.11	<0.094	<0.10
1-Methylnaphthalene	(a)	<0.0097	<0.095	<0.14	<0.11	<0.094	<0.10
2-Methylnaphthalene	(a)	<0.013	<0.095	<0.094	<0.11	<0.094	<0.10
<i>Naphthalenes</i>	160	<i>0.0210</i>	<i>0.143</i>	<i>0.352</i>	<i>0.165</i>	<i>0.141</i>	<i>0.150</i>
Acenaphthene	NE	<0.0097	<0.095	<0.094	<0.11	<0.094	<0.10
Acenaphthylene	NE	<0.0097	<0.095	<0.094	<0.11	<0.094	<0.10
Anthracene	NE	<0.0097	<0.095	<0.047	<0.11	<0.094	<0.10
Benzo (a) anthracene	(b)	<0.0097	<0.095	<0.094	<0.11	<0.094	<0.10
Benzo (a) pyrene	0.1	0.019	<0.095	<0.094	<0.11	<0.094	<0.10
Benzo (b) fluoranthene	(b)	0.017	<0.095	<0.094	<0.11	<0.094	<0.10
Benzo (g,h,i) perylene	NE	0.013	<0.095	<0.094	<0.11	<0.094	<0.10
Benzo (k) fluoranthene	(b)	<0.0097	<0.095	<0.094	<0.11	<0.094	<0.10
Chrysene	(b)	0.011	<0.095	<0.061	<0.11	<0.094	<0.10
Dibenzo (a,h) anthracene	(b)	<0.0097	<0.095	<0.094	<0.11	<0.094	<0.10
Fluoranthene	NE	0.013	<0.095	<0.061	<0.11	<0.094	<0.10
Fluorene	NE	<0.0097	<0.095	<0.094	<0.11	<0.094	<0.10
Indeno (1,2,3-cd) pyrene	(b)	0.011	<0.095	<0.094	<0.11	<0.094	<0.10
Phenanthrene	NE	<0.0097	<0.095	<0.094	<0.11	<0.094	<0.10
Pyrene	NE	0.017	<0.095	<0.061	<0.11	<0.094	<0.10
<i>cPAH B(a)P Equivalents</i>	0.1	<i>0.0234</i>	<i>0.0717</i>	<i>0.0708</i>	<i>0.0831</i>	<i>0.0710</i>	<i>0.0755</i>

Notes

Volatile Organic Compounds analyzed by USEPA Method 8260
Total petroleum hydrocarbons-gasoline range organics analyzed by Northwest Method NWTPH-Gx
Total petroleum hydrocarbons-diesel and residual/heavy oil range organics analyzed by Northwest Method NWTPH-Dx
Total and dissolved lead analyzed by USEPA Method 6010
c-Polyaromatic hydrocarbons analyzed by USEPA Method 8270
Concentrations compared to the Model Toxics Control Act (MTCA) Method A groundwater cleanup levels presented in Table 720-1 of Chapter 173-340 of the Washington Administrative Code (WAC)
The MTCA cleanup level for gasoline range total petroleum hydrocarbons is 1000-µg/kg without benzene and 800-µg/kg with benzene present.
Benzene was observed in groundwater collected from sample ID-4 in 2001, thus the cleanup level of 800-µg/kg was utilized.
µg/L = micrograms per liter
NE = Cleanup level not established under MTCA
cPAH = Carcinogenic polyaromatic hydrocarbons
B(a)P = Benzo(a)pyrene
< = Chemical not detected above the laboratory reporting limit
Bold = Chemical detected at a concentration above the laboratory reporting limit
Italics = Value calculated for comparison to MTCA cleanup level
(a) = See MTCA cleanup level for naphthalenes. This is a total value for naphthalene, 1-methylnaphthalene and 2-methylnaphthalene
(b) = See MTCA cleanup level for B(a)P. Total concentration of cPAHs calculated using the toxicity equivalency method in WAC 173-340-708(8)
[^] = ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, DLCK, or MRL standard: Instrument related QC exceeds the control limits

