

## **Voluntary Cleanup Program**

Washington State Department of Ecology Toxics Cleanup Program

### 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 <a href="https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation">https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation</a>.

| Step 1: IDENTIFY HAZARDOUS WASTE SITE   |
|---|
| Please identify below the hazardous waste site for which you are documenting an evaluation. |
| Facility/Site Name: Glitsa America Inc.   |
| Facility/Site Address: 327 S. Kenyon St. Seattle, WA 98108                                  |
| Facility/Site No: 63168342 VCP Project No.:   |

| Step 2: IDENTIFY EVALUATOR   |             |                     |  |
|--|-------------|---------------------|--|
| Please identify below the person who conducted the evaluation and their contact information. |             |                     |  |
| Name: Skye Bartel  |             | Title: Partner      |  |
| Organization: Teror Co.  |             |                     |  |
| Mailing address: 18708 126th Ave NE Apt. 2624  |             |                     |  |
| City: Bothell  | State: WA   | Zip code: 98011     |  |
| Phone: (425) - 213 - 9200 Fax:   | E-mail: wko | edhyzvyx & msn. com |  |

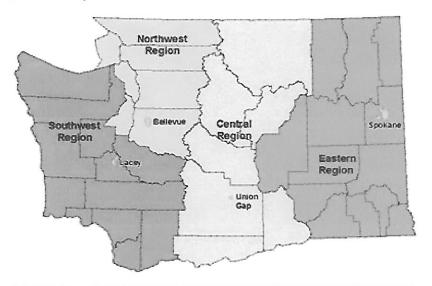
| St  | ep 3: DOC  | UMENT EVALUATION TYPE AND RESULTS  |  |  |
|---|--|--|--|--|
| A.  | Exclusion  | from further evaluation.   |  |  |
| 1.  | Does the S   | Site qualify for an exclusion from further evaluation?   |  |  |
|   | □ Y  | es If you answered "YES," then answer Question 2.  |  |  |
|   | ∑ N<br>Únkn  |  |  |  |
| 2.  | What is the  | e basis for the exclusion? Check all that apply. Then skip to Step 4 of this form.   |  |  |
|   | Point of Co  | ompliance: 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.  |  |  |
|   | Undeveloped Land: WAC 173-340-7491(1)(c)               |  |  |  |
|   |  | There is less than 0.25 acres of contiguous <sup>#</sup> undeveloped <sup>±</sup> 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.  |  |  |
| ace<br>± "<br>pre                                 | ceptable to E 'Undeveloped event wildlife 'Contiguous" | based on future land use must have a completion date for future development that is cology. I land" is land that is not covered by building, roads, paved areas, or other barriers that would from feeding on plants, earthworms, insects, or other food in or on the soil.  undeveloped land is an area of undeveloped land that is not divided into smaller areas of asive paving, or similar structures that are likely to reduce the potential use of the overall area |  |  |
| by  | by wildlife.   |  |  |  |

| В.  | Simplified   | evaluation.   |  |
|---|--|---|--|
| 1.  | Does the S   | te qualify for a simplified evaluation?   |  |
|   | X Ye   | es If you answered "YES," then answer Question 2 below.   |  |
|   | ☐ No<br>Unkno  | 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?  |  |
|   | ∑ Ye   | es If you answered "YES," then answer Question 3 below.   |  |
|   |  | If you answered "NO," then skip to Step 3C of this form.  |  |
| 3.  | Was furthe   | r evaluation necessary?   |  |
|   |  | s If you answered "YES," then answer Question 4 below.  |  |
|   | ∭ No   | If you answered "NO," then answer Question 5 below.   |  |
| 4.  | If further ev  | aluation was necessary, what did you do?  |  |
|   |  | Used the concentrations listed in Table 749-2 as cleanup levels. <i>If so, then skip to</i> <b>Step 4</b> of this form.   |  |
|   |  | Conducted a site-specific evaluation. If so, then skip to Step 3C of this form.   |  |
| 5.  | . If no further evaluation was necessary, what was the reason? Check all that apply. Then skip to Step 4 of this form. |   |  |
|   |  | nalysis: WAC 173-340-7492(2)(a)   |  |
|   |  | Area of soil contamination at the Site is not more than 350 square feet.  |  |
|   | $\square$  | Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.   |  |
|   | Pathway Ar   | alysis: WAC 173-340-7492(2)(b)  |  |
| Pathway Analysis: WAC 173-340-7492(2)(b)  No potential exposure pathways from soil contamination to ecological receptors. |  |   |  |
| Contaminant 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. | C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. See WAC 173-340-7493(1)(c). |  |  |  |  |
|----|--|--|--|--|--|
| 1. | Was there  | problem? See WAC 173-340-7493(2).  |  |  |  |
|    | ☐ Ye   | s 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 y   | ou 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 <b>Question 5</b> 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. | 3. If you conducted further site-specific evaluations, what methods did you use?  Check all 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 t   | he result of those evaluations?  |  |  |  |
|    |  | Confirmed there was no problem.  |  |  |  |
|    |  | Confirmed there was a problem and established site-specific cleanup levels.  |  |  |  |
| 5. | 5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?   |  |  |  |  |
|    | ☐ Y  | es If so, please identify the Ecology staff who approved those steps:  |  |  |  |
|    | □ N  |  |  |  |  |

