



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

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February 17, 2010

John T. Cooke, Attorney  
1201 Third Ave, Suite 4800  
Seattle WA 98101-3099

**Re: Further Action at the following Site:**

- Site Name: Kent Aziz Chevron
- Site Address: 18315 S. 212<sup>th</sup> ST Kent WA 98032
- Facility Site No.: 43822373
- VCP No.: NW1076

Dear: Mr. Cooke:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Kent Aziz Chevron facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

**Issue Presented and Opinion**

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

**YES. Ecology has determined that further remedial action is necessary to clean up contamination at the Site.**

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

**Description of the Site**

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This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following releases:

- Petroleum Hydrocarbons (TPH-gasoline, TPH-oil and TPH-diesel) and BTEX The into the Soil and the Ground Water.
- Metals (lead) into the Soil and Ground Water

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

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

### **Basis for the Opinion**

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This opinion is based on the information contained in the documents listed in Ecology's Interim NFA (soil only NFA) issued June 27, 2005 in **Enclosure B**.

Those documents are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by calling the NWRO resource contact at (425) 649-7190.

This opinion is void if any of the information contained in those documents is materially false or misleading.

### **Analysis of the Cleanup**

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Ecology has concluded that **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

#### **1. Characterization of the Site.**

Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards and select a cleanup action.

##### **a. Soil Data Gaps :**

- The 5 sampling points (MS-103, MCS106, 107, 108 and MCS 1012) presented in the RZA-AGRA Report July 1991, Fig 4, to support the limit of

excavations for the 1) multiple fuel lines, 2) former waste oil tank, 3) former fuel oil tank, 4) gasoline tanks excavations, especially to the west of the site and 5) multiple pump islands excavation points are not sufficient to verify whether the limits of the excavations cover the extent of the soil impacts requiring remedial action implementation at this site.

b. Groundwater Data Gaps:

- Data shows Fig. 2 after EA Engineering Dec 1995 that groundwater quality at MW-1 was impacted (57,000 ug/l TPH-gasoline and BTEX) above the MTCA cleanup level (1000 ug/l TPH-gasoline) and the plume was migrating northeast along a radial groundwater flow path. No groundwater compliance monitoring well was located between MW-1 along the northeast flow path and the property boundary on the South 212<sup>th</sup> Street.
- Data shows that MW-1 in 7/11/90, MW-2 in 7/11/90, MW-4 in 4/23/92 and MW-7 in 4/23/92 were all impacted (38,000, 32,000, 6500 and 2200 ug/l respectively) above the MTCA cleanup levels (1000 ug/l) for TPH-gasoline.
- This means that the TPH gasoline plume has reached and potentially migrated **beyond** MW-1 along a northeasterly, MW-2 along a westerly, MW-4 along an easterly and MW-7 along a northwesterly direction at levels above the MTCA cleanup levels.
- As a result, **MW-1, MW-2, MW-4 and MW-7 no longer represent the extent (front) of the plume at these locations.**
- Client should have conducted additional site characterization in 7/11/90 and 4/23/92 when cleanup levels were exceeded at these locations **to delineate the front and extent of the plumes migrating along the path of MW-1, MW-2, MW-4 and MW-7.**
- Subsequently over the years: *since 7/11/90 and 4/23/92, the client continued monitoring the **tail of the plume** now at MW-1, MW-2, MW-4 & MW-7 until recently when data show no detections at these locations.*
- While **the front of the plume** have since migrated beyond MW-1 towards South 212<sup>th</sup> Street; Public Right of Way to the northeast, beyond MW-2 off property towards Van Waters and Rogers Shipping to the west, beyond MW-4 towards East Valley Road; Public Right of Way to the east and beyond MW-7 off property along a northwesterly direction.
- Additional site characterization along the flow paths of MW-1, MW2, MW-4 and MW-7 are needed to address the full extent of the Total Petroleum Hydrocarbons and BTEX impacts for an NFA or Partial Sufficiency (for either soils or groundwater only) determinations at this site.

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- Conversely, additional site characterization along the flow paths of MW-1 north and northeast of the site and MW-4 along the east of the site are needed to address the extent of the Total Petroleum Hydrocarbons and BTEX impacts for a Property Specific NFA determination.