TABLE 2
SELECT GROUNDWATER ANALYTICAL RESULTS - OCTOBER 2010 TO SEPTEMBER 2011
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTCA Method A Groundwater Cleanup Levels	MW-7					
		Date Collected					
		10/1/2010	12/29/2010	3/17/2011	6/11/2011	9/22/2011	12/22/2011
Volatile Organic Compounds	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Benzene	5	<1.0	<0.20	<1.0	<0.20	<0.20	<0.20
Toluene	1,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	700	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	1,000	<2.0	<3.0	<2.0	<3.0	<3.0	<3.0
Total Petroleum Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Gasoline Range Organics	800	<50	<50.0	<50	<50.0	<50.0	<50.0
Diesel Range Organics	500	150Y	<77	<120	<87	<75	<75
Residual Range/Heavy Oil Organics	500	<250	<380	<240 [^]	<430	<380	<380
Metals	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Lead (Total)	15	<2.0 [^]	<10.0	<2.0	<10.0	<10.0	<10.0
Lead (Dissolved)	NE	<2.0 [^]	<10.0	<2.0	<10.0	<10.0	<10.0
c-Polyaromatic Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Naphthalene	(a)	0.086	<0.096	<0.47	<0.11	<0.094	<0.094
1-Methylnaphthalene	(a)	0.23	<0.096	<0.14	<0.11	0.16	0.11
2-Methylnaphthalene	(a)	0.16	<0.096	<0.094	<0.11	0.13	<0.094
<i>Naphthalenes</i>	160	<i>0.48</i>	<i>0.144</i>	<i>0.352</i>	<i>0.165</i>	<i>0.337</i>	<i>0.204</i>
Acenaphthene	NE	0.051	<0.096	<0.094	<0.11	<0.094	<0.094
Acenaphthylene	NE	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.094
Anthracene	NE	0.011	<0.096	<0.047	<0.11	<0.094	<0.094
Benzo (a) anthracene	(b)	0.017	<0.096	<0.094	<0.11	<0.094	<0.094
Benzo (a) pyrene	0.1	0.019	<0.096	<0.094	<0.11	<0.094	<0.094
Benzo (b) fluoranthene	(b)	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.094
Benzo (g,h,i) perylene	NE	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.094
Benzo (k) fluoranthene	(b)	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.094
Chrysene	(b)	<0.0097	<0.096	<0.061	<0.11	<0.094	<0.094
Dibenzo (a,h) anthracene	(b)	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.094
Fluoranthene	NE	0.010	<0.096	<0.061	<0.11	<0.094	<0.094
Fluorene	NE	0.063	<0.096	<0.094	<0.11	<0.094	<0.094
Indeno (1,2,3-cd) pyrene	(b)	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.094
Phenanthrene	NE	0.048	<0.096	<0.094	<0.11	<0.094	<0.094
Pyrene	NE	<0.0097	<0.096	<0.061	<0.11	<0.094	<0.094
<i>cPAH B(a)P Equivalents</i>	0.1	<i>0.0132</i>	<i>0.0725</i>	<i>0.0708</i>	<i>0.0831</i>	<i>0.0710</i>	<i>0.0710</i>

Notes

Volatile Organic Compounds analyzed by USEPA Method 8260
Total petroleum hydrocarbons-gasoline range organics analyzed by Northwest Method NWTPH-Gx
Total petroleum hydrocarbons-diesel and residual/heavy oil range organics analyzed by Northwest Method NWTPH-Dx
Total and dissolved lead analyzed by USEPA Method 6010
c-Polyaromatic hydrocarbons analyzed by USEPA Method 8270
Concentrations compared to the Model Toxics Control Act (MTCA) Method A groundwater cleanup levels presented in Table 720-1 of Chapter 173-340 of the Washington Administrative Code (WAC)
The MTCA cleanup level for gasoline range total petroleum hydrocarbons is 1000-µg/kg without benzene and 800-µg/kg with benzene present.
Benzene was observed in groundwater collected from sample ID-4 in 2001, thus the cleanup level of 800-µg/kg was utilized.
µg/L = micrograms per liter
NE = Cleanup level not established under MTCA
cPAH = Carcinogenic polyaromatic hydrocarbons
B(a)P = Benzo(a)pyrene
< = Chemical not detected above the laboratory reporting limit
Bold = Chemical detected at a concentration above the laboratory reporting limit
Italics = Value calculated for comparison to MTCA cleanup level
(a) = See MTCA cleanup level for naphthalenes. This is a total value for naphthalene, 1-methylnaphthalene and 2-methylnaphthalene
(b) = See MTCA cleanup level for B(a)P. Total concentration of cPAHs calculated using the toxicity equivalency method in WAC 173-340-708(8)
[^] = ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, DLCK, or MRL standard: Instrument related QC exceeds the control limits

