

Voluntary Cleanup Program

Washington State Department of Ecology Toxics Cleanup Program

Title: Associate Environmental

Engineer

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

- 1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
- 2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
- 3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to www.ecy.wa.gov/programs/tcp/policies/terrestrial/TEEHome.htm.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are documenting an evaluation.

Facility/Site Name: Rufus 2.0 Development - Block 21

Facility/Site Address: Block 21 - between Bell and Blanchard Streets, and 7th and 8th Avenues

Facility/Site No:

VCP Project No.:

Step 2: IDENTIFY EVALUATOR

Please identify below the person who conducted the evaluation and their contact information.

Name: Tony Orme

Organization: GeoEngineers, Inc.

Mailing address: 17425 Union Hill Road Ste 250

City: Redmond		Sta	te: WA	Zip code: 98052
Phone: 425-861-6000	Fax: 425-861-6050		E-mail: torme	e@geoengineers.com

A. Exclusion from further evaluation. 1. Does the Site qualify for an exclusion from further evaluation?
 Yes If you answered "YES," then answer Question 2. No or Unknown If you answered "NO" or "UKNOWN," then skip to Step 3B of this form. What is the basis for the exclusion? Check all that apply. Then skip to Step 4 of this form. Point of Compliance: WAC 173-340-7491(1)(a) All soil contamination is, or will be,* at least 15 feet below the surface. All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination. Barriers to Exposure: WAC 173-340-7491(1)(b) All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.
 No or Unknown If you answered "NO" or "UKNOWN," then skip to Step 3B of this form. What is the basis for the exclusion? Check all that apply. Then skip to Step 4 of this form. Point of Compliance: WAC 173-340-7491(1)(a) All soil contamination is, or will be,* at least 15 feet below the surface. All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination. Barriers to Exposure: WAC 173-340-7491(1)(b) All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.
Unknown If you answered "NO" of "UKNOWN," then skip to Step 3B of this form. 2. What is the basis for the exclusion? Check all that apply. Then skip to Step 4 of this form. Point of Compliance: WAC 173-340-7491(1)(a) All soil contamination is, or will be,* at least 15 feet below the surface. All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination. Barriers to Exposure: WAC 173-340-7491(1)(b) All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.
 Point of Compliance: WAC 173-340-7491(1)(a) All soil contamination is, or will be,* at least 15 feet below the surface. All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination. Barriers to Exposure: WAC 173-340-7491(1)(b) All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.
 All soil contamination is, or will be,* at least 15 feet below the surface. All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination. Barriers to Exposure: WAC 173-340-7491(1)(b) All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.
 All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination. Barriers to Exposure: WAC 173-340-7491(1)(b) All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.
 depth if approved by Ecology), and institutional controls are used to manage remaining contamination. Barriers to Exposure: WAC 173-340-7491(1)(b) All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.
All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.
paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.
Undeveloped Land: WAC 173-340-7491(1)(c)
 There is less than 0.25 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.
For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous [#] undeveloped [±] land on or within 500 feet of any area of the Site.
Background Concentrations: WAC 173-340-7491(1)(d)
Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.
 * An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology. # "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil. # "Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

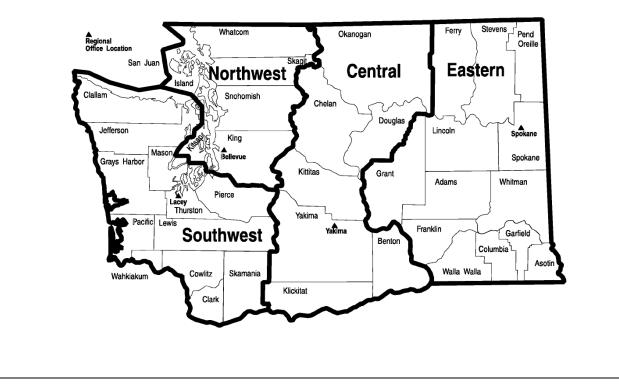
В.	Simplified	evaluation.
1.	Does the S	ite qualify for a simplified evaluation?
	🗌 Y	es If you answered "YES," then answer Question 2 below.
	☐ N Unkn	o or or own If you answered " NO " or " UNKNOWN, " then skip to Step 3C of this form.
2.	Did you co	nduct a simplified evaluation?
	□ Y	es If you answered "YES," then answer Question 3 below.
	🗌 N	o If you answered " NO, " then skip to Step 3C of this form.
3.	Was furthe	er evaluation necessary?
	□ Y	es If you answered "YES," then answer Question 4 below.
	🗌 N	o If you answered " NO ," then answer Question 5 below.
4.	lf further e	valuation was necessary, what did you do?
		Used the concentrations listed in Table 749-2 as cleanup levels. If so, then skip to Step 4 of this form.
		Conducted a site-specific evaluation. If so, then skip to Step 3C of this form.
5.	If no furthe to Step 4 o	er evaluation was necessary, what was the reason? Check all that apply. Then skip f this form.
	Exposure A	analysis: WAC 173-340-7492(2)(a)
		Area of soil contamination at the Site is not more than 350 square feet.
		Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.
	Pathway A	nalysis: WAC 173-340-7492(2)(b)
		No potential exposure pathways from soil contamination to ecological receptors.
	Contamina	nt Analysis: WAC 173-340-7492(2)(c)
		No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.
		No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.
		No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.
		No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C.	the proble	cific evaluation. A site-specific evaluation process consists of two parts: (1) formulating em, and (2) selecting the methods for addressing the identified problem. Both steps onsultation with and approval by Ecology. See WAC 173-340-7493(1)(c).
1.	Was there	e a problem? See WAC 173-340-7493(2).
		Yes If you answered "YES," then answer Question 2 below.
		No If you answered " NO ," then identify the reason here and then skip to Question 5 below:
		No issues were identified during the problem formulation step.
		While issues were identified, those issues were addressed by the cleanup actions for protecting human health.
2.	What did	you do to resolve the problem? See WAC 173-340-7493(3).
		Used the concentrations listed in Table 749-3 as cleanup levels. If so, then skip to Question 5 below.
		Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. <i>If so, then answer Questions 3 and 4 below.</i>
3.		nducted further site-specific evaluations, what methods did you use? that apply. See WAC 173-340-7493(3).
		Literature surveys.
		Soil bioassays.
		Wildlife exposure model.
		Biomarkers.
		Site-specific field studies.
		Weight of evidence.
		Other methods approved by Ecology. If so, please specify:
4.	What was	s the result of those evaluations?
		Confirmed there was no problem.
		Confirmed there was a problem and established site-specific cleanup levels.
5.	-	u already obtained Ecology's approval of both your problem formulation and resolution steps?
		Yes If so, please identify the Ecology staff who approved those steps:
		No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.

Northwest Region:	Central Region:
Attn: VCP Coordinator	Attn: VCP Coordinator
3190 160 th Ave. SE	1250 West Alder St.
Bellevue, WA 98008-5452	Union Gap, WA 98903-0009
Southwest Region:	Eastern Region:
Southwest Region: Attn: VCP Coordinator	Eastern Region: Attn: VCP Coordinator
Attn: VCP Coordinator	Attn: VCP Coordinator



ECY 090-300 (07/2015) To request ADA accommodation including materials in a format for the visually impaired, call Ecology Toxic Cleanup Program 360-407-7170. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.