ARCADIS

Appendix H

SEPA Environmental Checklist

WAC 197-11-970 Determination of nonsignificance (DNS).

DETERMINATION OF NONSIGNIFICANCE

Description of proposal: Cleanup actions will be conducted at the Unocal Edmonds Bulk Fuel Terminal Site. This Site is being cleaned up under the authority of the Model Toxics Control Act, Ch 70.105D RCW, and the Model Toxics Control Action Cleanup Regulation, Chapter 173-340 WAC. The proposed cleanup action will excavate petroleum-contaminated soil from one area of the Site and will use Dual-Phase Extraction technology to clean up petroleum in another area adjacent to a storm drain.

Proponent: Chevron Environmental Management Company for Union Oil Company of California (Unocal)

Location of proposal, including street address, if any: 11720 Unoco Road, Edmonds, Washington 98020

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 54 days from the date below. Comments must be submitted by August 31, 2015.

Responsible official: Robert W. Warren

Position/title: Section Manager, Toxics Cleanup Program, Northwest Regional Office Phone: 425-649-7054

Address: Washington State Dept. of Ecology, 3190 160th Avenue SE, Bellevue, Washington 98008

Date. 7/6/15 Signature Louise Bardy for Robert W. Warren

(OPTIONAL)

☐ You may appeal this determination to (name) _____
at (location) _____
no later than (date) _____
by (method) .....

You should be prepared to make specific factual objections.
Contact _____ to read or ask about the procedures for SEPA appeals.

☒ There is no agency appeal.

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 non-project proposals:

For non-project proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NON-PROJECT 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:**

   Interim Action at the Lower Yard of Unocal Edmonds Bulk Fuel Terminal

2. **Name of applicant:**

   Chevron Environmental Management Company (Chevron) for Union Oil Company of California (Unocal)

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

   Ms. Kim Jolitz
   Chevron Environmental Management Company
   6101 Bollinger Canyon Road San Ramon, CA 94583
   Tel (925) 790-3946
   E-mail: kjolitz@chevron.com

4. **Date checklist prepared:**
   May 29, 2015

5. **Agency requesting checklist:**

   Washington State Department of Ecology (Ecology)

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

   The interim action in the Lower Yard of the former bulk fuel terminal will consist of soil excavation, removal of contaminated media (light non-aqueus phase liquid (LNAPL), soil and groundwater) from open excavations, and the installation of a dual phase extraction (DPE) system in the vicinity of a Washington State Department of Transportation storm drain. The remedial implementation is scheduled to begin in Summer 2015.

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

   No. The property is in escrow for sale to the Washington State Department of Transportation (WSDOT).

   The DPE system is to be transferred to WSDOT once the requirements of the purchase and sale agreement (PSA) are met.

   Future property uses are expected to be consistent with those allowed by the current zoning code of MP2, which allows for commercial, multifamily residential (above the ground floor) and multimodal transportation center uses. Washington State Ferries considers this location as a potential site for relocation of the Edmonds Ferry Terminal as

part of the Edmonds Crossing Project. The Federal Transit Administration, the Federal Highways Administration, and the Washington State Department of Transportation completed a National Environmental Policy Act (NEPA) Environmental Impact Statement and a Record of Decision (ROD) for the Edmonds Crossing Project in 2004 to relocate the Edmonds Ferry Terminal to the Unocal Edmonds Lower Yard.

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 regarding this proposal. These reports are available at Ecology's Northwest Regional Office Central Records unless otherwise noted. Reports marked with † are available online at Ecology's Unocal Edmonds web site: https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=5180, click on View Electronic Documents in the sidebar.