TABLE 2
SELECT GROUNDWATER ANALYTICAL RESULTS - OCTOBER 2010 TO SEPTEMBER 2011
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTCA Method A Groundwater Cleanup Levels	MW-8					
		Date Collected					
		10/1/2010	12/29/2010	3/17/2011	6/11/2011	9/22/2011	12/22/2011
Volatile Organic Compounds	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Benzene	5	<1.0	0.21	<1.0	0.26	0.35	0.23
Toluene	1,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	700	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	1,000	<2.0	<3.0	<2.0	<3.0	<3.0	<3.0
Total Petroleum Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Gasoline Range Hydrocarbons	800	<50	<50.0	<50	<50.0	<50.0	<50.0
Diesel Range Organics	500	200Y	<77	<120	<83	<75	<87
Residual Range/Heavy Oil Organics	500	<240	<380	<240 [^]	<420	<380	<430
Metals	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Lead (Total)	15	<2.0 [^]	<10.0	<2.0	<10.0	<10.0	<10.0
Lead (Dissolved)	NE	<2.0 [^]	<10.0	<2.0	<10.0	<10.0	<10.0
c-Polyaromatic Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Naphthalene	(a)	0.085	<0.096	<0.47	<0.096	0.12	<0.11
1-Methylnaphthalene	(a)	0.11	<0.096	<0.14	<0.096	0.13	<0.11
2-Methylnaphthalene	(a)	0.038	<0.096	<0.094	<0.096	<0.094	<0.11
<i>Naphthalenes</i>	160	<i>0.23</i>	<i>0.144</i>	<i>0.352</i>	<i>0.144</i>	<i>0.297</i>	<i>0.165</i>
Acenaphthene	NE	0.033	<0.096	<0.094	<0.096	<0.094	<0.11
Acenaphthylene	NE	<0.0097	<0.096	<0.094	<0.096	<0.094	<0.11
Anthracene	NE	0.018	<0.096	<0.047	<0.096	<0.094	<0.11
Benzo (a) anthracene	(b)	<0.0097	<0.096	<0.094	<0.096	<0.094	<0.11
Benzo (a) pyrene	0.1	<0.019	<0.096	<0.094	<0.096	<0.094	<0.11
Benzo (b) fluoranthene	(b)	<0.0097	<0.096	<0.094	<0.096	<0.094	<0.11
Benzo (g,h,i) perylene	NE	<0.0097	<0.096	<0.094	<0.096	<0.094	<0.11
Benzo (k) fluoranthene	(b)	<0.0097	<0.096	<0.094	<0.096	<0.094	<0.11
Chrysene	(b)	0.053	<0.096	<0.061	<0.096	<0.094	<0.11
Dibenzo (a,h) anthracene	(b)	<0.0097	<0.096	<0.094	<0.096	<0.094	<0.11
Fluoranthene	NE	0.011	<0.096	<0.061	<0.096	<0.094	<0.11
Fluorene	NE	0.029	<0.096	<0.094	<0.096	<0.094	<0.11
Indeno (1,2,3-cd) pyrene	(b)	<0.0097	<0.096	<0.094	<0.096	<0.094	<0.11
Phenanthrene	NE	0.028	<0.096	<0.094	<0.096	<0.094	<0.11
Pyrene	NE	0.010	<0.096	<0.061	<0.096	<0.094	<0.11
<i>cPAH B(a)P Equivalents</i>	0.1	<i>0.0125</i>	<i>0.0725</i>	<i>0.0708</i>	<i>0.0725</i>	<i>0.0710</i>	<i>0.0831</i>

