



# INITIAL INVESTIGATION FIELD REPORT

ERTS Number: 659543  
Parcel #(s): 00618100100-100, 200, 400  
County: King  
FSID #: 38543624  
CSID #: 12980  
UST ID#: 8643

## SITE INFORMATION

|   |  |                              |
|---|--|------------------------------|
| Site Name (Name over door):<br>7-Eleven 21001               | Site Address (including City, State and Zip):<br>541 N West Ave<br>Arlington, WA 98223 | Phone/email:                 |
| Site Contact, Title, Business:<br>Paul Fairbairn<br>Stantec | Site Contact Address (including City, State and Zip):                                  | Phone/email:<br>206-369-8383 |
| Site Owner, Title, Business:<br>7 Eleven Inc #21001         | Site Owner Address (including City, State and Zip):<br>PO Box 711<br>Dallas, TX 75221  | Phone/email:                 |
| Site Owner Contact, Title, Business:                        | Site Owner Contact Address (including City, State and Zip):                            | Phone/email:                 |
| Previous Site Owner(s):                                     | Additional Info:   |                              |
| Alternate Site Name(s):<br>Southland 2306-21001D            | Additional Info:   |                              |

Latitude (Decimal Degrees): 48.19843

Longitude (Decimal Degrees): -122.12760

## INSPECTION INFORMATION

|  |  |   |
|--|--|---|
| Inspection Conducted?<br>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Date/Time:<br>Brenda Curtis, UST Inspector | Entry Notice: Announced <input type="checkbox"/> Unannounced <input type="checkbox"/> |
| Photographs taken? Yes <input type="checkbox"/> No <input type="checkbox"/>                  | Photos available in site reports           |   |
| Samples collected? Yes <input type="checkbox"/> No <input type="checkbox"/>                  | Data available in site reports             |   |

## RECOMMENDATION

|  |  |
|--|--|
| <b>No Further Action</b> (Check appropriate box below):  | <b>LIST on Confirmed and Suspected Contaminated Sites List:</b> <input type="checkbox"/> |
| Release or threatened release does not pose a threat <input type="checkbox"/>                    |  |
| No release or threatened release <input type="checkbox"/>  |  |
| Refer to program/agency (Name: _____) <input type="checkbox"/>                                   |  |
| Independent Cleanup Action Completed (contamination removed) <input checked="" type="checkbox"/> |  |

### COMPLAINT (Brief Summary of ERTS Complaint):

UST analytical test results indicated impacted soil. Spill happened a long time ago and the tank no longer exists (recently removed.) Brenda Curtis from ECY has visited the site.

### CURRENT SITE STATUS (Brief Summary of why Site is recommended for Listing or NFA):

The consultant used a statistical approach to argue for NFA, but the statistical argument was flawed. However, the site still qualifies for NFA based on the use of soil contact CULs not including the leaching pathway. Recommendation: NFA due to independent remediation.

Investigator: Gayle Garbush / Priscilla Tomlinson

Date Submitted: 1/5/2016

## OBSERVATIONS

**Description** (If site visit made, please be sure to include the following: site observations, site features and cover, chronology of events, sources/past practices likely responsible for contamination, presence of water supply wells and other potential exposure pathways, etc.):

Documents reviewed:

- Underground Storage Tank Closure Report 7-Eleven Store No. 21001. Stantec Consulting Services Inc, Bellevue, Washington. November 20, 2015.

Ten soil samples representing post-excavation conditions on the site were analyzed for TPH-G, BTEX, and lead. All results were below Method A except for one benzene result at 0.0326 mg/kg from the north wall of the UST excavation. The consultant used Ecology's Site97 statistical software to calculate an upper 95 percent confidence limit on the mean (95UCL) and argued that the benzene data set was in compliance using the three-part statistical rule. This argument fails on two points:

- Seven of the ten results were not detected. When more than 50 percent of the results are not detected, MTCA requires the maximum detected value to be used as the 95UCL [WAC 173-340-740(7)(f)(iv)]. The maximum value of 0.0326 mg/kg exceeds the Method A cleanup level (CUL) of 0.03 mg/kg.
- One exceedance out of 10 samples is a 10 percent rate of exceedance. MTCA requires that less than 10 percent of the samples exceed the CUL [WAC 173-340-740(7)(e)(ii)].

