

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. 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. 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 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.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. 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: [\[help\]](#)

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer 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. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background [\[help\]](#)

1. Name of proposed project, if applicable: [\[help\]](#)

Point Feed Conversion Project

2. Name of applicant: [\[help\]](#)

Intalco Aluminum LLC

3. Address and phone number of applicant and contact person: [\[help\]](#)

Kathryn Mitchell
4050 Mountain View Road, Ferndale WA, 98248
(360) 961-6720

4. Date checklist prepared: [\[help\]](#)

December 11, 2017

5. Agency requesting checklist: [\[help\]](#)

Washington State Department of Ecology

6. Proposed timing or schedule (including phasing, if applicable): [\[help\]](#)

March 1, 2018 – January 1, 2022

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [\[help\]](#)

No.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [\[help\]](#)

Notice of Construction (NOC) Application prepared for the Department of Ecology.

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. [\[help\]](#)

No

10. List any government approvals or permits that will be needed for your proposal, if known. [\[help\]](#)

Department of Ecology NOC

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.) [\[help\]](#)

Intalco operates three potlines (A, B, and C), consisting of a series of Side-Work Prebake (SWPB) pots. With the current project, Intalco proposes to convert these potlines to a Center Work Prebake (CWPB) or Point Feed (PF) configuration. The anticipated results from the conversion to CWPB point feeding is to achieve higher current efficiency, increase pot stability, and lower emissions.

PF technology automates the addition of alumina to the smelting pot in smaller, almost continuous quantities. Bins installed on a pot's superstructure store the alumina, which is fed into the pot in precise amounts via automated feeders. Remotely operated tools break through the crust, and the fume exhaust system captures gases emitted when the crust is opened. Unlike the jackhammer method currently in use at Intalco, the pot hood

remains closed during the feeding process. The jackhammers are mounted on cranes to break through the crust so operators can add the alumina via a dispensing chute.

The major benefit of converting to point feed technology is the significant reduction in GHG emissions through decreased anode effect rates. Anode effects are undesired side reactions that produce large amounts of perfluorocarbons (PFCs), which are greenhouse gases with a higher global warming potential than carbon dioxide. Anode effects occur when the alumina concentration in molten bath is not sufficient. Point feed algorithms automate the alumina feeding to keep alumina in solution at optimal concentrations.

An additional benefit is the increased fume capture efficiency by not opening the pot hood to add alumina. In addition to the environmental benefit, the conversion to point feed technology benefits the workers as the reduced duration of open hood time reduces their exposure to molten metal, heat, and potroom emissions.

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. [\[help\]](#)

The proposed project is occurring at the existing potlines located within the production area of Intalco Aluminum LLC. Intalco Aluminum LLC is located at 4050 Mountain View Road, Ferndale WA, 98248. A site map was included within the Point Feed Conversion Project NOC application as Figure 1.

B. ENVIRONMENTAL ELEMENTS [\[help\]](#)

1. Earth [\[help\]](#)

a. General description of the site: [\[help\]](#)

(circle one): **Flat, rolling**, hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)? [\[help\]](#)

Upland slopes vary from 0 to 15%, typically 1 to 5% in and around the developed facility area. Typical ditch, culvert and paved areas have 0.4- 1% slopes.

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 agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [\[help\]](#)

Silty clay, sand, gravel, silty sand and sandy silt (Bellingham-Kulshan Glaciomarine Drift, Esperance Sand, Cherry Point Formation)

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [\[help\]](#)
No
- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [\[help\]](#)
None
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [\[help\]](#)
No
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [\[help\]](#)
The amount of impervious surface will not change.
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [\[help\]](#)
Not applicable. No excavation or earth disturbance will occur.

2. Air [\[help\]](#)

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [\[help\]](#)

During conversion activities, fugitive dust emissions may occur.

This project will significantly reduce CO₂e emissions and all other known emissions with the exception of nitrogen oxides (NO_x) and carbonyl sulfide (COS). Refer to the NOC application for additional details of Project air emissions, including potential emissions during the conversion process.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [\[help\]](#)
There are no off site sources of emissions or odor that will affect this proposal.
- c. Proposed measures to reduce or control emissions or other impacts to air, if any: [\[help\]](#)
Intalco's SWPB reduction cell technology requires each cell to be opened along one side every 4 hours in order to dispense approximately 800 pounds of alumina into the reduction cell. CWPB reduction cell technology uses computer controlled point feeders to automatically add alumina to the cells in much smaller quantities according to proprietary algorithms. The CWPB will reduce the frequency and durations of open hood time. As a result of decreased time open hood time, more emissions will be routed to the dry scrubber

than the wet scrubbers resulting in increased removal efficiencies of those emissions which are controlled by the dry scrubbers (TF, PM, etc).