Notes

Volatile Organic Compounds analyzed by USEPA Method 8260
Total petroleum hydrocarbons-gasoline range organics analyzed by Northwest Method NWTPH-Gx
Total petroleum hydrocarbons-diesel and residual/heavy oil range organics analyzed by Northwest Method NWTPH-Dx
Total and dissolved lead analyzed by USEPA Method 6010
c-Polyaromatic hydrocarbons analyzed by USEPA Method 8270
Concentrations compared to the Model Toxics Control Act (MTCA) Method A groundwater cleanup levels presented in Table 720-1 of Chapter 173-340 of the Washington Administrative Code (WAC)
The MTCA cleanup level for gasoline range total petroleum hydrocarbons is 1000-µg/kg without benzene and 800-µg/kg with benzene present.
Benzene was observed in groundwater collected from sample ID-4 in 2001, thus the cleanup level of 800-µg/kg was utilized.
µg/L = micrograms per liter
NE = Cleanup level not established under MTCA
cPAH = Carcinogenic polyaromatic hydrocarbons
B(a)P = Benzo(a)pyrene
< = Chemical not detected above the laboratory reporting limit
Bold = Chemical detected at a concentration above the laboratory reporting limit
Italics = Value calculated for comparison to MTCA cleanup level
(a) = See MTCA cleanup level for naphthalenes. This is a total value for naphthalene, 1-methylnaphthalene and 2-methylnaphthalene
(b) = See MTCA cleanup level for B(a)P. Total concentration of cPAHs calculated using the toxicity equivalency method in WAC 173-340-708(8)
[^] = ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, DLCK, or MRL standard: Instrument related QC exceeds the control limits

TABLE 2
SELECT GROUNDWATER ANALYTICAL RESULTS - OCTOBER 2010 TO SEPTEMBER 2011
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTCA Method A Groundwater Cleanup Levels	MW-9					
		Date Collected					
		10/1/2010	12/29/2010	3/17/2002	6/11/2011	9/22/2011	12/22/2011
Volatile Organic Compounds	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Benzene	5	<1.0	0.21	<1.0	<0.20	0.37	0.3
Toluene	1,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	700	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	1,000	<2.0	<3.0	<2.0	<3.0	<3.0	<3.0
Total Petroleum Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Gasoline Range Hydrocarbons	800	110	56.5	<50	84.4	241	222
Diesel Range Organics	500	160Y	<76	<120	<88	<75	<76
Residual Range/Heavy Oil Organics	500	<250	<380	<240^	<440	<380	<380
Metals	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Lead (Total)	15	<2.0^	<10.0	<2.0	<10.0	<10.0	<10.0
Lead (Dissolved)	NE	<2.0^	<10.0	<2.0	<10.0	<10.0	<10.0
c-Polyaromatic Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Naphthalene	(a)	0.400	0.59	<1.9	0.36	<0.094	2.6
1-Methylnaphthalene	(a)	0.019	<0.095	<0.38	<0.11	<0.094	0.17
2-Methylnaphthalene	(a)	0.013	<0.095	<0.94	<0.11	<0.094	<0.094
<i>Naphthalenes</i>	160	<i>0.43</i>	<i>0.390</i>	<i>0.352</i>	<i>0.470</i>	<i>0.141</i>	<i>2.817</i>
Acenaphthene	NE	<0.0094	<0.095	<0.094	<0.11	<0.094	<0.094
Acenaphthylene	NE	<0.0094	<0.095	<0.094	<0.11	<0.094	<0.094
Anthracene	NE	<0.0094	<0.095	<0.047	<0.11	<0.094	<0.094
Benzo (a) anthracene	(b)	<0.0094	<0.095	<0.094	<0.11	<0.094	<0.094
Benzo (a) pyrene	0.1	<0.019	<0.095	<0.094	<0.11	<0.094	<0.094
Benzo (b) fluoranthene	(b)	<0.0094	<0.095	<0.094	<0.11	<0.094	<0.094
Benzo (g,h,i) perylene	NE	<0.0094	<0.095	<0.094	<0.11	<0.094	<0.094
Benzo (k) fluoranthene	(b)	<0.0094	<0.095	<0.094	<0.11	<0.094	<0.094
Chrysene	(b)	<0.0094	<0.095	<0.061	<0.11	<0.094	<0.094
Dibenzo (a,h) anthracene	(b)	<0.0094	<0.095	<0.094	<0.11	<0.094	<0.094
Fluoranthene	NE	<0.0094	<0.095	<0.061	<0.11	<0.094	<0.094
Fluorene	NE	<0.0094	<0.095	<0.094	<0.11	<0.094	<0.094
Indeno (1,2,3-cd) pyrene	(b)	<0.0094	<0.095	<0.094	<0.11	<0.094	<0.094
Phenanthrene	NE	0.011	<0.095	<0.094	<0.11	<0.094	<0.094
Pyrene	NE	<0.0094	<0.095	<0.061	<0.11	<0.094	<0.094
<i>cPAH B(a)P Equivalents</i>	0.1	<i>0.0119</i>	<i>0.0717</i>	<i>0.0708</i>	<i>0.0831</i>	<i>0.0710</i>	<i>0.0710</i>