Impacts to ground water at this site are unlikely for the following reasons:

- Two ground water grab samples collected from borings prior to the excavation were analyzed for TPH-G and BTEX with no detections (detection limits below Method A levels). (Two grab water samples from the excavation pit did contain concentrations of TPH-G, benzene, xylenes, and lead above Method A levels, but these samples are not representative of ground water.)
- The bottom of the excavation was 16.5 feet bgs and ground water was encountered at 27 feet bgs, so the vertical separation between the residual contamination and ground water is 10.5 feet.
- The bulk of the contaminant mass was removed during the excavation.

In the absence of ground water impacts, it is possible to use the soil contact CUL of 18 mg/kg for benzene. The maximum detected concentration of 0.0326 mg/kg is below the soil contact CUL, so the site is in compliance.



(fill in contaminant matrix below with appropriate status choice from the key below the table)

| CONTAMINANT GROUP                             | CONTAMINANT  | SOIL | GROUNDWATER | SURFACE WATER | AIR | BEDROCK | DESCRIPTION  |
|---|--|------|-------------|---------------|-----|---------|--|
| Non-Halogenated Organics                      | Phenolic Compounds                                     |      |             |               |     |         | Compounds containing phenols (Examples: phenol; 4-methylphenol; 2-methylphenol)  |
|   | Non-Halogenated Solvents                               |      |             |               |     |         | Organic solvents, typically volatile or semi-volatile, not containing any halogens. To determine if a product has halogens, search HSDB ( <a href="http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB">http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB</a> ) and look at the Chemical/Physical Properties, and Molecular Formula. If there is not a Cl, I, Br, F in the formula, it's not halogenated. (Examples: acetone, benzene, toluene, xylenes, methyl ethyl ketone, ethyl acetate, methanol, ethanol, isopropanol, formic acid, acetic acid, stoddard solvent, Naptha). <i>Use this when TEX contaminants are present independently of gasoline.</i> |
|   | Polynuclear Aromatic Hydrocarbons (PAH)                |      |             |               |     |         | Hydrocarbons composed of two or more benzene rings.  |
|   | Tributyltin  |      |             |               |     |         | The main active ingredients in biocides used to control a broad spectrum of organisms. Found in antifouling marine paint, antifungal action in textiles and industrial water systems. (Examples: Tributyltin; monobutyltin; dibutyltin)  |
|   | Methyl tertiary-butyl ether                            |      |             |               |     |         | MTBE is a volatile oxygen-containing organic compound that was formerly used as a gasoline additive to promote complete combustion and help reduce air pollution.  |
|   | Benzene  | RB   | B           |               |     |         | Benzene  |
|   | Other Non-Halogenated Organics                         |      |             |               |     |         | TEX  |
|   | Petroleum Diesel                                       |      |             |               |     |         | Petroleum Diesel   |
|   | Petroleum Gasoline                                     | B    | B           |               |     |         | Petroleum Gasoline   |
|   | Petroleum Other  |      |             |               |     |         | Oil range organics   |
| Halogenated Organics<br>(see notes at bottom) | PBDE   |      |             |               |     |         | Polybrominated di-phenyl ether   |
|   | Other Halogenated Organics                             |      |             |               |     |         | Other organic compounds with halogens (chlorine, fluorine, bromine, iodine). search HSDB ( <a href="http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB">http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB</a> ) and look at the Chemical/Physical Properties, and Molecular Formula. If there is a Cl, I, Br, F in the formula, it is halogenated. (Examples: Hexachlorobutadiene; hexachlorobenzene; pentachlorophenol)  |
|   | Halogenated solvents                                   |      |             |               |     |         | PCE, chloroform, EDB, EDC, MTBE  |
|   | Polychlorinated Biphenyls (PCB)                        |      |             |               |     |         | Any of a family of industrial compounds produced by chlorination of biphenyl, noted primarily as an environmental pollutant that accumulates in animal tissue with resultant pathogenic and teratogenic effects  |
|   | Dioxin/dibenzofuran compounds<br>(see notes at bottom) |      |             |               |     |         | A family of more than 70 compounds of chlorinated dioxins or furans. (Examples: Dioxin; Furan; Dioxin TEQ; PCDD; PCDF; TCDD; TCDF; OCDD; OCDF). <i>Do not use for 'dibenzofuran', which is a non-chlorinated compound that is detected using the semivolatile organics analysis 8270</i>   |
| Metals  | Metals - Other   |      |             |               |     |         | Cr, Se, Ag, Ba, Cd   |
|   | Lead   | B    |             |               |     |         | Lead   |
|   | Mercury  |      |             |               |     |         | Mercury  |
|   | Arsenic  |      |             |               |     |         | Arsenic  |
| Pesticides                                    | Non-halogenated pesticides                             |      |             |               |     |         | Pesticides without halogens (Examples: parathion, malathion, diazinon, phosmet, carbaryl (sevin), fenoxycarb, aldicarb)  |
|   | Halogenated pesticides                                 |      |             |               |     |         | Pesticides with halogens (Examples: DDT; DDE; Chlordane; Heptachlor; alpha-beta and delta BHC; Aldrin; Endosulfan, dieldrin, endrin)   |