3. Water [\[help\]](#)

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. [\[help\]](#)

The Strait of Georgia is the surface water body that is closest to the site. It is located between Vancouver Island and the mainland coast of British Columbia, the Strait stretches from the US border (where it adjoins Puget Sound), north to Campbell River and the Discovery Islands of Canada.

- 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. [\[help\]](#)

No, this project will not require any work over, in or adjacent to the water described in #1 above.

- 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. [\[help\]](#)

There will be no fill or dredge materials that will be placed in or removed from surface waters or wetland.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

There will be no surface water withdrawals or diversions as a result of this project.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [\[help\]](#)

This project does not lie within a 100 year floodplain.

- 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. [\[help\]](#)

This project does not involve any discharges of waste materials to surface waters.

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

No

- 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. [\[help\]](#)

There will be no waste material discharged into ground water or septic tanks.

c. Water runoff (including stormwater):

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. [\[help\]](#)

No changes will be made to the current stormwater handling method. Currently, stormwater is handled in the existing stormwater treatment system and discharged to the Strait of Georgia under NPDES permit # WA000295-0.

2) Could waste materials enter ground or surface waters? If so, generally describe. [\[help\]](#)

No

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. [\[help\]](#)

No

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any: [\[help\]](#)

None

4. **Plants** [\[help\]](#)

a. Check the types of vegetation found on the site: [\[help\]](#)

deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other

shrubs

grass

pasture

crop or grain

Orchards, vineyards or other permanent crops.

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? [\[help\]](#)

There will be no vegetation removed or altered as a result of this project.

c. List threatened and endangered species known to be on or near the site. [\[help\]](#)

None known

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [\[help\]](#)

None

- e. List all noxious weeds and invasive species known to be on or near the site. [\[help\]](#)

None known

5. Animals [\[help\]](#)

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. [\[help\]](#)

Examples include:

birds: hawk, heron, eagle, songbirds, other:

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

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

- b. List any threatened and endangered species known to be on or near the site. [\[help\]](#)

bald eagle, salmon

- c. Is the site part of a migration route? If so, explain. [\[help\]](#)

Yes – the Pacific Flyway and the Strait of Georgia

- d. Proposed measures to preserve or enhance wildlife, if any: [\[help\]](#)

None

- e. List any invasive animal species known to be on or near the site. [\[help\]](#)

None known

6. Energy and Natural Resources [\[help\]](#)

- 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. [\[help\]](#)

Installing point feed technology will not increase electrical demand or change the kinds of energy used to power the potlines. Intalco purchases power from BPA and the market.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [\[help\]](#)

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: [\[help\]](#)

This project would improve the energy efficiency of making Aluminum (current efficiency improves).

7. Environmental Health [\[help\]](#)

- 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. [\[help\]](#)

This project would reduce environmental health hazards from exposure to toxic chemicals. There is no increase in risk from fire, explosions, spills, or hazardous waste.

- 1) Describe any known or possible contamination at the site from present or past uses.

[\[help\]](#)

There is no known or possible contamination at the potline site from present or past uses.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity. [\[help\]](#)

The project will be implemented within the potline buildings which contain "pots" or "cells" of molten Aluminum.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project. [\[help\]](#)

The pots have hoods to route the majority of emissions through the dry scrubbing system. The point feed hoods will replace existing side worked, prebake hoods on operating pots. Source testing will occur during the project to ensure continued compliance with existing air operating permit limits. Once the project is complete, all emissions will decrease with the exception of NOx and COS.

- 4) Describe special emergency services that might be required. [\[help\]](#)

None. In the event of an injury, the facility will follow established protocol for industrial workplace medical evaluation and treatment.

- 5) Proposed measures to reduce or control environmental health hazards, if any: [\[help\]](#)

The facility will ensure affected facility personal wear appropriate molten metal personal protection equipment. This will include respiratory protection during hood replacement.

- b. Noise [\[help\]](#)

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

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. [\[help\]](#)

None.

3) Proposed measures to reduce or control noise impacts, if any: [\[help\]](#)

None.