Notes

Volatile Organic Compounds analyzed by USEPA Method 8260
Total petroleum hydrocarbons-gasoline range organics analyzed by Northwest Method NWTPH-Gx
Total petroleum hydrocarbons-diesel and residual/heavy oil range organics analyzed by Northwest Method NWTPH-Dx
Total and dissolved lead analyzed by USEPA Method 6010
c-Polyaromatic hydrocarbons analyzed by USEPA Method 8270
Concentrations compared to the Model Toxics Control Act (MTCA) Method A groundwater cleanup levels presented in Table 720-1 of Chapter 173-340 of the Washington Administrative Code (WAC)
The MTCA cleanup level for gasoline range total petroleum hydrocarbons is 1000-µg/kg without benzene and 800-µg/kg with benzene present.
Benzene was observed in groundwater collected from sample ID-4 in 2001, thus the cleanup level of 800-µg/kg was utilized.
µg/L = micrograms per liter
NE = Cleanup level not established under MTCA
cPAH = Carcinogenic polyaromatic hydrocarbons
B(a)P = Benzo(a)pyrene
< = Chemical not detected above the laboratory reporting limit
Bold = Chemical detected at a concentration above the laboratory reporting limit
Italics = Value calculated for comparison to MTCA cleanup level
(a) = See MTCA cleanup level for naphthalenes. This is a total value for naphthalene, 1-methylnaphthalene and 2-methylnaphthalene
(b) = See MTCA cleanup level for B(a)P. Total concentration of cPAHs calculated using the toxicity equivalency method in WAC 173-340-708(8)
^ = ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, DLCK, or MRL standard: Instrument related QC exceeds the control limits