| CONTAMINANT GROUP  | CONTAMINANT                          | SOIL | GROUNDWATER | SURFACE WATER | AIR | BEDROCK | DESCRIPTION   |
|--------------------|--------------------------------------|------|-------------|---------------|-----|---------|---|
| Other Contaminants | Radioactive Wastes                   |      |             |               |     |         | Wastes that emit more than background levels of radiation.  |
|                    | Conventional Contaminants, Organic   |      |             |               |     |         | Unspecified organic matter that imposes an oxygen demand during its decomposition (Example: Total Organic Carbon)   |
|                    | Conventional Contaminants, Inorganic |      |             |               |     |         | Non-metallic inorganic substances or indicator parameters that may indicate the existence of contamination if present at unusual levels (Examples: Sulfides, ammonia)   |
|                    | Asbestos                             |      |             |               |     |         | All forms of Asbestos. Asbestos fibers have been used in products such as building materials, friction products and heat-resistant materials.   |
|                    | Other Deleterious Substances         |      |             |               |     |         | Other contaminants or substances that cause subtle or unexpected harm to sediments (Examples: Wood debris; garbage (e.g., dumped in sediments))   |
|                    | Benthic Failures                     |      |             |               |     |         | Failures of the benthic analysis standards from the Sediment Management Standards.  |
|                    | Bioassay Failures                    |      |             |               |     |         | For sediments, a failure to meet bioassay criteria from the Sediment Management Standards. For soils, a failure to meet TEE bioassay criteria for plant, animal or soil biota toxicity.   |
| Reactive Wastes    | Unexploded Ordnance                  |      |             |               |     |         | Weapons that failed to detonate or discarded shells containing volatile material.   |
|                    | Other Reactive Wastes                |      |             |               |     |         | Other Reactive Wastes (Examples: phosphorous, lithium metal, sodium metal)  |
|                    | Corrosive Wastes                     |      |             |               |     |         | Corrosive wastes are acidic or alkaline (basic) wastes that can readily corrode or dissolve materials they come into contact with. Wastes that are highly corrosive as defined by the Dangerous Waste Regulation (WAC 173-303-090(6)). (Examples: Hydrochloric acid; sulfuric acid; caustic soda) |

