



A Community Group
St. Helens, OR

June 12, 2107

Oregon Public Utility Commission
scott.gibbens@state.or.us
PO Box 1088
Salem, OR 97308-1088

RE: PORTLAND GENERAL ELECTRIC: (Docket No. UP 349)

Dear PUC Commissioners:

Attached are comments from the organization, Envision Columbia County, which was formed in 2014. We are concerned citizens who respect all points of view and share common goals of retaining our quality of life and building a future for our children and grandchildren for years to come. We meet once a month, participate in Columbia County Board of Commissioners meetings, City Council meetings in St. Helens, Scappoose, Rainier and Columbia City, as well as the Port of St. Helens Commission meetings. We frequently attend workshops outside our meeting dates and keep abreast of local issues and participate in decision-making when appropriate.

Based on these guiding principles we submit to you the attached comments on the Application Docket No. UP 349 for Portland General Electric. We are concerned the staff report to the PUC is deficient in its description of the facility being sold and transferred and lacks background materials to provide guidance to your commission for approval of the application.

We are also concerned that the approval of the tank farm sale is one step closer in a long list of applications for building a large fossil fuel terminal adjacent to the PGE power generating plants at Port Westward, Oregon. A fossil fuel terminal adjacent to three generating plants creates the potential for an explosion that could eliminate the power facility and at the same time create a catastrophic environmental mess. In addition, the facility is in the Cascadia Subduction Zone which was not in the description of the facility in the staff report. These two facts alone create a double risk which is not presented to you in the staff report and which is not consistent with the public interest.

Please review our comments on the staff report deficiencies in their entirety, and vote to deny the application.

Sincerely,

Darrel Whipple
Carroll Sweet
Co-chairs, Envision Columbia County
Envisioncolumbiacounty@gmail.com

**Comments on the staff report to the
PUC Commission for the PGE Tank Farm Sale – edocket UP 349**

Submitted by
Envision Columbia County
St. Helens, OR 97051

The staff report to the Public Utility Commission for the approval of the sale of the PGE Tank Farm cites OAR 860-027-0025 as the administrative rule for approval. The staff report has insufficient information for the Public Utility Commission to base its decision on. Additional reports and information is presented below which should be evaluated by to the PUC for this tank farm sale. Lacking the inclusion of this information, the PUC should deny the application to buy and sell certain storage tanks with Columbia Pacific Bio-Refinery.

OAR 860-027-0025 - Applications for authority to sell, lease, assign, mortgage, merge, consolidate or otherwise dispose of or encumber its property, or to acquire stock, bonds, or property of another utility.

OAR 860-027-0025 (i) **A statement and general description of facilities to be disposed of**, consolidated, merged, or acquired from another utility, **giving a description of their present use and of their proposed use after disposition**, consolidation, merger, or acquisition. State whether the proposed disposition of facilities or plan for consolidation, merger, or acquisition **includes all the operating facilities of the parties to the transaction;**

Comments:

1. The facility (tank farm) has environmental, contamination and safety issues not fully stated in the staff report. Among documents not submitted to the PUC is a report entitled, "Preliminary Assessment Beaver Army Terminal (Former) Kallunki Road, Clatskanie, OR 97016." Dated, October 26, 2008 and prepared by Joanne Labaw, U.S. EPA Region 10, Superfund Program Management Section and Steve Fortuna, Oregon DEQ Environmental Cleanup Division.

The report is important because it documents eight contaminant spills at the Beaver Army Terminal between the years 1989 and 2006. The report describes the soil and hydrology of the area, and states the water table is 2 feet to 7 feet below ground level. The tank farm cleanup in the fall 2016 encountered the water table at these depths and could not remove all contaminants from the spill site (AMEC, Foster, Wheeler, 2016. Construction Completion Report PUC docket file and reference list below). The possibility that the water table and local water users already have been impacted by the spills occurring since 1989 are not listed in the PUC staff report's description of the facility. The staff report is deficient in its description of the facility being sold.

