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

1. Name of proposed project, if applicable:
   Qualco Generator Reconstruction

2. Name of applicant:
   Public Utility District No. 1 of Snohomish County

3. Address and phone number of applicant and contact person:
   P.U.D. No. 1 of Snohomish County                Contact Person: Adam Lewis
   P.O. Box 1107 Email: ALewis@snopud.com
   Everett, WA 98206 Phone: 425-583-0965

4. Date checklist prepared:
   August 24, 2021

5. Agency requesting checklist:
   Public Utility District No. 1 of Snohomish County

6. Proposed timing or schedule (including phasing, if applicable):
   Generator manufacture during fall 2021; installation during December 2021

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
   No further activity is planned at this time.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
   • Snohomish County Environmental Checklist (SEPA Checklist) for the Monroe Honor Farm Dairy Digester, prepared by Tulalip Tribes. Submitted April 20, 2005.
   • “Order of Approval to Construct, Install, or Establish Dairy Manure Digester” Issued by Puget Sound Clean Air Agency, July 1, 2008 to Qualco Energy Corporation and Tulalip Tribes of Washington.

9. Describe applications pending for governmental approvals of other proposals directly affecting the property covered by this proposal.
   None.

10. Governmental approvals or permits that will be needed for this proposal.
Snohomish County PUD:
- SEPA Checklist and Threshold Determination.

Snohomish County Planning and Development Services:
- Existing Administrative Conditional Use permit

Puget Sound Clean Air Agency:
- Notice of Construction for Gas Turbine Engines

11. Description of the proposal, including the proposed uses and the size of the project and site.

Install a new generator at the existing Qualco Biogas Facility to supplement the existing generator. The facility currently includes at 450 kW electric generating facility fueled by the biogas generated by the dairy digester. Snohomish County Public Utility District (the District) plans to install a new generator which the District will own and operate. This will result in additional renewable electricity generation from the existing facility’s waste stream without changing emissions.

Existing electric distribution lines are sufficient for the additional generation, however a new meter will be installed. Local distribution line upgrades are being conducted in the vicinity of the Qualco facility, but are independent of this work and will be reviewed and permitted separately. No land disturbing utility upgrades are needed as a result of this proposal.

The existing facility includes a generator and flare previously evaluated and permitted (Figure 1). The flare allows excess gas to be burned off to prevent it building up inside the facility. The proposed project would divert a proportion of gas through the new generator instead of the methane flare (Figure 2). Overall emissions are a component of the existing facility and are not increased or decreased by the proposed project.
12. Location of the proposal. Provide 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 available.

**Street Address:** 18117 203rd St SE, Monroe, WA (Figure 3).

**NW1/4, Section 24 Township 27 Range 06E**
B. ENVIRONMENTAL ELEMENTS

1. Earth
   a. General description of the site (underlined):
      Flat, rolling, hilly, steep slopes, mountainous, other ____________.
   b. What is the steepest slope on the site (approximate percent slope)?
      The site is mostly flat with slopes on average approximately 1-3 percent.
   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 vicinity is used for agriculture and includes prime soils and farmland.
   d. Are there 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.
      No filling or grading is planned.
   f. Could erosion occur as a result of clearing, construction, or use? If so, generally
describe.

No clearing or construction is required for the proposal.

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

No new impervious surfaces are proposed.

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

No land disturbing activity is proposed. Any vehicles used under this proposal will be parked in designated parking areas to avoid erosion from tires.

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.

The construction phase will not result in new emissions other than those from motor vehicles traveling to the site. The completed proposal includes a new generator for the biodigester which requires a reconstruction permit from the PSCAA. The main emission from the completed project is methane, the natural byproduct of the biodigester process.

The greenhouse gas emissions associated with the active construction of the project are estimated below:

- Carbon dioxide: 3.94 metric tons
- Methane: 0.09 kilograms
- Nitrous oxide: 0.12 kilograms
- Total combined in CO2 equivalents: 3.98 metric tons

Maximum annual greenhouse gas emissions from the completed project operations are estimated below. (Note that emissions are modifications of those that would inevitably be released by breakdown of the dairy and food waste that is fed to the biodigester):

- Carbon dioxide: 33,049 metric tons
- NOx: 8,282.1 kilograms

Long term emissions for the completed project are expected primarily from vehicles used by employees and visitors to the facility.
b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No off-site sources of emissions or odor in the immediate vicinity of the project site are known that will impact the proposed project.

