Pasco Sanitary Landfill NPL Site – Balefill Fire Abatement Measures April 2014

# SEPA ENVIRONMENTAL CHECKLIST

# 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. <u>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</u>. 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 <u>all parts of your proposal</u>, 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:

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 nonproject proposals:

Please complete 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. ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). For nonproject actions.

# A. BACKGROUND

1. Name of proposed project, if applicable:

Pasco Landfill NPL Cleanup Site: Interim Action to develop and execute a plan to extinguish and monitor an existing landfill fire and to develop a plan to prevent future landfill fires. Pasco Sanitary Landfill (PSL) Balefill Area

Pasco, Washington

2. Name of applicant:

Washington State Department of Ecology

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

Charles Gruenenfelder, L.G., L.Hg. Eastern Regional Office, Department of Ecology 4601 N. Monroe Street Spokane, WA 99205-1295 (509) 329-3439 E-mail: chgr461@ecy.wa.gov

4. Date checklist prepared:

April 28, 2014

5. Agency requesting checklist:

Washington State Department of Ecology, Eastern Region (Ecology)

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

Interim Action Work Plan development will commence upon Ecology issuance of a Threshold Determination and issuance of an Enforcement Order to perform the work. A project schedule is presented as Exhibit B of the Enforcement Order which is included as an attachment to this SEPA checklist. Field work associated with this SEPA checklist is expected to commence in May and June, 2014.

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

Yes, additional actions to help further reduce the potential for future underground fires in the municipal solid wastes bordering Zone A at the PSL Site are expected once the current fire has been fully extinguished.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

The proposed work will involve preparation of Interim Action Work Plans. One work plan will describe the anticipated actions to extinguish the existing fire and monitor the effectiveness of the abatement actions. Another work plan will describe possible actions to help prevent similar underground fires in the future. Since December 2013, the potentially liable persons (PLPs) have gathered various kinds of data and information to help better understand the nature, extent and characteristics of the fire, and performed targeted maintenance activities of the Balefill Area cover. Actions taken to date have been performed in accordance with Ecology-approved work plans. A large number of documents are on file at Ecology's Eastern Regional Office regarding past and ongoing work in the PSL Project Area. These documents are too numerous to list here. A list of all publically available documents regarding this Project Area may be

found by contacting Ecology's Public Disclosure Coordinator, Kari Johnson, in Ecology's Eastern Region Office at:

Email: <u>kari.johnson@ecy.wa.gov</u> Phone: 509-329-3415

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.

No other applications are pending for government approval of other proposals affecting this property.

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

1. Compliance with the State Environmental Policy Act.

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.)

In early December 2013, Ecology learned a subsurface fire had started in a small section of the Pasco Landfill Site near the interface between the Balefill Area and Zone A. The fire's lateral and vertical extent were investigated in early 2014. Limited soil cover repairs were conducted within the area where ground settlement and soil cracks were observed at the western edge of the Balefill Area. A thermocouple array was installed within the general area where the subsurface fire was believed to be occurring. Temperatures of 700 degrees F and greater have been recorded at selected depth intervals within the waste mass.

Because a subsurface fire is burning within the Balefill portion of the Pasco Landfill Site, Ecology is requiring the PLPs to take the following remedial actions at the Site:

- 1. Develop an Interim Action Work Plan describing a preferred method (or methods) to promptly extinguish the Balefill Area subsurface fire at the Pasco Landfill NPL Site (Site). This work plan also shall include necessary monitoring activities to verify both the short-term and long-term success of these actions.
- 2. Implement the fire extinguishment activities and the associated performance monitoring activities described in the Ecology approved work plan.
- 3. Develop a plan detailing an engineered and/or operational approach to minimize, to the extent practicable, the potential for future subsurface combustion events within waste materials located near the Zone A perimeter.