2. On February 1, 2017, Portland General Electric received a letter from Oregon DEQ. The letter is a "Notice to Current and/or Past Owners and Operators of Proposal to add Contaminated Property to DEQ's Confirmed Release List (CRL) and Inventory. Beaver Army Terminal (Former) Kallunki Road, Clatskanie, OR ECSI #3839." The Port of St. Helens is a public-owned port district and is a past owner and operator of this site. Will the out-of-state LLC walk away from any financial liability to ratepayers and the public if additional contamination occurs? If so, PGE and the public can be left with an industrial site requiring cleanup at great expense? The staff report is deficient in

reviewing this DEQ notice as a description of the facility being sold and presenting that information to the PUC.

3. Clarification is needed in the staff report on page 3, top of page, which states, “operates an ethanol production and terminalling facility....” Ethanol has not been produced at the facility owned by CPBR. The commission should not make the assumption that ethanol is being produced at this facility. Since the purchase in 2012 only Bakken crude oil and ethanol from out-of-state has been stored and/or transloaded from this facility.
4. Staff report, page 3, last sentence. “Staff has identified no unresolved issues.” The issues in this list of comments should be resolved before the PUC accepts the staff report for final review of the application.
5. In a peer reviewed, published report by Northwest Fisheries Science Center, NMFS, NOAA, 2012 suggests that PAHs in the food chain are a potential source of injury to juvenile salmon in the Lower Columbia. The sampling site listed as the Beaver Army Terminal shows elevated concentrations of PAHs. See the report: Yanagida, GK and 9 others, 2012. Polycyclic aromatic hydrocarbons and risk to threatened and endangered Chinook salmon in the Lower Columbia River estuary. The reported information of Lower Columbia River’s possible impact from migrating contaminants is information which has long-term liabilities and should be noted as an area of concern. The staff report is deficient in its description of the present facility.
6. The PUC staff report’s description of the present use and proposed use should include an environmental cost analysis should migrating contaminants be confirmed in residential well water in the nearby homes and in the Columbia River. The cost analysis should include the cost of connecting new water lines from the local water district to area homes. These types of concerns are long-term costs which have lingering assignments of liability and economic costs for both PGE and the Port of St. Helens. The report is deficient in the economic impacts to PGE and does not adequately describe the facility being sold.

OAR 860-027-0025 (I) The facts relied upon by applicants to show that the proposed sale, lease, assignment, or consolidation of facilities, mortgage or encumbrance of property, or acquisition of stock, bonds, or property of another utility will be consistent with the public interest;

Comments:

1. The tank farm is old, needs reinforcement and requires refurbishing. The tanks were built on river dredge materials deposited in the early 1900’s and sits on ground with a water table varying in depth from 2 feet to 7 feet below ground level. (See the Preliminary Assessment Report 2008 where soils are described throughout the report and the Construction Completion Report dated December 2016 see Section 6.2). It is not consistent with the public interest to continue to store and expand storage capacity of petroleum products at a site which may not be considered a buildable site now. The tank farm expansion is not consistent with the public interest.
2. In addition, the site is located within the Cascade Subduction Zone. The subduction zone is a large geographic area of the Pacific Northwest which is subject to an earthquake of huge proportions,

and is anticipated will occur within the next 40-50 years. The facility is located in this zone and is a substantial concern for health and safety and is not consistent with the public interest.

3. Attached is a description from Cornforth Consultants who were hired by PGE to design the foundation for the company's combined-cycle gas power plant. The description is instructive in assessing for liquefaction of the type of soils further inland from the river where the tank farm is located. The engineering firm said it determined 4,000 stone columns were considered most effective for the project. Siting a tank farm on soils subject to liquefaction is not consistent with the public interest when an earthquake can create a spill of unimagined proportions.
4. Page 6, paragraph 6 of the staff report fails to equate storage of the petroleum products being shipped by rail with consequences to PGE power generating facilities. Increased storage capacity, more frequent unloading of unit trains and loading of Panamax ships at the docks adjacent to the power generating plants which are within the blast zone of these explosive products is of serious concern. PGE has plans for an additional power generating plant at this location and seems to be putting all their eggs in one basket. Movement and storage of explosive petroleum products and nearby power generating plants are not compatible and are not consistent with the public interest.
5. Comments listed on page 2 above at numbers 1 and 2 are not consistent with the public interest.