On a larger scale off-site emissions sources and climate change may have the potential to affect the proposal.

The Puget Sound Clean Air Agency has established local ambient air standards for six criteria air pollutants and the Agency monitors and reports on these air quality observations annually. These criteria air pollutants are:

- Particulate Matter (10 micrometers and 2.5 micrometers in diameter)
- Ozone
- Nitrogen Dioxide
- Carbon Monoxide
- Sulfur Dioxide
- Lead

Efforts to address air quality in the region have successfully achieved attainment for several of the criteria pollutants however observation sites in King, Pierce and Snohomish counties continue to exceed the Puget Sound Clean Air Agency local PM2.5 health goal for fine particulate matter. Observations at sites monitoring ozone indicate ozone levels remain a concern in the region. Carbon dioxide and methane are additional emissions of interest associated with climate change with the potential to affect weather conditions in the Snohomish County region.

Potential impacts in the Pacific Northwest due to climate change have been assessed through the National Oceanic and Atmospheric Administration U.S. Global Change Research Program, and summarized in the 2009 report titled “Global Climate Change Impacts in the United States.” The projected changes include declining springtime snowpack, reduced summer stream flows, warmer water temperatures, higher ambient temperatures and rising sea levels. Such changes could result in reduced water supplies, and thus the need to seek new sources or methods to meet future water demand.

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

The District has adopted a Climate Change Policy providing guidance to address planning and operational changes necessary to reduce greenhouse gas emissions from non-generation related activities. Additionally, a secondary goal is to improve the energy efficiency of generation, transmission, distribution and administrative facilities. Total utility greenhouse gas emissions inclusive of all District operations are calculated and reported annually to the US Energy Information Agency under the 1605 (b) reporting program and this process is expected to continue.

In regard to the proposed project, all passenger vehicles and construction related vehicles and equipment are and will be properly maintained and will
comply with applicable emission control devices and federal and state air quality regulations for exhaust pipe emissions. Operational measures to increase fuel efficiency and reduce fuel related emissions will be applied when practicable and attainable at reasonable cost. Idling of combustion engines will be minimized and equipment will be turned off when applicable.

Erosion control and dust control measures will be addressed as needed. Best management practices to limit deposition of soil on roadways will be implemented and active dust suppression measures will be evaluated and applied as necessary.

Dust during construction will also be controlled through street sweeping and wetting the construction area during dry weather, if necessary.

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.

      A wetland was identified in a previous study. No work is proposed within the wetland or its buffer. A containment lagoon holds solids and liquids from the biodigester process.

      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 work over, in or adjacent to (within 200 feet) is proposed.

      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 flood plain? If so, note location on the site plan.

      Yes, zone AE. The proposal will not change the footprint of existing structures.

      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.

The farm associated with the Qualco facility has an existing well and water right. The proposal will not affect existing permissions for groundwater withdrawals.

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.

Liquids from the biodigester process are removed and applied as fertilizer to agricultural crops. Solids are used as bedding in the nurse cow barn.

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.

The activities conducted in this project take place indoors and do not affect runoff or drainage in the area of installation.

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

The Qualco facility is designed to contain all waste materials and dispose in accordance with any conditions and regulations imposed on the facility.

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

No land disturbing activity is proposed under this project action.

4. Plants

a. Identity types of vegetation found on the site

_____ deciduous tree: None
_____ evergreen tree: None
X shrubs: native varieties
X grass: native varieties
X pasture:
X crop or grain:
_____ wet soil plants: None
b. What kind and amount of vegetation will be removed or altered?

No vegetation removal is proposed for this action.

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

No threatened or endangered plant species are reported on the Washington Department of Fish and Wildlife’s Priority Habitats and Species database.

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

No landscaping is proposed.

5. Animals

a. Identify 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, barred owl
Mammals: deer, bear, elk, beaver, small mammals anticipated but were not observed.
Fish: bass, salmon, trout, herring, shellfish, other, none.

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

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

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

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.

Electrical power provided by the grid will be used to provide all energy needs for the proposed project. The proposal will generate electricity for the local electric utility, also the project proponent.

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:

Energy conservation features shall consist of those required by the Washington State Energy Code. Additional conservation measures may be employed in accordance with the goals and objectives of the Snohomish County PUD conservation initiative.

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.