- †Ecology, 2014. Review of Proposed Addendum to the Draft Feasibility Study Report, Former Unocal Edmonds Bulk Fuel Terminal, dated August 11, 2014.
- †ARCADIS U.S. Inc., 2014. Draft FS Addendum, Former Unocal Edmonds Bulk Fuel Terminal, 11720 Unoco Road, Edmonds, Washington. August 11, 2014.
- †ARCADIS U.S. Inc., 2014. Draft Feasibility Study Report, Former Unocal Edmonds Bulk Fuel Terminal, 11720 Unoco Road, Edmonds, Washington. January 30, 2014.
- †ARCADIS U.S. Inc., 2013. Cleanup Levels and Remediation Levels Report. Former Unocal Edmonds Bulk Fuel Terminal, 11720 Unoco Road, Edmonds, Washington. September 17, 2013. Available online at Ecology's Unocal Edmonds web site.
- †ARCADIS U.S. Inc., 2013. Final Conceptual Site Model. Former Unocal Edmonds Bulk Fuel Terminal, 11720 Unoco Road, Edmonds, Washington. May 15, 2013.
- ARCADIS U.S. Inc., 2011. Final 2011 Site Investigation Completion Report. Former Unocal Edmonds Bulk Fuel Terminal, 11720 Unoco Road, Edmonds, Washington. May 11, 2011.
- ARCADIS U.S. Inc., 2010. Final Phase II Remedial Implementation As-Built Report. Former Unocal Edmonds Bulk Fuel Terminal, 11720 Unoco Road, Edmonds, Washington. January 18, 2010.
- ARCADIS U.S. Inc., 2009. Final Phase I Remedial Implementation As-Built Report. Former Unocal Edmonds Bulk Fuel Terminal, 11720 Unoco Road, Edmonds, Washington. July 31, 2009.
- CH2MHill, 2004. Final Environmental Impact Statement and Final Section 4(f) Evaluation. November 2004. Table of Contents available online at:

http://www.edmondswa.gov/images/COE/Government/Departments/Community_Services/EdmondsCrossing/EdmondsFEIS_TableofContentsVol12.pdf

- Maul Foster & Alongi, 2003. Supplemental Remedial Investigation Report, Unocal Edmonds Terminal, Edmonds. Washington. April 8, 2003.

- Maul Foster & Alongi, 2001. Remedial Investigation Report, Unocal Edmonds Bulk Fuel Terminal, Edmonds, Washington. June 2001.

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.**

   None known.

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

    Federal:

    - Joint Aquatic Resource Permit Application (JARPA)

    State:

    - Hydraulic Project Approval (HPA)

    - National Pollution Discharge Elimination System (NPDES) Permit

    Local:

    - Puget Sound Clean Air Agency (PSCAA)

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 project Site includes the Upper Yard, the Lower Yard, and the Fish Hatchery. The Lower Yard is where the proposed project will be located and hence is the focus of this SEPA checklist. The Lower Yard includes a total area of 22 acres. The specific objective of this Interim Action is to remediate soil and groundwater in the Lower Yard in two discrete areas with remaining impacts: Detention Basin 2 (DB-2) and the WSDOT stormwater line. This will be achieved by exacavation in the area of DB-2 and installation of a DPE system near a portion of the WSDOT stormwater line.

    1. Excavation in areas of DB-2 will:

- Remove recoverable LNAPL, and

- Remove soil and groundwater with petroleum hydrocarbon impacts above remediation levels (RELs) and clean up levels (CULs).

Prior to the excavation, the stormwater collection system will be rerouted from the nearest catch basin around the proposed excavation area and connected directly into Detention Basin 1 (DB-1). Water will be pumped from the catch basin through above ground hoses/ pipes under a new NPDES permit. Existing piping will be initially capped and then removed during excavation activities. After completion of DB-2 excavation, above grade piping will be installed in DB-1 for discharge through outfall #002, and stormwater catch basins will be permanently routed to discharge to DB-1. This work is anticipated to take one construction season.

2. Installation and operation of a DPE system:

A soil and groundwater treatment system using DPE will be installed to address petroleum hydrocarbon impacts remaining near a portion of the WSDOT SR 104 stormwater line area. DPE is a remedial technology that extracts water and vapor using pumping wells. DPE relies on mass transfer and subsequent extraction to reduce the mass of residual LNAPL in vadose and smear zone soils in the subsurface. The DPE system will remediate petroleum hydrocarbon soil impacts surrounding a portion of the WSDOT stormwater line and act as a groundwater extraction system. DPE system installation will occur in one construction season. The system is anticipated to operate for several years to achieve cleanup.