2. **Establishment of cleanup standards.**

a. **Substance-specific standards.**

Ecology has determined the cleanup levels and points of compliance you established for the Site do not meet the substantive requirements of MTCA.

- For a site to meet cleanup standards under the MTCA, the site must meet cleanup levels at the points of compliance.

**Points of Compliance:**

- The points of compliance presented for this site include MW-1, MW-2, MW-3, MW-4, MW-5, MW-6 and MW-7.
- A discussion from the above (Site Characterization) shows (groundwater performance monitoring) that MW-1 in 7/11/90, MW-2 in 7/11/90, MW-4 in 4/23/92 and MW-7 in 4/23/92 were all impacted (38,000, 32,000, 6500 and 2200 ug/l respectively) above the MTCA cleanup levels (1000 ug/l) for TPH-gasoline.
- This means that the TPH gasoline plume has reached and potentially migrated **beyond** MW-1 along a northeasterly, MW-2 along a westerly, MW-4 along an easterly and MW-7 along a northwesterly direction at levels above the MTCA cleanup levels.
- As a result, **MW-1, MW-2, MW-4 and MW-7 no longer represent the extent (front) of the plume and cannot serve as the points of compliance at these locations.**
- Client should have conducted additional site characterization in 7/11/90 and 4/23/92 **to delineate the front and extent of the plume migrating along the path of MW-1, MW-2, MW-4 and MW-7 in order to establish a true point of compliance** to measure the cleanup of standard for an NFA determination for this site.
- Ecology does not agree that **MW-1, MW-2, MW-4 and MW-7** represent the true points of compliance to measure cleanup standards at this site.
- The extent of the Total Petroleum Hydrocarbons and BTEX plumes that migrated along the path and beyond **MW-1, MW-2, MW-4 and MW-7** are not known.

- Therefore Ecology is unable to make an NFA determination as a result of these critical data gaps. Further action is required at this site.

Standard Points of Compliance for Soil and Groundwater is applicable at this site as follows:

- Soils protective of groundwater- the points of compliance for soils protective of the groundwater media is throughout the site (data gaps from Section 1 Site Characterization discussion exist to establish points of compliance protective of the groundwater pathway).
- Soils protective of vapors – the points of compliance for soils protective of the vapor media is throughout the site from the ground surface to the uppermost ground water saturated zone (water table): (data gaps from Section 1 discussion exists to establish points of compliance protective of the vapor pathway).
- Soils protective of direct contact - the points of compliance for soils protective of the direct contact is throughout the site from the ground surface to fifteen feet below the ground surface (reasonable depths for re-development and utility upgrades): (data gaps from Section 1 discussion exists to establish points of compliance protective of the direct contact pathway)
- Terrestrial Ecological Evaluation (TEE) must address the areas of the site where data gaps were identified (as discussed in Section 1 of the above)

#### Cleanup Levels:

- The extent of soil contamination at the site is unknown (see discussion on Section 1 of the above): the extent of groundwater contamination is as well unknown, as a result, other substance specific cleanup levels like VOCs associated with waste oil and de-greasers may still be applicable at this site.
- Ecology will consider “grandfathering” the cleanup levels applicable at the time cleanup action was last implemented at this site

#### Soil

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Gasoline – 100 mg/Kg  
Oil – 2,000 mg/Kg  
Benzene – 0.03 mg/Kg  
Toluene – 7 mg/Kg  
Xylenes – 9 mg/Kg  
Lead – 250 mg/Kg

Groundwater

Gasoline – 800 µg/l  
Diesel - 500 ug/l  
Oil – 500 ug/l  
Benzene – 5 µg/l  
Ethylbenzene – 700 ug/l  
Toluene – 1,000 µg/l  
Xylenes – 1,000 µg/l

**b. Action and location-specific requirements.**

Please note that other requirements (e.g., NPDES) may be applicable to the cleanup action based on the type of the action or location (nearby surface water) at the Site.

**3. Selection of cleanup action.**

Ecology has determined the cleanup action you selected for the Site does not meet the substantive requirements of MTCA.