Snohomish County PUD constructs and operates its facilities in compliance with applicable public safety standards. During construction, exposure to dust, fumes, and exhaust could occur. Construction Materials may contain odor causing solvents or materials that are toxic prior to appropriate application. Construction equipment will contain gasoline and diesel fuels, which could result in explosion or fire under certain circumstances. Hazardous wastes would be cleaned up in the earliest stages of site preparation, and a Site Safety Plan will apply to all construction activity that may be hazardous to workers and environmental health, through the construction phase of the project.

1) Describe special emergency services that might be required.

None beyond normal community emergency response for fire, police and emergency medical aid.

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

Oil and Hazardous Material Spills:
This facility will be designed to contain the release of diesel, oil and battery acid during routine operations and emergency conditions. Spill response procedures will be developed to address spill situations in the District’s SPCC Plan, required by federal oil use regulations. The Plan provides response procedures, and utilization of an emergency spill response contractor if initial District response resources are not sufficient.

b. Noise

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

The project will not be affected by noise from other sites.

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.

There will be short-term noise from vehicles and equipment at the site.

There will be minor noise from employee, visitor, and maintenance vehicles entering and leaving the facility following construction. The noise levels will be below permissible noise levels established by any applicable county noise ordinances.

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

Compliance with Snohomish County Noise Ordinance and designated work hours.

8. Land and Shoreline Use
   a. What is the current use of the site and adjacent properties?
      The site is located on an operating dairy farm.
   b. Has the site been used for agriculture? If so, describe.
      Yes. The site supports the continuing operation of a dairy farm. Fuel for the project derives in part from the dairy waste.
   c. Describe any structures on the site.
      The project is located within a 30’ x 60’ enclosed building. There is a dairy cow barn 100 feet north of the project building.
   d. Will any structures be demolished? If so, what?
      No.
   e. What is the current zoning classification of the site?
      Agricultural.
   f. What is the current comprehensive plan designation of the site?
      Riverway commercial farmland.
   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. The project will operate remotely and receive occasional visits for maintenance.
j. Approximately how many people would the completed project displace?
The project will not displace any workers or residences.

k. Proposed measures to avoid or reduce displacement impacts, if any:
None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
The proposed project is a slight modification of an operating concern. The biogas digester supports water quality and the ongoing viability of the dairy farm on which it is located.

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?
No new structures are proposed. The proposed generator will be located inside an existing building at the facility.

b. What views in the immediate vicinity would be altered or obstructed?
No changes to existing views will result from this proposal.

c. Proposed measures to reduce or control aesthetic impacts, if any:
None proposed.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
The proposal will not produce any new light or glare.

b. Could light or glare from the finished project be a safety hazard or interfere with views?
No changes are proposed.

c. What existing off-site sources of light or glare may affect your proposal?
None anticipated.
d. Proposed measures to reduce or control light and glare impacts, if any:  
**None proposed.**

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:  
**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.  
**None known.**

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:  
**No adverse historic or cultural impacts are anticipated from this proposal. Snohomish PUD is working closely with the Tulalip Tribes on this proposal. Any historic or cultural impacts will be evaluated, avoided or mitigated as appropriate.**

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 site is served by 203rd St. SE and Crescent Lake Rd. Access is existing.**

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?  
**The existing facility contains a gravel parking lot sufficient for employees and visitors. No parking spaces will be created or eliminated by this proposal.**
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 or streets are proposed, including electrical equipment maintenance access roads.**

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
   **The project will not use water, rail or air transportation.**

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
   **No additional vehicular trips are anticipated after the project is completed.**
   **During the generator installation, approximately 3-5 daily trips will be needed over a period of 2 months.**

g. Proposed measures to reduce or control transportation impacts, if any:
   **No transportation impact measures are proposed.**

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.
   **The site is served by Snohomish County Fire and sheriff.**

   b. Proposed measures to reduce or control direct impacts on public services, if any.
      **None.**

16. Utilities

   a. Utilities currently available at the site are underlined: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system.

   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.

      **Electricity:** Snohomish County PUD provides electric service onsite. Electricity generated by the project will be managed by Snohomish County PUD.

      **Natural Gas:** Puget Sound Energy.

      **Water:** City of Monroe Water Utility

      **Refuse Service:** City of Monroe – Republic Services.

      **Telephone:** Verizon.

      **Sanitary Sewer:** City of Monroe.

A. 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.
Name: Adam Lewis
Title: Senior Utility Analyst, Generation
PUD No. 1 of Snohomish County

Signature: ___________________________________________
Date completed: ________________________________