TABLE 2
SELECT GROUNDWATER ANALYTICAL RESULTS - OCTOBER 2010 TO SEPTEMBER 2011
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTCA Method A Groundwater Cleanup Levels	MW-10					
		Date Collected					
		10/1/2010	12/29/2010	3/17/2011	6/11/2011	9/22/2011	12/22/2011
Volatile Organic Compounds	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Benzene	5	<1.0	<0.20	<1.0	<0.20	<0.20	<0.20
Toluene	1,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	700	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	1,000	<2.0	<3.0	<2.0	<3.0	<3.0	<3.0
Total Petroleum Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Gasoline Range Hydrocarbons	800	<50	<50.0	<50	<50.0	<50.0	<50.0
Diesel Range Organics	500	<120	<77	<120	<86	<75	<75
Residual Range/Heavy Oil Organics	500	<240	<380	<240 [^]	<430	<380	<380
Metals	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Lead (Total)	15	<2.0 [^]	<10.0	<2.0	<10.0	<10.0	<10.0
Lead (Dissolved)	NE	<2.0 [^]	<10.0	<2.0	<10.0	<10.0	<10.0
c-Polyaromatic Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Naphthalene	(a)	<0.0094	<0.096	<0.47	<0.11	<0.094	<0.095
1-Methylnaphthalene	(a)	<0.0094	<0.096	<0.14	<0.11	<0.094	<0.095
2-Methylnaphthalene	(a)	<0.012	<0.096	<0.094	<0.11	<0.094	<0.095
<i>Naphthalenes</i>	160	<i>0.015</i>	<i>0.144</i>	<i>0.352</i>	<i>0.165</i>	<i>0.141</i>	<i>0.143</i>
Acenaphthene	NE	<0.0094	<0.096	<0.47	<0.11	<0.094	<0.095
Acenaphthylene	NE	<0.0094	<0.096	<0.38	<0.11	<0.094	<0.095
Anthracene	NE	<0.0094	<0.096	<0.19	<0.11	<0.094	<0.095
Benzo (a) anthracene	(b)	<0.0094	<0.096	<0.28	<0.11	<0.094	<0.095
Benzo (a) pyrene	0.1	<0.019	<0.096	<0.19	<0.11	<0.094	<0.095
Benzo (b) fluoranthene	(b)	<0.0094	<0.096	<0.38	<0.11	<0.094	<0.095
Benzo (g,h,i) perylene	NE	<0.0094	<0.096	<0.28	<0.11	<0.094	<0.095
Benzo (k) fluoranthene	(b)	<0.0094	<0.096	<0.28	<0.11	<0.094	<0.095
Chrysene	(b)	<0.0094	<0.096	<0.19	<0.11	<0.094	<0.095
Dibenzo (a,h) anthracene	(b)	<0.0094	<0.096	<0.28	<0.11	<0.094	<0.095
Fluoranthene	NE	<0.0094	<0.096	<0.24	<0.11	<0.094	<0.095
Fluorene	NE	<0.0094	<0.096	<0.28	<0.11	<0.094	<0.095
Indeno (1,2,3-cd) pyrene	(b)	<0.0094	<0.096	<0.28	<0.11	<0.094	<0.095
Phenanthrene	NE	<0.0094	<0.096	<0.38	<0.11	<0.094	<0.095
Pyrene	NE	<0.0094	<0.096	<0.28	<0.11	<0.094	<0.095
<i>cPAH B(a)P Equivalent</i> s	0.1	<i>0.0119</i>	<i>0.0725</i>	<i>0.0708</i>	<i>0.0831</i>	<i>0.0710</i>	<i>0.0717</i>

Notes

Volatile Organic Compounds analyzed by USEPA Method 8260
Total petroleum hydrocarbons-gasoline range organics analyzed by Northwest Method NWTPH-Gx
Total petroleum hydrocarbons-diesel and residual/heavy oil range organics analyzed by Northwest Method NWTPH-Dx
Total and dissolved lead analyzed by USEPA Method 6010
c-Polyaromatic hydrocarbons analyzed by USEPA Method 8270
Concentrations compared to the Model Toxics Control Act (MTCA) Method A groundwater cleanup levels presented in Table 720-1 of Chapter 173-340 of the Washington Administrative Code (WAC)
The MTCA cleanup level for gasoline range total petroleum hydrocarbons is 1000-µg/kg without benzene and 800-µg/kg with benzene present.
Benzene was observed in groundwater collected from sample ID-4 in 2001, thus the cleanup level of 800-µg/kg was utilized.
µg/L = micrograms per liter
NE = Cleanup level not established under MTCA
cPAH = Carcinogenic polyaromatic hydrocarbons
B(a)P = Benzo(a)pyrene
< = Chemical not detected above the laboratory reporting limit
Bold = Chemical detected at a concentration above the laboratory reporting limit
Italics = Value calculated for comparison to MTCA cleanup level
(a) = See MTCA cleanup level for naphthalenes. This is a total value for naphthalene, 1-methylnaphthalene and 2-methylnaphthalene
(b) = See MTCA cleanup level for B(a)P. Total concentration of cPAHs calculated using the toxicity equivalency method in WAC 173-340-708(8)
[^] = ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, DLCK, or MRL standard: Instrument related QC exceeds the control limits