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 Unocal Edmonds Bulk Fuel Terminal is located at 11720 Unocol Road in Edmonds, Washington (Snohomish County). The Terminal is in Section 23 and the northwest quarter of the northeast quarter of Section 26 in Township 27 North, Range 3 East, Willamette Meridian. The Lower Yard of the Terminal is approximately 22 acres in area. A Site vicinity map and Lower Yard Site map can be found as figures Figures 1-1 and 2-1 of the Interim Action Work Plan (IAWP).

B. Environmental Elements

1. Earth

a. General description of the site (BOLD):

Flat, rolling, hilly, steep slopes, mountainous, other _____

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

The Lower Yard is essentially flat. There are sloped banks along east, northeast, north, and northwest boundaries of the Lower Yard that run down to Willow Creek (up to approximately 35% slope).

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.

The Lower Yard is underlain by fill and alluvium:

Fill. The uppermost unit consists of fill material (Placed in 1929 during Lower Yard Facility development and in 2007/2008 excavations) that occurs throughout the entire Lower Yard, and generally varies in thickness from approximately 1 to 15 feet. The 1929 Backfill consists of silty sands with gravel and sandy silts with gravel. The 2007-2008 interim action excavations were backfilled to 6 to 12 inches above the observed groundwater table in the open excavations with poorly graded coarse gravels (⅜ to 1 inch) and little to no fines. Backfill material above the coarse gravel to ground surface was a mixture of very fine to medium sand, trace silt, and fine to medium gravel materials.

Alluvium. Native soil underlies the fill throughout the Lower Yard. The native soil is present from the base of the fill to the maximum explored depth of 41.8 feet bgs. Native soil consists of Marsh Deposits, Beach Deposits, and Whidbey formation. *Marsh Deposits* are found in many areas of the Lower Yard, beneath the 1929 fill unit. This layer is interpreted to be representative of the former marsh horizon beneath the Lower Yard. *Beach Deposits* are found below the 1929 fill unit and marsh deposits, a poorly graded sand formation of very fine to medium sand with fine gravel containing organic material such as driftwood and seashells. *Whidbey Formation* is a poorly graded sand layer consisting of very fine to medium sand with fine gravel and is distinct from the overlying materials in the Lower Yard. It is present to the maximum depth explored by Unocal (41.8 feet bgs).

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

There are no unstable soils in the vicinity of planned excavation and DPE system.

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.

Excavation to remove petroleum hydrocarbon-impacted soil will typically extend to a depth of approximately 10-12 feet bgs. The excavation area was delineated in the 2011 soil assessment (ARCADIS U.S. Inc., 2011) and includes impacted soil in the vicinity of DB-2 and an adjacent monitoring well MW-510. The excavation boundary is limited to the following areas with a total area estimated as 0.696 acres.

- To the northwest by the berm separating DB-2 from Willow Creek and extending approximately 200 feet to the southeast to the point where clean soil was observed during the 2011 soil assessment.

- To the northeast by the berm separating DB-1 and DB-2 and extending approximately 100 feet to the southwest to the edge of previous excavation work.

To safely remove petroleum hydrocarbon impacted soil in vicinity of DB-2 and to allow adequate room to maintain excavation sidewall stability, a temporary earthen berm will be offset from the existing DB-1/DB-2 berm as shown on Figure 8-1 in the IAWP. Water will be removed from the northeast portion of DB-1 and the proposed area of excavation.

The total estimated amount of excavated contaminated soil is expected to be approximately 6,900 cubic yards. These areas will be backfilled to match the original grade. Excavated soil that contains Total Petroleum Hydrocarbon (TPH) concentrations greater than the MTCA Method A cleanup level will be hauled off-Site for treatment and/or disposal. Future imported fill is anticipated to be obtained from an Ecology approved supplier, and will be certified as clean. The planned areas of soil excavation are shown on the Figure 8-1 in the IWAP.