- a. The Limited soil excavation and Soil Vapor Extraction (SVE) selected for the Site does not meet the substantive requirement of MTCA and does not protect human health and the environment.
  - The Customer did not conduct a feasibility study of cleanup alternatives.
  - The characterization of the Site is not sufficient to conduct a feasibility

- study of cleanup alternatives (see discussion in Section 1).
  - The cleanup standards established do not meet substantive requirements (see discussion in Section 2).
  - The cleanup selected does not meet one or more of the minimum cleanup requirements in WAC 173-340-360(2).
- b. Please address the data gaps identified in the above Sections 1 and 2 in order to address further cleanup alternatives, if any, that may be necessary to select or substantiate a cleanup action.

#### 4. Cleanup.

Ecology has determined the cleanup you performed does not meet any cleanup standards at the Site.

- a. The soil remedial action of limited excavation and SVE conducted at the Site does not meet the substantive requirement of MTCA and does not protect human health and the environment.
- The cleanup standards established do not meet substantive requirements (see discussion in Section 2).
  - The cleanup action selected does not meet substantive requirements (see discussion in Section 3).
  - The cleanup performed has not yet achieved cleanup standards (performance and confirmation monitoring based on the extent of soil and groundwater impacts at the site or property).
  - The cleanup performed will not maintain compliance with cleanup standards.
- b. **Ecology hereby rescinds the "Interim NFA for soils only" issued by Ecology on June 27, 2005 as null and void for the reasons outlined in the above sections.** Ecology no longer issues "Interim NFA" letters: we could issue a "Partial Sufficiency" letter in its place if you meet the substantive requirements of the MTCA for a chemical specific criterion (e.g., TPH-gasoline) or media specific criteria (e.g., soil only) throughout the site where contamination has come to be located. Not limited to the property boundaries.
- c. This site will remain listed in our database of contaminated sites until the substantive requirements for the MTCA are met.

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## **Limitations of the Opinion**

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### **1. Opinion does not settle liability with the state.**

Liabile persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

### **2. Opinion does not constitute a determination of substantial equivalence.**

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

### **3. State is immune from liability.**

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

## **Contact Information**

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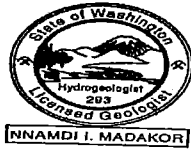
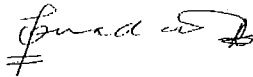
Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: [www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm](http://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm). If you have any questions about this opinion, please contact me by phone at (360) 407-7244 or e-mail at [nmad461@ecy.wa.gov](mailto:nmad461@ecy.wa.gov)



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Sincerely,



Nnamdi Madakor, PHg, P.G.  
VCP Statewide Coordinator  
Policy and Technical Manager  
HQ - Toxic Cleanup Program

NM:nm

Enclosures (1): A – Description and Diagrams of the Site  
B – Previous Interim NFA of 6/27/05

cc: Ivy Anderson: Attorney General Office (Ecology Division)  
Dolores Mitchell - VCP FINANCIAL MANAGER (without enclosures) NW1076  
Russ Olsen – VCP UNIT MANAGER NWRO  
Mike Kuntz. – Ecology Site Manager

## **Enclosure A**

### **Description and Diagrams of the Site**

## Site Description

- The source of the releases at the Site: Used over the years as Gas Service Station with multiple pump islands, underground waste oil tanks, fuel and gasoline USTs. The property is rectangular in shape measuring about 150 feet by 250 feet and situated in an industrial/commercial neighborhood about one mile north of downtown Kent, Washington.
- The hazardous substances released at the Site: Petroleum, Metals and potentially VOCs
- The horizontal and vertical extent of contamination located at the Site: Extent of contamination is unknown – Data gaps exist in the soil and groundwater investigations.
- The media affected by the releases at the Site: Soils, Air, Groundwater and potentially nearby surface water (Green River located west and northwest corner of the site)
- The pathways of exposure at the Site. Direct contact, TEE, Groundwater, Air and potentially Surface Water
- The human or ecological receptors affected by the releases at the Site. Humans, Terrestrial and potentially aquatic organisms.
- The geology and hydrology of the Site: Post glacial alluvial deposits characteristic of the Puget Sound region: generally consists of silty fine sand or sandy silt with some gravel and some organics with shallow depth to groundwater of about 7 to 8 feet from the ground surface.