8. Land and Shoreline Use [\[help\]](#)

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [\[help\]](#)

Intalco Aluminum LLC is an aluminum smelting plant. Adjacent property is zoned for industry.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [\[help\]](#)

No

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how: [\[help\]](#)

No

c. Describe any structures on the site. [\[help\]](#)

Raw material storage tanks and silos; and buildings where smelting, casting, maintenance, and administrative activities occur.

d. Will any structures be demolished? If so, what? [\[help\]](#)

No structures will be demolished.

e. What is the current zoning classification of the site? [\[help\]](#)

Heavy Impact Industrial

f. What is the current comprehensive plan designation of the site? [\[help\]](#)

Major/Port Industrial UGA

g. If applicable, what is the current shoreline master program designation of the site? [\[help\]](#)

Cherry Point Management Unit

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [\[help\]](#)

Yes, Cherry Point Management Unit. None of the proposed project will occur in this area.

- i. Approximately how many people would reside or work in the completed project? [\[help\]](#)

This project affects the type of hood and alumina feeding of the existing smelter. No significant changes in workforce are anticipated.

- j. Approximately how many people would the completed project displace? [\[help\]](#)

No significant changes in workforce are anticipated.

- k. Proposed measures to avoid or reduce displacement impacts, if any: [\[help\]](#)

Not applicable

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [\[help\]](#)

The proposed project does not require a change in land use or projected land use plans.

- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any: [\[help\]](#)

No impacts to forest and agricultural lands are anticipated.

9. Housing [\[help\]](#)

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [\[help\]](#)

None

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [\[help\]](#)

None

- c. Proposed measures to reduce or control housing impacts, if any: [\[help\]](#)

None

10. Aesthetics [\[help\]](#)

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

No structures are proposed.

- b. What views in the immediate vicinity would be altered or obstructed? [\[help\]](#)

No views in the immediate vicinity will be altered or obstructed.

- c. Proposed measures to reduce or control aesthetic impacts, if any: [\[help\]](#)

Proposed project aesthetics are consistent with current aesthetics of an aluminum production facility.

11. Light and Glare [\[help\]](#)

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [\[help\]](#)

The proposed project will not produce any additional light or glare.

- b. Could light or glare from the finished project be a safety hazard or interfere with views? [\[help\]](#)

No

- c. What existing off-site sources of light or glare may affect your proposal? [\[help\]](#)

None

- d. Proposed measures to reduce or control light and glare impacts, if any: [\[help\]](#)

There will be no light or glare impacts as a result of this project.

12. Recreation [\[help\]](#)

- a. What designated and informal recreational opportunities are in the immediate vicinity? [\[help\]](#)

None

- b. Would the proposed project displace any existing recreational uses? If so, describe. [\[help\]](#)

No

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [\[help\]](#)

As there are no recreation opportunities in the immediate vicinity, no measures are being proposed to reduce or control impacts to such.

13. Historic and cultural preservation [\[help\]](#)

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe. [\[help\]](#)

None are known

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [\[help\]](#)

None are known. No land will be disturbed.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [\[help\]](#)

None. No land will be disturbed.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required. [\[help\]](#)

None. No land will be disturbed.

14. Transportation [\[help\]](#)

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [\[help\]](#)

Mountain View Road serves the site. No additional access is proposed.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [\[help\]](#)

The site is not served by public transit.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [\[help\]](#)

No parking spaces are being proposed, none are being eliminated.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [\[help\]](#)

The proposed project will not require any new roads or streets, or improvements to existing road or streets.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [\[help\]](#)

The proposed project does not alter facility transportation methods.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [\[help\]](#)

The completed project will not generate vehicular trips.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe. [\[help\]](#)

The proposed project will not affect agricultural or forest product movement.

- h. Proposed measures to reduce or control transportation impacts, if any: [\[help\]](#)

Transportation impacts will not occur as a result of the proposed project.

15. Public Services [\[help\]](#)

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [\[help\]](#)

No

- b. Proposed measures to reduce or control direct impacts on public services, if any. [\[help\]](#)

Public services will not be impacted as a result of the proposed project.

16. Utilities [\[help\]](#)

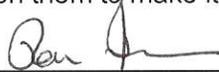
a. Circle utilities currently available at the site: [\[help\]](#)
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____

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. [\[help\]](#)

No additional utilities will be required as a result of the proposed project.

C. Signature [\[help\]](#)

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 Ronald Jorgensen

Position and Agency/Organization: Plant Manager / Intalco Aluminum LLC

Date Submitted: December 11, 2017

D. supplemental sheet for nonproject actions [\[help\]](#)

(IT IS NOT NECESSARY to 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; pro-
duction, 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 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.