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

Potential erosion could occur during excavation if the work is conducted during rainy periods. Erosion will be controlled per an erosion control and sedimentation control plan.

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

No impervious surface will be added as part of the interim action.

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

Prepare and implement an erosion control and sedimentation plan. Measures will include use of filter fabric fences, straw bales barriers, and storm drain inlet protection.

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.**

During the excavation activities, dust, truck emissions, and petroleum hydrocarbon odors could be emitted to the air. There would be no anticipated emissions after excavation activities are completed. A PSCAA permit would be obtained prior to discharging any air emissions from the DPE system.

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 will be controlled by water spray. No visible dust will be allowed.

The proposed DPE system will be equipped with a catalytic oxidizer (CATOX) for vapor treatment and to reduce air emissions prior to discharge to atmosphere. Sampling will be done as specified in a Puget Sound Clean Air Agency permit to document compliance with permit requirements.

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.**

Willow Creek runs along the east, northeast, north, and northwest boundaries of the Lower Yard, and discharges into the Puget Sound. Edmonds Marsh is located to the northeast of the Lower Yard, and is connected to Willow Creek. Willow Creek runs in a man-made drainage ditch and an underground piped culvert between Edmonds Marsh and Puget Sound.

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.**

The berm separating DB-2 from Willow Creek will be excavated. To protect Willow Creek, two coffer dams will be placed in Willow Creek approximately 200 feet apart along the northwest excavation boundary. Water from Willow Creek will be diverted

around the coffer dams using pumps. Following excavation, the coffer dams will be removed and Willow Creek will be restored to its original stream bed.

Impacted soil in the area of DB-2 will be excavated and recoverable LNAPL will be removed using vacuum dewatering trucks. Waste material will be direct loaded into truck and trailers for off-Site disposal, or stockpiled in a central location for loading into truck and trailers for transportation to an appropriate waste disposal facility. Following completion of the DB-2 excavation, the temporary berm will be removed and DB-1 will be returned to its original boundary. As part of Site restoration, DB-2 will be removed from the Site. The proposed excavation boundaries, including the temporary berm location, are shown on Figure 8-1 of the IAWP.

Excavation to remove petroleum hydrocarbon-impacted soil will be conducted within 200 feet of Willow Creek. The planned excavation area is shown on Figure 8-1 of the IAWP. The extracted groundwater from the excavation in DB-2 will be pumped into an on-Site groundwater treatment system prior to discharge to Willow Creek for subsequent discharge pursuant to the conditions of an NPDES Individual Stormwater Permit.

After petroleum product and groundwater removal, the excavations will be backfilled with clean imported material and the excavated soil that contains petroleum hydrocarbon concentrations below the remediation levels for TPH and benzene and the CUL for total carcinogenic polyaromatic hydrocarbons (cPAHs). The excavated soil will only be used as backfill material at depths above the high seasonal groundwater table.

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.**

Certified clean fill material (source to be determined) will be placed along both (northeast and northwest) ends of the excavation border within Willow Creek to install two temporary coffer dams. Each coffer dam will be composed of 188 cubic yards (CY) of fill material (376 CY total) and will be removed after excavation. Clean fill will also be placed in a temporary berm separating the northern portion of DB-1 to allow for dewatering and excavation of DB-2. The berm will be approximately 450 cubic yards and will be removed following excavation.

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

To minimize the volume of water to be diverted around the remediation area, DB-2 Excavation work will be conducted during a dry period of the year (Summer), when less strormater is expected. Furthermore, coffer dams will be installed at low tide. Prior to conducting the work, coffer dams will be installed at the southwest (downstream) and northeast (upstream) ends of the excavation area. The area of the Willow Creek between the coffer dams will be dewatered by pumping the water into an on-Site treatment system prior to discharge to the Willow Creek at a location a location

downstream of the remediation area. The water treatment and subsequent discharge will be pursuant to the conditions of a NPDES Individual Stormwater Permit. The dewatering will be conducted throughout the excavation/backfilling, as necessary. During dewatering, a qualified wildlife biologist will remove any fish and marine organisms from the dammed area. The water in the Willow Creek that collects along the outside of each dam (depending upon the flow direction in the Willow Creek) will be pumped around the remediation area.