TABLE 2
SELECT GROUNDWATER ANALYTICAL RESULTS - OCTOBER 2010 TO SEPTEMBER 2011
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTCA Method A Groundwater Cleanup Levels	MW-11					
		Date Collected					
		10/1/2010	12/30/2010	3/17/2011	6/11/2011	9/22/2011	12/22/2011
Volatile Organic Compounds	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Benzene	5	<1.0	<0.20	<1.0	<0.20	<0.20	<0.20
Toluene	1,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	700	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	1,000	<2.0	<3.0	<2.0	<3.0	<3.0	<3.0
Total Petroleum Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Gasoline Range Hydrocarbons	800	<50	<50.0	<50	<50.0	<50.0	<50.0
Diesel Range Organics	500	<120	110	<120	<84	<75	<86
Residual Range/Heavy Oil Organics	500	<240	<380	<240 [^]	<420	<380	<430
Metals	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Lead (Total)	15	<2.0 [^]	<10.0	<2.0	<10.0	<10.0	<10.0
Lead (Dissolved)	NE	<2.0 [^]	<10.0	<2.0	<10.0	<10.0	<10.0
c-Polyaromatic Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Naphthalene	(a)	0.012	<0.095	<0.47	<0.11	<0.094	<0.11
1-Methylnaphthalene	(a)	<0.0098	<0.095	<0.14	<0.11	<0.094	<0.11
2-Methylnaphthalene	(a)	<0.013	<0.095	<0.094	<0.11	<0.094	<0.11
<i>Naphthalenes</i>	160	<i>0.023</i>	<i>0.143</i>	<i>0.352</i>	<i>0.165</i>	<i>0.141</i>	<i>0.165</i>
Acenaphthene	NE	<0.0098	<0.095	<0.094	<0.11	<0.094	<0.11
Acenaphthylene	NE	<0.0098	<0.095	<0.094	<0.11	<0.094	<0.11
Anthracene	NE	<0.0098	<0.095	<0.047	<0.11	<0.094	<0.11
Benzo (a) anthracene	(b)	<0.0098	<0.095	<0.094	<0.11	<0.094	<0.11
Benzo (a) pyrene	0.1	<0.020	<0.095	<0.094	<0.11	<0.094	<0.11
Benzo (b) fluoranthene	(b)	<0.0098	<0.095	<0.094	<0.11	<0.094	<0.11
Benzo (g,h,i) perylene	NE	<0.0098	<0.095	<0.094	<0.11	<0.094	<0.11
Benzo (k) fluoranthene	(b)	<0.0098	<0.095	<0.094	<0.11	<0.094	<0.11
Chrysene	(b)	<0.0098	<0.095	<0.061	<0.11	<0.094	<0.11
Dibenzo (a,h) anthracene	(b)	<0.0098	<0.095	<0.094	<0.11	<0.094	<0.11
Fluoranthene	NE	<0.0098	<0.095	<0.061	<0.11	<0.094	<0.11
Fluorene	NE	<0.0098	<0.095	<0.094	<0.11	<0.094	<0.11
Indeno (1,2,3-cd) pyrene	(b)	<0.0098	<0.095	<0.094	<0.11	<0.094	<0.11
Phenanthrene	NE	<0.0098	<0.095	<0.094	<0.11	<0.094	<0.11
Pyrene	NE	<0.0098	<0.095	<0.061	<0.11	<0.094	<0.11
<i>cPAH B(a)P Equivalent</i> s	0.1	<i>0.0125</i>	<i>0.0717</i>	<i>0.0708</i>	<i>0.0831</i>	<i>0.0710</i>	<i>0.0831</i>

Notes

Volatile Organic Compounds analyzed by USEPA Method 8260
Total petroleum hydrocarbons-gasoline range organics analyzed by Northwest Method NWTPH-Gx
Total petroleum hydrocarbons-diesel and residual/heavy oil range organics analyzed by Northwest Method NWTPH-Dx
Total and dissolved lead analyzed by USEPA Method 6010
c-Polyaromatic hydrocarbons analyzed by USEPA Method 8270
Concentrations compared to the Model Toxics Control Act (MTCA) Method A groundwater cleanup levels presented in Table 720-1 of Chapter 173-340 of the Washington Administrative Code (WAC)
The MTCA cleanup level for gasoline range total petroleum hydrocarbons is 1000-µg/kg without benzene and 800-µg/kg with benzene present.
Benzene was observed in groundwater collected from sample ID-4 in 2001, thus the cleanup level of 800-µg/kg was utilized.
µg/L = micrograms per liter
NE = Cleanup level not established under MTCA
cPAH = Carcinogenic polyaromatic hydrocarbons
B(a)P = Benzo(a)pyrene
< = Chemical not detected above the laboratory reporting limit
Bold = Chemical detected at a concentration above the laboratory reporting limit
Italics = Value calculated for comparison to MTCA cleanup level
(a) = See MTCA cleanup level for naphthalenes. This is a total value for naphthalene, 1-methylnaphthalene and 2-methylnaphthalene
(b) = See MTCA cleanup level for B(a)P. Total concentration of cPAHs calculated using the toxicity equivalency method in WAC 173-340-708(8)
[^] = ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, DLCK, or MRL standard: Instrument related QC exceeds the control limits

