



ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

The environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply". Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, 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.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the works "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable: **Former Frank Wear site, Soil Vapor Extraction (SVE) System and In-situ Bioremediation**
2. Name of applicant: **Washington State Department of Ecology**
3. Address and phone number of applicant and contact person:
Jason Shira
Washington State Department of Ecology
15 W. Yakima Avenue, Suite 200
Yakima, WA 98902
(509) 454-7834
4. Date checklist prepared: **November 16, 2011**
5. Agency requesting checklist: **Washington State Department of Ecology**
6. Proposed time or schedule (including phasing, if applicable): **January 2012 SVE construction; August 2012 Draft Cleanup Action Plan; February 2013 In-situ remediation system construction**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? **Not at this time**
8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. **There are several environmental reports that have been prepared for the former Frank Wear Dry Cleaning Site and surrounding area.**
1989. SAIC. Preliminary Assessment Report Frank Wear Cleaners.
1995. AGRA, Inc. Soil Vapor Study 106 South 3rd Avenue Yakima, Washington.
1996. Maxim Technologies, Inc. Remedial Investigation and Interim Action Frank Wear Cleaners.
2001. Fulcrum, Inc. Voluntary Cleanup Report Frank Wear Cleaners.
2007. Hart Crowser, Inc. Feasibility Study Frank Wear.
2011. Kennedy/Jenks, Inc. Vapor Intrusion Study Report Former Frank Wear Cleaners Site.
9. Do you know whether applications are pending for governmental approvals or other proposals directly affecting the property covered by your proposal? If yes, explain. **No.**
10. List any government approvals or permits that will be needed for your proposal, if known. **An air discharge permit from the Yakima Clean Air Agency may be required for discharge of treated soil vapors to the atmosphere. Underground Injection Control Permit from Department of Ecology maybe required for addition of amendments to groundwater during recirculation. Yakima City approval for installation of wells in right-of-ways; and possible temporary discharge of purge water to POTW (<500-gallons/event).**
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.) **The project includes design and construction of a soil vapor extraction system (SVE) to remove solvents from unsaturated soils and create a negative vacuum below the adjacent daycare building (Buckle My Shoes Early Learning Center located at 108 South Third Street in Yakima, Washington). Soil vapor will be removed from four vertical SVE wells completed in the vadose zone. The SVE system will include a vapor phase treatment system to remove chlorinated solvents for the discharged air. An additional phase includes design and construction of an in-situ remediation system to treat contaminated groundwater. The key component for the in-situ remediation approach is a groundwater recirculation system. We will install of up to eight new groundwater wells, and using five of the existing monitoring wells for extraction and injection. Contaminants in the saturated phase would be destroyed through reductive dechlorination and captured by activated carbon. Based on subsurface conditions following completion of the dechlorination process, the recirculation system may be used to accelerate returning the aquifer to natural, oxidative conditions conducive to rapid degradation of any remaining vinyl chloride (a PCE daughter product).**
12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including 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 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 SVE project will be completed at the at the former Frank Wear Dry Cleaners property located at 106 South Third Avenue in Yakima, Washington. One of the SVE wells will be located on the adjacent property to the south (Buckle My Shoes Early Learning Center). The nearest intersection is West Chestnut Avenue and South 3rd Avenue in Yakima, Washington. The groundwater in-situ remediation project will occur across the entire Site (within the block bounded north/south by Chestnut and Walnut and east/west by 3rd Avenue and 4th Avenue).**

TO BE COMPLETED BY APPLICANT

EVALUATION FOR
AGENCY USE ONLY

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (circle one) Flat, rolling, hilly, steep slopes, mountainous, other _____.
- b. What is the steepest slope on the site (approximate percent slope)? The site is flat (no slope).
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, mulch)? If you know the classification of agricultural soils, specify them and note any prime farmland. **Surface and subsurface soils consist of sand and gravel.**
- d. Are there any surface indications or history of unstable soils in the immediate vicinity? If so, describe. **No.**
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill. **A small area (approximately 20 feet by 30 feet) will require grading for a concrete pad.**
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. **No.**
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? **Approximately 15 to 20 percent.**
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: **Standard stormwater construction procedures, as needed.**

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 know. **Emission from the SVE system will be treated in an onsite treatment unit consisting of granular activated carbon. The volume of airflow is unknown at this time.**
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. **No**
- c. Proposed measure to reduce or control emissions or other impacts to air, if any: **Installation and operation of soil vapor treatment unit for the SVE system using granular activated carbon.**

3. Water

TO BE COMPLETED BY APPLICANT

EVALUATION FOR
AGENCY USE ONLY

a. Surface:

- 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. **NA, there will be no significant onsite filling.**
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. **No, surface water withdrawal or diversion will not be performed.**
- 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:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known. **Groundwater will be extracted, amended, and injected to create a groundwater recirculation cell for the purposes of containing treating contaminated groundwater. Quantities of groundwater are unknown at this time. Purge water generated from characterization of the site will be managed according to local, state and federal regulations.**
- 2) Describe the 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 wastes will be discharged to the ground.**

c. Water Runoff (including storm water):

- 1) 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. **Only a small concrete pad (approximately 20 feet by 30 feet) will be constructed with the SVE system. Stormwater will runoff to the surrounding soils adjacent to the concrete pad.**
- 2) Could waste materials enter ground or surface waters? If so, generally describe. **No.**

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: **Condensate (if any) from the SVE may contain volatile organic compounds (VOCs) and will be contained in a knock-out can. Purge water generated during**

characterization of the site will be managed according to local, state and federal regulations.