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

A small portion of the Site on the eastern boundary (immediate southeast of DB-1 along Willow Creek boundary) lies within 100-year floodplain. See Figure H-1 attached.

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 waste materials will be discharged to surface waters. The groundwater that is extracted from the excavations and the water generated from the DPE system operation will be treated and discharged via DB-1 in accordance with NPDES stormwater permit. The system will be operated and the effluent sampled in accordance with an NPDES permit.

The estimated flow for dewatering the proposed excavation is 15 gallons per minute (gpm) and is based on the volume of water pumped and discharged during the 2007/ 2008 interim action. The estimated flow for the water generated from the DPE system is based on the long-term, average groundwater extraction rate required to lower the water table within the target treatment zone, is estimated at 21 gpm using the MODFLOW model for the Site. The overall system effluent discharge may be higher based on DPE system pilot test results. The system will be designed to treat a maximum discharge rate of 80 gpm.

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.**

No.

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.**

Storm water will be collected within the stormwater collection system that consists of two legs of piping. During excavation, a portion of the existing northwestern stormwater collection line will be removed. A sump pump with float will be installed in the collection drain nearest the excavation boundary on the northwestern line. The pump will connect to above ground hose and discharge through above grade hose to DB-1. Following excavation new piping will connect both storm water lines and extend the outfall of each line to DB-1. The final storm water collection system will consist of 12 catch basins. DB-1 serves as a stormwater collection area from which Lower Yard stormwater is discharged into Willow Creek via Outfall #002 under Industrial Stormwater General Permit No. SO3-002953C. DB-1 forms a depression approximately 6 feet deep and is an unlined pond. Water from DB-1 will be pumped via two submerged pumps and a piping system connecting to outfall #002. Outfall #002 discharges to Willow Creek. After excavation is complete DB-2 will be filled and the stormwater system will drain directly to DB-1.

Willow Creek runs along the east, northeast, north, and northwest boundaries of the Lower Yard. Willow Creek is approximately 10 feet wide and is underlain by silt and sand material. The creek banks on the property boundary are sloped (up to approximately 35%) and vegetated with native and non-native vegetation. Water depths in Willow Creek vary from 0 to 4 feet deep, depending on season and tidal cycles. Willow Creek flows into a tidal basin. The flow is conveyed from the tidal basin to Puget Sound in an underground pipe.

A WSDOT stormwater line runs across the southern portion of the Lower Yard, along lower Unoco Road, and out to Puget Sound (Figure 2-1 of the IAWP).

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

No. The water generated from construction and from the groundwater treatment system will be treated and sampled in accordance with the NPDES permit requirements to confirm that the ground and surface water will not be adversely impacted.

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

Willow Creek will be diverted during excavation of DB-2. Coffer dams will be placed blocking the creek flow at the northern and southern intersections of DB-2 excavation boundary and willow creek. Pumps will divert flow around the coffer dams to maintain the natural flow rates and drainage patterns in the vicinity of the Site. The coffer dams will be removed and the creek restored when the project is completed.

4) **Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:**

The existing stormwater system collects surface-water runoff and conveys collected stormwater directly into DB-2 via gravity flow. DB-2 serves as a stormwater collection area from which Lower Yard stormwater is discharged into Willow Creek via Outfall #002 under Industrial Stormwater General Permit No. SO3-002953C. DB-1 acts as a retention pond for overflow from DB-2 during storm events.

Existing piping used to collect on-Site stormwater intersects the excavation area and discharges into DB-2. Prior to excavation, the stormwater collection system will be rerouted around the proposed excavation area and discharged directly into DB-1 through above ground hoses under the new NPDES permit. Existing piping will be initially capped and then removed during excavation activities. After completion of DB-2 excavation, above grade piping will be installed in DB-1 for discharge through outfall #002. Stormwater catch basins will be permanently routed to DB-1 upon excavation completion.