TABLE 2
SELECT GROUNDWATER ANALYTICAL RESULTS - OCTOBER 2010 TO SEPTEMBER 2011
SEPA CHECKLIST
Former Industrial Petroleum Distributors Bulk Terminal
1120 West Bay Drive
Olympia, Washington

Analysis	MTCA Method A Groundwater Cleanup Levels	MW-12					
		Date Collected					
		10/1/2010	12/30/2011	3/17/2011	6/11/2011	9/22/2011	12/22/2011
Volatile Organic Compounds	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Benzene	5	<1.0	<0.20	<1.0	<0.20	<0.20	<0.20
Toluene	1,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	700	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	1,000	<2.0	<3.0	<2.0	<3.0	<3.0	<3.0
Total Petroleum Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Gasoline Range Hydrocarbons	800	<50	<50.0	<50	<50.0	<50.0	<50.0
Diesel Range Organics	500	<120	89	<120	<82	<75	<85
Residual Range/Heavy Oil Organics	500	<240	<380	<240 [^]	<410	<380	<430
Metals	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Lead (Total)	15	<2.0 [^]	<10.0	<2.0	<10.0	<10.0	<10.0
Lead (Dissolved)	NE	<2.0 [^]	<10.0	<2.0	<10.0	<10.0	<10.0
c-Polyaromatic Hydrocarbons	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Naphthalene	(a)	0.019	<0.096	<0.47	<0.11	<0.094	<0.11
1-Methylnaphthalene	(a)	<0.0097	<0.096	<0.14	<0.11	<0.094	<0.11
2-Methylnaphthalene	(a)	<0.013	<0.096	<0.094	<0.11	<0.094	<0.11
<i>Naphthalenes</i>	160	0.031	0.144	0.352	0.165	0.141	0.165
Acenaphthene	NE	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.11
Acenaphthylene	NE	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.11
Anthracene	NE	<0.0097	<0.096	<0.047	<0.11	<0.094	<0.11
Benzo (a) anthracene	(b)	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.11
Benzo (a) pyrene	0.1	<0.019	<0.096	<0.094	<0.11	<0.094	<0.11
Benzo (b) fluoranthene	(b)	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.11
Benzo (g,h,i) perylene	NE	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.11
Benzo (k) fluoranthene	(b)	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.11
Chrysene	(b)	<0.0097	<0.096	<0.061	<0.11	<0.094	<0.11
Dibenzo (a,h) anthracene	(b)	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.11
Fluoranthene	NE	<0.0097	<0.096	<0.061	<0.11	<0.094	<0.11
Fluorene	NE	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.11
Indeno (1,2,3-cd) pyrene	(b)	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.11
Phenanthrene	NE	<0.0097	<0.096	<0.094	<0.11	<0.094	<0.11
Pyrene	NE	<0.0097	<0.096	<0.061	<0.11	<0.094	<0.11
<i>cPAH B(a)P Equivalents</i>	0.1	0.0120	0.0725	0.0708	0.0831	0.0710	0.0831

Notes:

Volatile Organic Compounds analyzed by USEPA Method 8260
Total petroleum hydrocarbons-gasoline range organics analyzed by Northwest Method NWTPH-Gx
Total petroleum hydrocarbons-diesel and residual/heavy oil range organics analyzed by Northwest Method NWTPH-Dx
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Benzene was observed in groundwater collected from sample ID-4 in 2001, thus the cleanup level of 800-µg/kg was utilized.
µg/L = micrograms per liter
NE = Cleanup level not established under MTCA
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(b) = See MTCA cleanup level for B(a)P. Total concentration of cPAHs calculated using the toxicity equivalency method in WAC 173-340-708(8)
[^] = ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, DLCK, or MRL standard: Instrument related QC exceeds the control limits