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 Pasco Sanitary Landfill site is located about 1.5 miles northeast of the city of Pasco, Washington. The landfill is on Dietrich Road north of the intersection of Kahlotus Road with U.S. Highway 12 (see Figure 1). The subsurface fire is occurring at the western edge of the Balefill Area, adjacent to the Zone A drum repository area. For the purpose of this SEPA Checklist, Zone A, the Balefill Area, and the immediately adjacent areas are considered the Project Area. The Project Area is located in the southwest quarter of Section 15, the northeast Quarter of Section 22, Township 9 North, and Range 30 East. The Project Area is made up of portions of two separate parcels:

- Parcel Number: 113-580-091 (owned by the Pasco Sanitary Landfill)
- Parcel Number: 113-580-082 (owned by the Pasco Sanitary Landfill)

# **B.** ENVIRONMENTAL ELEMENTS

### 1. Earth

a. General description of the site

(circle one): Flat, <u>rolling</u>, hilly, steep slopes, mountainous,

other \_\_\_\_\_

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

The steepest slope at the project Area is approximately 28% on the eastern edge of Zone A bordering the Balefill Area. The slope is engineered and stable.

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 prime farmland.

The native surface soils at the Project Area are generally sandy loam topsoil derived from wind-blown eolian deposits. These surficial deposits are underlain by thin layered beds of fine sands and silts locally known as the Touchet Beds. The Touchet Beds are 20-30 feet thick locally. The Touchet Bed soils are underlain by silts, sands, and gravels of the Upper Pasco Gravels. Soil materials placed atop the Balefill Area and Zone A to serve as engineered cover material consist largely of local borrow source material, dominated by fine- to medium-grained sand and silty sand.

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

Active ground subsidence is occurring in the immediate area where the Balefill Area Subsurface fire is occurring. Differential settlement of the RCRA C cover system also has been observed at Zone A. In other portions of the Balefill disposal area, beyond the limits of the landfill fire, localized settlement appears to have occurred in selected areas. Additional abrupt subsidence could occur at any time in the area of the fire.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Routine placement of soil fill material has been occurring in the immediate vicinity where the landfill fire was first reported. Soil cracking and progressive ground settlement have been observed since December 2013. It is not known at this time if the proposed fire extinguishment activities will result in the placement of additional fill materials. If soil fill placement is required, the surficial soil materials will be size classed properly to minimize potential wind-related erosion.

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

Not anticipated. Some wind-related erosion of surficial soils has occurred in this area in the past

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

None expected.

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

Depending on the actions taken to extinguish the fire, any surface soil disturbances may require additional fill placement to re-establish site grades. If soil fill placement is required, the surficial soil materials must be size classed properly to minimize potential wind-related erosion.

# 2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Dust could possibly be generated during potential actions to extinguish the Balefill Area fire. Some smoke from the ongoing fire may also be emitted during extinguishment of the fire. No additional emissions are expected upon completion of the fire abatement work and associated site grading.

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guidance updated March 2012

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:

Vehicles and equipment not in use will be shut off. Dust that is generated during construction activities will be monitored as appropriate. Dust suppression actions (e.g., water spraying or misting) will be performed, as required. The Fire Suppression Work Plan will address measures that will be taken to manage any smoke that may be generated during the active fire abatement work.

# 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.

No.

- 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.
  - No.
- 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.

Not applicable.

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

No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. No. 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.

# b. Ground Water:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Water may be discharged to the ground to manage the existing landfill fire.

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.

No waste material will be discharged.

#### c. Water runoff (including stormwater):

 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.

It is possible that water could be applied to help extinguish any burning material – either in place, or within a designated waste spreading and treatment area. If a waste spreading area is used for purposes of water spraying/quenching/cooling, this area will be constructed to capture and collect any applied water. Efforts will be made to minimize the amount of water used so as to minimize the potential for inadvertent carry-down or vertical migration of any waste-related hazardous substances. Water which percolates into the local soils could eventually reach the underlying groundwater system, located at a depth of 50-60 feet below ground.

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

See response above to 3.c.1.

 d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: If it becomes necessary to apply water to burning material, the least amount of water possible will be applied.

# 4. Plants

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

\_\_\_\_deciduous tree: alder, maple, aspen, other

\_\_\_\_evergreen tree: fir, cedar, pine, other

<u>X</u>shrubs

<u>X</u>grass

\_\_\_\_pasture

\_\_\_\_crop or grain

wet soil plants: cattail, buttercup, bullrush, 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?

None expected.

c. List threatened or endangered species known to be on or near the site.

None.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None proposed or anticipated.

## 5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

> birds: <u>hawk</u>, heron, eagle, <u>songbirds</u>, other: <u>Canadian geese, chucker</u>, <u>owls</u> mammals: deer, bear, elk, beaver, other: <u>coyote, ground squirrel</u>, <u>rabbit/hare</u>

fish: bass, salmon, trout, herring, shellfish, other \_\_\_\_

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

No threatened or endangered species are known to occur on or within  $\frac{1}{2}$  mile of the Project Area.