## **Site Diagrams**

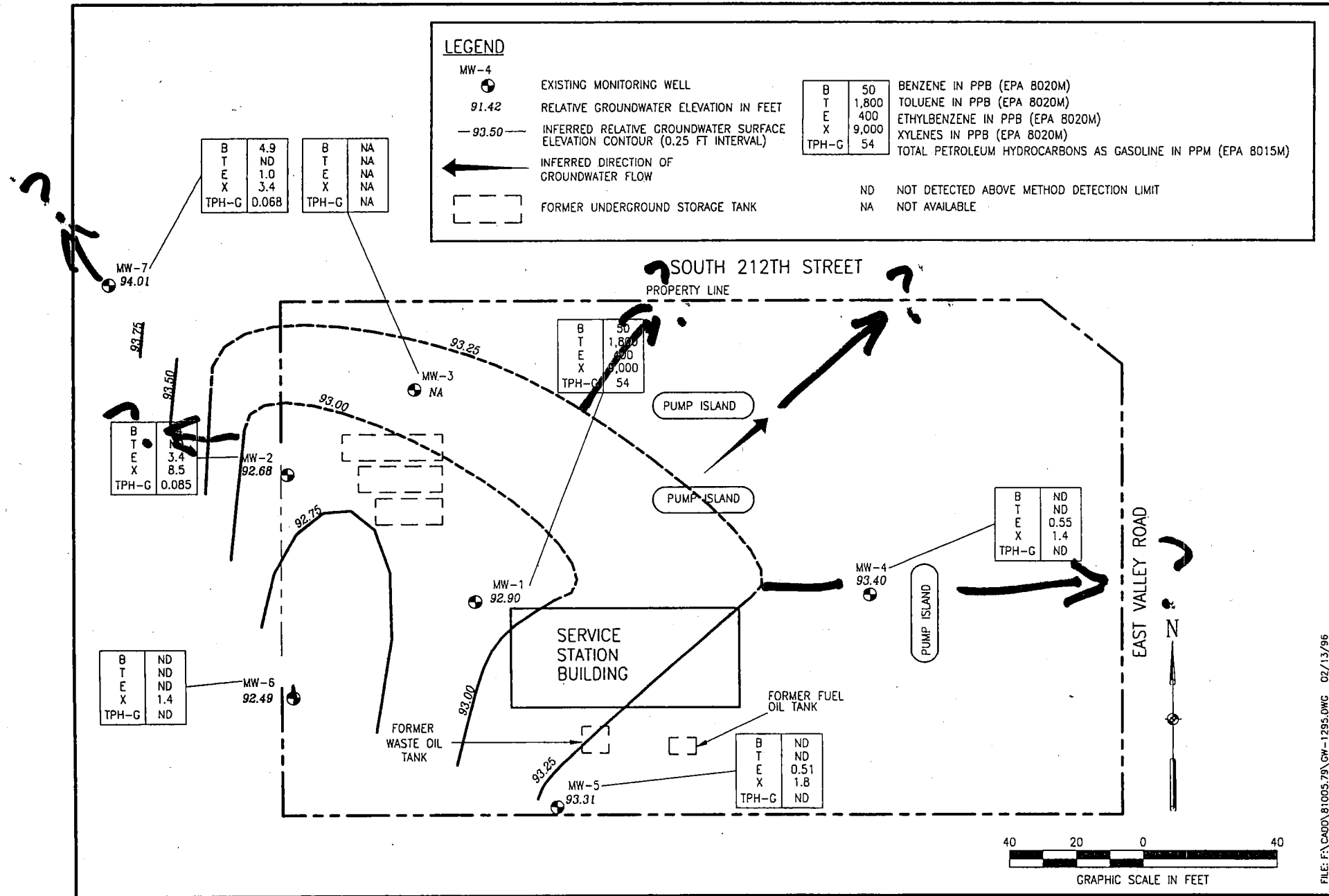


Figure 2. December 1995 groundwater data. Former Exxon station 7-3383, Kent, Washington.