The proposed excavation will intersect a section of Willow Creek. In order to maintain the natural flow and drainage pattern, above grade piping and pumps will divert water around the coffer dams.

4. Plants

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

- _X_ deciduous tree: alder, maple, aspen, other
- _X_ evergreen tree: fir, cedar, pine, other
- _X_ shrubs
- _X_ grass
- ___ pasture
- ___ crop or grain
- ___ orchards, vineyards or other permanent crops.
- _X_ wet soil plants: cattail, buttercup, bulrush, 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?

Nothing other than routine weed abatement work.

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:

Native species will be planted along the banks of Willow Creek to re-establish a riparian wetland community to restore conditions and increase ecosystem function in Willow Creek.

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

None. Occasionally, gorse (*Ulex Europeus*) growth encountered in the Lower Yard. Gorse is a weed that displaces native plants. Gorse removal activities are conducted at the Site on an as needed basis. The recent most gorse removal activities were conducted in the Lower Yard in December 2014.

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: Historically heron and bald eagles have been observed near the Site.
Mammals: Historically Coyote have been seen at the Site occasionally.
Fish: Pacific salmon, and groundfish have been observed in Willow Creek.

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

None.

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

No.

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.

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.

Electricity will be used to run the DPE system.

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.

Risk of exposure to construction workers (dermal contact, ingestion, inhalation) by dust, petroleum hydrocarbon vapors, petroleum product, or petroleum hydrocarbon-contaminated soil/groundwater. Risks to be controlled by Site specific health and safety plan, including dust control, air monitoring, and protective clothing.

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

From 1954 to 1990, several documented spills occurred at the terminal, totaling approximately 155,000 gallons. Spilled quantities ranged from a few gallons to 80,000 gallons and involved fuel oils, heavy oils, gasoline, off-specification asphalt, and diesel products. Periodic product releases (approximately 0.2 gallon to 2 gallons) reportedly occurred from valves, flanges, and pumps in the Upper and Lower Yards throughout the terminal history. Records and documentation of these smaller releases are not available. The Site has been the focus of several significant phases of remedial activity and as a result, much of the impacts from historical use no longer remain.

c. 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 chemicals expected to be present in the water generated from the excavation and DPE treatment system include TPH, cPAHs, and benzene. These chemicals are the focus of the project development and design.

d. 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.

No significant quantities of toxic or hazardous chemicals are planned for use, storage or production.

e. Describe special emergency services that might be required.

Routine medical facility services as necessary in case of worker exposures noted above.

f. Proposed measures to reduce or control environmental health hazards, if any:

Workers will have received Hazardous Waste Operations and Emergency Response training. Workers will follow a Site-specific health and safety plan, including use of protective clothing as required. Air monitoring with field instruments and visual monitoring of fugitive dust will be performed during the interim action.

8. Noise

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

There is little noise in the area. The most significant noise in the area is occasional blasts from the horn of ferries leaving the Edmonds ferry terminal and from passing trains. Noise will not affect the project.

b. 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.

There will be short-term noise associated with heavy equipment operation, disposal truck traffic, and construction activities for the two weeks of active construction duration as well as noise from the DPE system. The construction activities will be limited to business hours of operation. The most significant short-term noise is likely to be backup horns on heavy equipment and trucks.

The DPE system will operate 24 hours a day, but the noise produced will be abated using noise attenuation devices and will not exceed the city of Edmonds noise ordinance.

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

Excavation and construction activities will be limited to during daytime/business hours. Noise from backup horns cannot be abated.

The DPE system will be equipped with sound attenuating insulation and engineered acoustic dampening devices to reduce noise levels originating from the system.

9. 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 former bulk fuel storage/distribution terminal. The terminal has been removed and the Lower yard is currently vacant with the exception of a temopary storage shed. The properties to the north/northeast is open space (Edmonds Marsh); to the southeast is Deer Creek Salmon Hatchery; to the south is a condominium development built after 2003; and to the west/northwest are the Burlington Northern and Santa Fe (BNSF) railroad tracks and the Port of Edmonds marina. The project is not anticipated to significantly affect nearby land uses.