#### 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: Attn: VCP Coordinator 3190 160<sup>th</sup> Ave. SE Bellevue, WA 98008-5452

Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775 Central Region: Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009

Eastern Region: Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

# Table 749-1 Simplified Terrestrial Ecological Evaluation-Exposure Analysis Procedure

| Estimate the area of contiguous (connected) <u>undeveloped land</u> on the site or within 500 area of the site to the nearest 1/2 acre (1/4 acre if the area is less than 0.5 acre).   | feet of any |
|--|-------------|
| 1) From the table below, find the number of points corresponding to the area and enter this number in the field to the right.  |             |
| Area (acres) Points 0.25 or less 4 0.5 5 1.0 6 1.5 7 2.0 8 2.5 9 3.0 10 3.5 11 4.0 or more 12  | в           |
| 2) Is this an <u>industrial</u> or <u>commercial</u> property? If yes, enter a score of 3. If no, enter a score of 1   | 3           |
| 3) <sup>a</sup> Enter a score in the box to the right for the habitat quality of the site, using the following rating system <sup>b</sup> . High=1, Intermediate=2, Low=3  | 3           |
| 4) Is the undeveloped land likely to attract wildlife? If yes, enter a score of 1 in the box to the right. If no, enter a score of 2.  | 2           |
| 5) Are there any of the following soil contaminants present: Chlorinated dioxins/furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, pentachlorobenzene? If yes, enter a score of 1 in the box to the right. If no, enter a score of 4. | 4           |
| 6) Add the numbers in the boxes on lines 2-5 and enter this number in the box to the right. If this number is larger than the number in the box on line 1, the simplified evaluation may be ended.   | 12          |

#### Notes for Table 749-1

Low: Early <u>successional</u> vegetative stands; vegetation predominantly noxious, nonnative, exotic plant species or weeds. Areas severely disturbed by human activity, including intensively cultivated croplands. Areas isolated from other habitat used by wildlife.

<sup>&</sup>lt;sup>a</sup> It is expected that this habitat evaluation will be undertaken by an experienced field biologist. If this is not the case, enter a conservative score of (1) for questions 3 and 4.

<sup>&</sup>lt;sup>b</sup> **Habitat rating system.** Rate the quality of the habitat as high, intermediate or low based on your professional judgment as a field biologist. The following are suggested factors to consider in making this evaluation:

**High:** Area is ecologically significant for one or more of the following reasons: Late-<u>successional</u> native plant communities present; relatively high species diversity; used by an uncommon or rare species; <u>priority habitat</u> (as defined by the Washington Department of fish and Wildlife); part of a larger area of habitat where size or fragmentation may be important for the retention of some species.

Intermediate: Area does not rate as either high or low.

<sup>c</sup> Indicate "yes" if the area attracts wildlife or is likely to do so. Examples: Birds frequently visit the area to feed; evidence of high use b mammals (tracks, scat, etc.); habitat "island" in an industrial area; unusual features of an area that make it important for feeding animals; heavy use during seasonal migrations.

[Area Calculation Aid] [Aerial Photo with Area Designations] [TEE Table 749-1] [Index of Tables]

[Exclusions Main] [TEE Definitions] [Simplified or Site-Specific?] [Simplified Ecological Evaluation] [Site-Specific Ecological Evaluation] [WAC 173-340-7493]

[TEE Home]