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

shrubs

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? **No vegetation will be removed.**

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.**

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: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, other:

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

b. List any threatened or endangered species known to be on or near the site. **None.**

c. Is the site part of a migration route? If so, explain. **No.**

d. Proposed measures to preserve or enhance wildlife, if any: **None needed.**

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 if will be used for heating, manufacturing, etc. **Electrical power will be required to run the SVE system and groundwater recirculation equipment.**

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: **Possible energy conservation measures will be determined in the design stage.**

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of

TO BE COMPLETED BY APPLICANT

EVALUATION FOR
AGENCY USE ONLY

fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. **None anticipated. Any possible environmental health hazards that may be identified will be mitigated during the design.**

- 1) Describe special emergency services that might be required. **No emergency services are anticipated.**
- 2) Proposed measures to reduce or control environmental health hazards, if any: **The electrical equipment associated with the SVE and groundwater recirculation system will be contained within an onsite building (wood shed) and surrounded by a 6-foot tall fence topped with razor wire.**

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? **Surrounding noise will not impact this project.**
- 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. **The blower associated with the SVE and recirculation system may generate a background noise. Noise from the equipment will be mitigated using a combination of mechanical silencer and a small wood structure over the noise generating equipment. The SVE system will operate 24-hours per day, 7 days per week.**
- 3) Proposed measures to reduce or control noise impacts, if any: **Noise from the equipment will be mitigated using a combination of mechanical silencer and a small wood structure over the noise generating equipment.**

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? **Industrial/commercial.**
- b. Has the site been used for agriculture? If so, describe. **Possibly over 50 years ago.**
- c. Describe any structures on the site. **The site is located in a city setting and is surrounded by commercial and industrial buildings. Buckle My Shoes Early Learning Center (located to the south) is used as daycare facility.**
- d. Will any structures be demolished? If so, what? **No.**
- e. What is the current zoning classification of the site? **CBD (Central Business District)**
- f. What is the current comprehensive plan designation of the site **CBD (Central Business District) Core Commercial**
- g. If applicable, what is the current shoreline master program designation of the site? **NA**
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify. **No.**

TO BE COMPLETED BY APPLICANT

EVALUATION FOR
AGENCY USE ONLY

- i. Approximately how many people would reside or work in the completed project? **None.**
- j. Approximately how many people would the completed project displace? **None.**
- k. Proposed measures to avoid or reduce displacement impacts, if any? **NA**
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: **Consult with the City of Yakima during design process.**

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. **NA**
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. **None**
- c. Proposed measures to reduce or control housing impacts, if any: **NA**

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? **A small wood shed will be constructed. The estimated height is approximately 12 feet or less.**
- b. What views in the immediate vicinity would be altered or obstructed? **None**
- c. Proposed measures to reduce or control aesthetic impacts, if any: **NA**

11. Light and Glare

- a. What type of light or glare will the proposal produce? **None.** What time of day would it mainly occur? **NA.**
- b. Could light or glare from the finished project be a safety hazard or interfere with views? **NA.**
- 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? **NA.**

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity? **None.**
- 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: **NA.**

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. **None we are aware of.**
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site. **None.**
- c. Proposed measures to reduce or control impacts, if any: **NA.**

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 nearest intersection is West Chestnut Avenue and South 3rd Avenue in Yakima, Washington. Access to the property will be from either from South 3rd Street or an alley located west of the property.**
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop? **Yes.**
- c. How many parking spaces would the completed project have? How many would the project eliminate? **None.**
- 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 new roads will be required.**
- 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. **Approximately one site visit per month.**
- g. Proposed measures to reduce or control transportation impacts, if any: **NA.**

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)? **No.** If so, generally describe. **NA.**
- b. Proposed measures to reduce or control direct impacts on public services, if any. **NA.**

16. Utilities

- a. Circle utilities currently available at the site: **electricity, natural gas, water, refuse service, 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. **To operate the SVE and recirculation system, electrical power will be needed from the local provider. Purge water generated during characterization might be temporary discharged to the City of Yakima POTW, which will require a local discharge permit.**

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: Valerie Bound

Date Submitted: 11-29-11

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS – **THIS IS A PROJECT**
(do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

- 1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Proposed measures to avoid or reduce such increases are:

- 2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

- 3. How would the proposal be likely to deplete energy or natural resources?

Proposed measures to protect or conserve energy and natural resources are:

- 4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Proposed measures to protect such resources or to avoid or reduce impacts are:

- 5. How would the proposal be likely to affect land and shoreline use, including whether it

TO BE COMPLETED BY APPLICANT

EVALUATION FOR
AGENCY USE ONLY

would allow or encourage land or shoreline uses incompatible with existing plans?

Proposed measures to avoid or reduce shoreline and land use impacts are:

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Proposed measures to reduce or respond to such demand(s) are:

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.