



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 words "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:

Monte Cristo Mining Area remedial investigation

2. Name of applicant:

State of Washington Department of Ecology Toxics Cleanup Program

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

**State of Washington Department of Ecology
Central Regional Office - Toxics Cleanup Program
Jason Shira (509) 454-7834 or Valerie Bound (509) 454-7886**

15 W. Yakima Avenue, Suite 200
Yakima, WA 98902

4. Date checklist prepared:

July 6, 2011

5. Agency requesting checklist:

State of Washington Department of Ecology

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

Begin remedial investigation summer 2011. Continue remedial investigation during field seasons 2012 and 2013.

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

Yes, Ecology will conduct a feasibility study once the remedial investigation is complete. Following the feasibility study Ecology will draft a cleanup action plan then implement the remedial action.

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

Havey, M. and Bailey, M. Monte Cristo Mining Area Phase I Spatial Analysis Summary Report Snohomish, Washington. April 20, 2011.

Havey, M. and Bailey, M. Monte Cristo Mining Area Remedial Investigation Phase I Data Report, Task 2.4. April 5, 2011.

Moyle, P.R and D. G. Wasley. Engineering Evaluation/Cost Analysis Monte Cristo Mining Area Mt. Baker-Snoqualmie National Forest Snohomish County, Washington. April 2010.

Amann M. A and R. H Lambeth. Site Inspection Report Monte Cristo Mining Area Mt. Baker-Snoqualmie National Forest. December 2007.

Crofoot, G. W. and M. S. O'Brien. Monte Cristo Mine Area Site Hazard Assessment. January 2004.

Wolff, F. E., Donald, T. M., and D. K. Norman. Inactive and Abandoned Mine Lands - Mystery and Justice Mines, Monte Cristo Mining District, Snohomish County, Washington. April 2003. WDGER Open File Report 2003-7.

Raforth, R. L., Norman, D. K. and Art Johnson. Second Screening Investigation of Water and Sediment Quality of Creeks in Ten Washington Mining Districts with Emphasis on Metals. June 2002. Ecology Publication No. 02-03-024.

USDA Forest Service Mt. Baker-Snoqualmie National Forest. Abbreviated Preliminary Assessment Monte Cristo Concentrator. October 2002.

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.

Yes, United States Department of Agriculture Forest Service is currently awaiting a biological opinion from the United States Fish and Wildlife Service concerning a non-time critical removal action.

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

None known at this time. The remedial investigation is being conducted under the Model Toxics Control Act (MTCA 173-340 WAC) authority, which exempt the action from state and local permits. The substantive requirements of each permit, where applicable, will be met.

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 purpose of the remedial investigation (RI) is to collect data, develop a conceptual site model, and evaluate the nature and extent of releases of hazardous substances (as defined by RCW 70.105D.020(10)) from the Monte Cristo Mining Area (MCMA) in order to, gather the necessary data to support the Feasibility Study (FS). Ecology plans to conduct a basin-wide RI. The first phase of the project (Phase 1) examined existing data, and compiled validated data into a Geodatabase for spatial analysis. The next phase (Phase 2) will evaluate additional mine sites, background soil concentrations, and terrestrial organisms within the MCMA. In addition, we will evaluate sediments in Monte Cristo Lake and impacts to aquatic organisms. Future phases will evaluate surface water, sediments in streams, and organisms (terrestrial and aquatic).

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 project is located throughout multiple sections in T29N R11E. A vicinity map is attached to the end of SEPA checklist.

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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)?
>100%

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.

Getchell series, rock outcrops, cryumbrepts/andic cryumbrepts.

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

Yes, avalanche chutes and steep ravines

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

Not applicable

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

No clearing or construction planned for this proposal.

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

None.

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

Planned activities will disturb surface soils to the extent needed to collect soil samples with a hand auger or trowel. Surface material removed to facilitate sampling will be replaced to reduce impact to soil surface.

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?

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If any, generally describe and give approximate quantities if know.

None.

- 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:

Not applicable.

3. Water

- 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.

Yes, Glacier Creek, Seventysix Creek, Weden Creek, South Fork Sauk River, and Monte Cristo Lake.

- 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.

Yes, soil sampling within 200 feet of waterbodies, collection of sediment samples from streams and Monte Cristo Lake, and surface water sampling.

- 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

None.

- 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.

Do not know at this time, but expect some areas of concern to lie within a 100-year floodplain.

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

Groundwater may be withdrawn for the purposes of sampling only.

- 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.