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.

c. 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.

d. Describe any structures on the site.

A temporary storage shed exists on-Site.

e. Will any structures be demolished? If so, what?

None. Upon project completion the temporary storage shed will be removed.

f. What is the current zoning classification of the site?

The Lower Yard is zoned MP2 (Master Plan Hillside Mixed Use). MP2 allowed uses include multi-family residential, office, hotels/motels, restaurants, excluding drive-in business, local public facilities, retail uses excluding activity that relies on outdoor display of merchandise, conference/performing arts center, day care, parks and open spaces, and multimodal transportation center. Residential use is prohibited on the ground floor of any building.

g. What is the current comprehensive plan designation of the site?

The City of Edmonds Comprehensive Plan, dated September, 2011, designates the Site as Master Plan Development.

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

No designation.

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

DB-1 was characterized in a 1995 study as a disturbed, emergent wetland. The eastern edge of the Lower Yard (along Willow Creek and part of the Edmonds Marsh) was characterized as a wetland. Portions of the Upper Yard were characterized as steep slope.

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

None.

k. **Approximately how many people would the completed project displace?**

None.

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

Does not apply.

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

After excavation of contaminated soil and installation of the DPE system, the only apparent above-ground new structure will be the addition of the DPE treatment system building (See 11a). There will be little change from current Site conditions. Underground and and above-ground systems will be laid out to be compatible with reasonably anticipated future land use. Their location can be adjusted if necessary.

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

Does not apply.

10. 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.**

Does not apply.

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

Does not apply.

11. Aesthetics

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

A structure will house the components of the DPE remediation system. The maximum height of the structure will be approximatly 15 feet constructed of metal and wood. The building exterior will be constructed to meet local building code and will be completed with painted metal siding. The system will discharge treated vapor through a metal effluent stack at a hight of 20 feet above ground surface.

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

None.

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

Does not apply.

12. 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?

Does not apply.

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:

Does not apply.

13. Recreation

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

None.

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:

Does not apply.

14. 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.

An archeological monitoring was conducted by Nothwest Archeological Associates, Inc. during 2008 excavation activities at the Site. Archeological Associates, Inc stated that no significant cultural resources were observed during the monitoring. (ARCADIS, 2010).

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.

There are no cultural or historic resources present in the Lower Yard.

15. 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.

Site is served by State Route 104 and Pine Street.

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?

Community Transit Routes 130 and 416, Stops C1168 (SB) and C683 (NB) at 5th Avenue South and Pine, approximately 0.4 miles east.

Edmonds Station, 211 Railroad Avenue, Edmonds, WA. Amtrak and Sounder trains. Located approximately 0.4 miles northeast of the Site.

Edmonds-Kingston Ferry Terminal is located approximately 0.5 miles northeast of the Site.

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

Does not apply.

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.

BNSF Railway tracks are located adjacent to the northwest of the Site. The Port of Edmonds Marina is located to the northwest of the Site, beyond the BNSF property. Edmonds Station, with Amtrak and Sounder train service, is located approximately 0.4 miles northeast of the Site. Edmonds-Kingston Ferry Terminal is located approximately 0.5 miles northeast of the Site.

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?

None.

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:

Does not apply.

16. 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.

Does not apply.

17. Utilities

a. Circle utilities currently available at the site:

Electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

Stormwater conveyance system

b. 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.

Existing power from Public Utility District of Snohomish County will be upgraded to sustain DPE system operation. This will be achieved by trenching electrical conduit from the existing power drop.