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

The Project Area is in the Pacific Flyway, but does not have habitat to support migratory birds.

d. Proposed measures to preserve or enhance wildlife, if any:

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.

Following completion of this project, it is not anticipated that any energy will be required.

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.

Yes. This work is being conducted at a contaminated site in an effort to remediate impacts to the environment from chemical wastes. The current Balefill Area subsurface fire is an unanticipated and undesirable event. Potential health and safety risks and will be evaluated within the Work Plan to be developed by the PLPs.

1) Describe special emergency services that might be required.

In the event an emergency situation arises during the proposed work that requires immediate response from medically trained professionals, personnel will be required to call 911, to alert emergency care professionals including the Fire Department, Hazardous Material Responders, and emergency medical responders.

2) Proposed measures to reduce or control environmental health hazards, if any:

To help minimize chemical exposure, appropriate personal protective equipment (PPE) will be worn during Project Area operations as required. Expected PPE use will include hard hats, work boots, appropriate gloves, protective eyewear, ear protection, and Tyvek coveralls as necessary. Air monitoring will occur to evaluate air quality within the work zone.

All Project Area workers will have current hazardous waste operation certification and medical clearance to wear an appropriately equipped respirator, if required.

b. Noise

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

None.

2) 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.

Intermittent short-term noise may be generated during work within the Project Area between the hours of 7:00 AM and 7:00 PM.

3) Proposed measures to reduce or control noise impacts, if any: None proposed or required.

# 8. Land and shoreline use

a. What is the current use of the site and adjacent properties?

The Pasco Landfill Site is a former landfill facility currently undergoing a state-led cleanup action in accordance with, and under the authority of, the Model Toxics Control Act (MTCA) Chapter 70.105D RCW, and the implementing regulations, Chapter 173-340 WAC. Adjacent properties are used primarily for agricultural purposes. The property immediately south of the site is used as a municipal solid waste transfer station. Areas farther south and southwest are predominantly commercial and light industrial.

b. Has the site been used for agriculture? If so, describe.

Prior to 1955, the PSL Site was characterized as unimproved grassland with both stable and active sand dunes. It is unknown whether this land was used for agricultural purposes prior to this time.

c. Describe any structures on the site.

None within the Project Area.

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

No.

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

Both parcels are currently zoned as Agricultural Production 20.

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

The PSL Site is not currently proposed to undergo redevelopment. The Franklin County Growth Management Comprehensive Plan designates the parcels as Agricultural.

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

Not applicable.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No.

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

None.

i. Approximately how many people would the completed project displace?

None.

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

Not applicable.

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

The existing site is undergoing site cleanup and is not an operating facility. The proposed scope of work is compatible with the current land use plans for the PSL Site.

- 9. Housing
- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Not applicable.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Not applicable.

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

Not applicable.

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## 10. Aesthetics

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

No structures are currently proposed.

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

None.

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

None.

## 11. 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?

Not applicable.

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:

None.

## 12. Recreation

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

The property west of the PSL site is agricultural farmland and is known to be used seasonally for bird hunting.

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:

None.

# 13. Historic and cultural preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None known.

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

Not applicable.

## 14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans; if any.

The PSL Site is accessed by heading west on E. Lewis/Pasco-Kahlotus Road from the Kahlotus exit on Interstate 182/State Highway 12 and then turning west onto Commercial Avenue and north onto Dietrich Road.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No. It is approximately 1.5 miles to the nearest bus stop in downtown Pasco.

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c. How many parking spaces would the completed project have? How many would the project eliminate?

Not applicable. Area is not intended for vehicular traffic or parking.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

None.

g. Proposed measures to reduce or control transportation impacts, if any:

Not applicable.

- 15. Public services
- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Not applicable.

### 16. Utilities

 a. Circle utilities currently available at the site: <u>electricity</u>, natural gas, <u>water, refuse service</u>, telephone, sanitary sewer, septic system, other 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.

No changes are proposed to the utilities that currently service the Project Area.

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 Charles Gruenenfelder

Position and Agency/Organization Site Manager, WA Department of Ecology Date Submitted: April 28, 2014