Water from decontaminating soil sampling equipment may be poured onto the ground in the location where the sample was taken.

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.

Activities conducted under this proposal will not impact water runoff (storm water)

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

Waste generated from sampling will be packed out. Waste generated by individuals conducting remedial investigation will be handled by existing system (out house).

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

Replace surface soil removed during sampling.

Pack out waste generated from sampling.

Use existing system to handle human waste.

4. Plants

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

___ deciduous tree: alder, maple, aspen, other

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- ___ 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?

None.

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

Choris' bog-orchid (*Platanthera chorisiana*)

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

None needed...it's a beautiful forest.

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.

Marbled Murrelet, Spotted Owl, Puget Sound bull trout, Puget Sound steelhead, Puget Sound Chinook

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

Yes, Pacific Flyway.

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

Depends on outcome of remedial investigation/feasibility study.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet

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the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Alkaline batteries, propane/isobutene/white gas and power bars.

- 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:

Number of trips to and from the area will be minimized by camping in vicinity.

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, a health and safety plan was prepared to address the specific risks associated with environmental sampling for hazardous substances in a remote location.

- 1) Describe special emergency services that might be required.

Search and Rescue, Helicopter evacuation.

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

Each team member will read and follow the health and safety plan. Morning team meetings will be conducted to go over risks associated with the day's activities and lessons learned from previous day.

- 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.

None.

- 3) Proposed measures to reduce or control noise impacts, if any:

Not applicable.

8. Land and Shoreline Use

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

Recreation: hiking, mountain biking, rock collecting, mountain climbing, archeology, and cultural/historic preservation.

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

No.

- c. Describe any structures on the site.

Structures at the Monte Cristo Townsite include private cabins and USFS cabins.

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

No.

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

Forestry.

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

National Forest (includes some private and non-federal lands)

- 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.

Wetlands and old growth forests are in the area.

- 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?

Not applicable.

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

The remedial investigation activities will not impact existing and projected land uses and plans.

9. Housing

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

None.

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:

None.

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?

Not applicable.

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

None.

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

11. Light and Glare

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- 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?

No.

- 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?

12. Recreation

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

Hiking, camping, mountain biking, mountaineering, rock collecting, archeology, cultural/historic preservation, etc.

- 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.

Yes, cultural features in the area are registered with the Department of Archeology and Historic Preservation.

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

Mining equipment and evidence of historical mining activity (building foundations, tails, waste rock dumps, etc)

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

The remedial investigation will impact cultural resources to the extent of collecting soil/mining waste samples from waste rock dumps.

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.

Site access via helicopter.

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

No.

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

Not applicable.

- 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.

Air.

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

Not applicable.

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

Use of helicopter from Barlow Pass to Monte Cristo Townsite to reduce number of trips and impacts to site access trail.

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.

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No.

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

None.

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.

None.

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: 

Date Submitted: August 15 2011

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS
(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?

The proposal is to conduct a remedial investigation to characterize the extent and nature of a hazardous substance release(s) associated with historical mining activity. Following the remedial investigation a feasibility study will determine how to reduce the risk to human health and the environment posed by hazardous substances that have become located on/in soil, water, and sediments.

Proposed measures to avoid or reduce such increases are:

The feasibility study will propose measures to avoid or reduce risk.

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

Measures will be taken to limit affects on plants, animal, and fish. Fish tissue sampling is proposed to determine fish uptake of hazardous substances.

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

Measures to protect or conserve plants, animals, and fish will be addressed in the work plan to implement the remedial action.

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

The proposed work is intended to characterize the extent hazardous substances released into the environment from natural resource extraction. However, future actions may consume a nominal amount of petroleum for transportation of personnel, equipment, and waste. Local country rock will be quarried for construction of an onsite repository.

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

Proposed measures to protect or conserve energy and natural resources will be addressed in the feasibility study.

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?

The proposed activity is intended to determine the if release of hazardous substances has impacted the environment, which includes wilderness, threatened or endangered species habitat, historic or cultural sites, wetlands, lakes, and rivers.

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

Proposed measures to protect or conserve energy and natural resources will be addressed in the feasibility study.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The proposed activity will not affect land and shoreline use.

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

Not applicable.

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

The proposed activity will not increase demands on transportation or public services and utilities.

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

Not applicable.

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

The proposed activity is being conducted under the Model Toxics Control Act authority, which requires compliance with the substantive requirements of applicable local, state, and federal laws.

Monte Cristo Mining Area - Vicinity Map