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: 

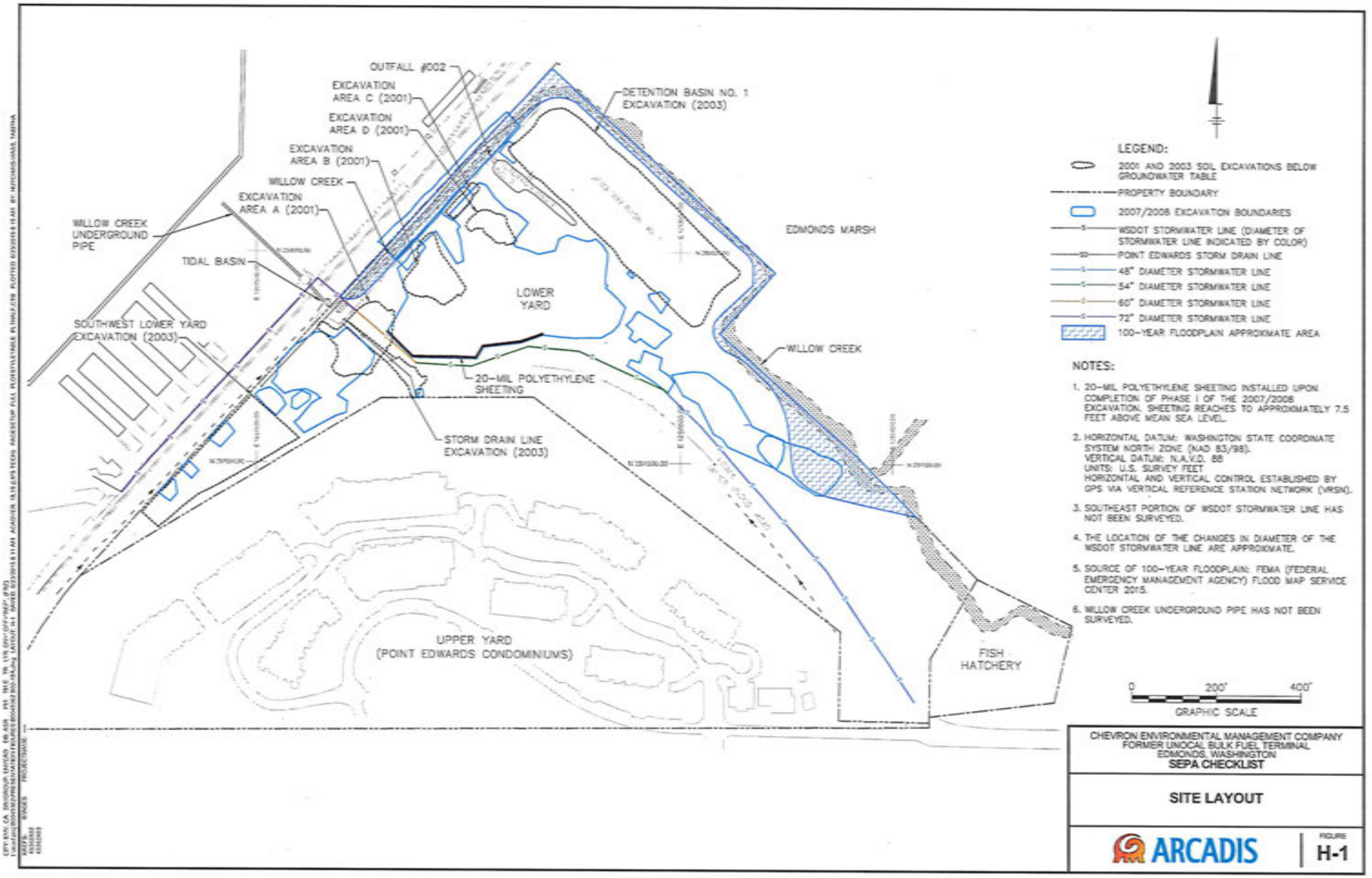
Name of signee: Scott Zorn

Position and Agency/Organization: Principal Geologist/ARCADIS

Date Submitted: May 29, 2015

ARCADIS

Appendix H Figure



CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
FORMER UNOCAL BULK FUEL TERMINAL
EDMONDS, WASHINGTON
SEPA CHECKLIST

SITE LAYOUT

ARCADIS

FIGURE
H-1