| Status choices for contaminants      |  |
|--------------------------------------|--|
| Contaminant Status                   | Definition   |
| B - Below Cleanup Levels (Confirmed) | The contaminant was tested and found to be below cleanup levels. (Generally, we would not enter each and every contaminant that was tested; for example if an SVOC analysis was done we would not enter each SVOC with a status of "below". We would use this for contaminants that were believed likely to be present but were found to be below standards when tested) |
| S - Suspected                        | The contaminant is suspected to be present; based on some knowledge about the history of the site, knowledge of regional contaminants, or based on other contaminants known to be present  |
| C - Confirmed Above Cleanup Levels   | The contaminant is confirmed to be present above any cleanup level. For example - above MTCA method A, B, or C; above Sediment Quality Standards; or above a presumed site-specific cleanup level (such as human health criteria for a sediment contaminant).  |
| RA - Remediated Above                | The contaminant was remediated, but remains on site above the cleanup standards (for example - capped area).   |
| RB - Remediated Below                | The contaminant was remediated, and no area of the site contains this contaminant above cleanup standards (for example - complete removal of contaminated soils).  |

**Halogenated chemicals and solvents:** Any chemical compound with chloro, bromo, iodo or fluoro is halogenated; those with eight or fewer carbons are generally solvents (e.g. halogenated methane, ethane, propane, butane, pentane, hexane, heptane or octane ) and may also be used for or registered as pesticides or fumigants. Most are dangerous wastes, either listed or categorical. Organic compounds with more carbons are almost always halogenated pesticides or a contaminant or derivative. Referral to the HSDB is recommended you are unfamiliar with a chemical name or compound, as it contains useful information about synonyms, uses, trade names, waste codes, and other regulatory information about most toxic or potentially toxic chemicals.

**Dibenzodioxins and dibenzofurans** are normalized to a combined equivalent toxicity based on 2,3,7,8-tetrachloro-p-dibenzodioxin as set out in Ch. 173-340-708(8)(d) and in the Evaluating the Toxicity and Assessing the Carcinogenic Risk of Environmental Mixtures using Toxicity Equivalency Factors Focus Sheet (<https://fortress.wa.gov/ecy/clarc/FocusSheets/tef.pdf> ). Results may be reported as individual compounds and isomers (usually lab results), or as a toxic equivalency value (reports).



**FOR ECOLOGY II REVIEWER USE ONLY (For Listing Sites):**

How did the Site come to be known: ☒ Site Discovery (received a report): 12/16/15 (Date Report Received)  
☐ ERTS Complaint  
☒ Other (please explain): \_\_\_\_\_

Does an Early Notice Letter need to be sent: ☐ Yes ☒ No  
If No, please explain why: NFA

NAICS Code (if known): \_\_\_\_\_

Otherwise, briefly explain how property is/was used (i.e., gas station, dry cleaner, paint shop, vacant land, etc.):  
\_\_\_\_\_

Site Unit(s) to be created (Unit Type): ☒ Upland (includes VCP & LUST) ☐ Sediment  
If multiple Units needed, please explain why: \_\_\_\_\_

Cleanup Process Type (for the Unit): ☐ No Process ☒ Independent Action  
☐ Voluntary Cleanup Program ☐ Ecology-supervised or conducted  
☐ Federal-supervised or conducted

Site Status: ☐ Awaiting Cleanup ☐ Construction Complete – Performance Monitoring  
☐ Cleanup Started ☐ Cleanup Complete – Active O&M/Monitoring  
☒ No Further Action Required

Site Manager (Default: Donna Musa): Donna Musa

Specific confirmed contaminants include:

\_\_\_\_\_ in Soil

\_\_\_\_\_ in Groundwater

\_\_\_\_\_ in Other (specify matrix: \_\_\_\_\_)

Facility/Site ID No. (if known):  
38543624

Cleanup Site ID No. (if known):  
12980

COUNTY ASSESSOR INFO: Please attach to this report a copy of the tax parcel/ownership information for each parcel associated with the site, as well as a parcel map illustrating the parcel boundary and location.