OAR 860-027-0025 (m) The reasons, in detail, relied upon by each applicant, or party to the application, for entering into the proposed sale, lease, assignment, merger, or consolidation of facilities, mortgage or encumbrance of property, acquisition of stock, bonds, or property of another utility, and the benefits, if any, to be derived by the customers of the applicants and the public;

Comments:

1. In the comments listed above, concerns are raised. The PUC staff report is not extensive and does not use DEQ's files and reports recorded under ID # 3839. The DEQ reports contain descriptions of the site and past contamination issues. Monetary benefits from the sale of the tank farm do not outweigh possible risks to PGE from expanding storage capacity and transloading capacity of petroleum products at this site.

References Cited:

AMEC, Foster, Wheeler, 2016. Construction Completion Report for Portland General Electric (see online document or Docket File)

<http://www.deq.state.or.us/Webdocs/Controls/Output/PdfHandler.ashx?p=0c773332-ff01-4a76-a048-edd8a6bba0ccpdf&s=CRL-Inventory%20Listing.pdf>

Cornforth Consultants, Project: Port Westward Power Generation Facility, Clatskanie, Oregon
(attached at page 11)

<http://www.cornforthconsultants.com/projects-foundations-port-westward.htm>

Oregon DEQ letter to PGE dated February 1, 2017. "Notice to Current and/or Past Owners and Operators of Proposal to add Contaminated Property to DEQ's Confirmed Release List (CRL) and Inventory. Beaver Army Terminal (Former) Kallunki Road, Clatskanie, OR ECSI #3839." (attached at page 6)

<http://www.deq.state.or.us/Webdocs/Controls/Output/PdfHandler.ashx?p=0c773332-ff01-4a76-a048-edd8a6bba0ccpdf&s=CRL-Inventory%20Listing.pdf>

"Preliminary Assessment Beaver Army Terminal (Former) Kallunki Road, Clatskanie, OR 97016." Dated, October 26, 2008 and prepared by Joanne Labaw, U.S. EPA Region 10, Superfund Program Management Section and Steve Fortuna, Oregon DEQ Environmental Cleanup Division. (see online document)

[http://www.deq.state.or.us/Webdocs/Controls/Output/PdfHandler.ashx?p=2269c200-6b44-4617-a820-10278980e957.pdf&s=Beaver%20Army%20Terminal%20\(Preliminary%20Assessment\)-1.pdf](http://www.deq.state.or.us/Webdocs/Controls/Output/PdfHandler.ashx?p=2269c200-6b44-4617-a820-10278980e957.pdf&s=Beaver%20Army%20Terminal%20(Preliminary%20Assessment)-1.pdf)

Yanagida, GK and 9 others, 2012. Polycyclic aromatic hydrocarbons and risk to threatened and endangered Chinook salmon in the Lower Columbia River estuary. Arch Environ Contam Toxicol, 62(2):282-95 (see attached abstract at page 10)

<http://connection.ebscohost.com/c/articles/70564021/polycyclic-aromatic-hydrocarbons-risk-threatened-endangered-chinook-salmon-lower-columbia-river-estuary>



Oregon

Kate Brown, Governor

Department of Environmental Quality

Northwest Region

700 NE Multnomah Street, Suite 600

Portland, OR 97232

(503)229-5263

FAX (503)229-6945

TTY 711

February 1, 2017

**CERTIFIED MAIL NO. 7002 3150 0005 9656 5022
RETURN RECEIPT REQUESTED**

Peggy Y. Fowler
President
Portland General Electric Company
121 SW Salmon Street
Portland, OR 97204-2908

**RE: NOTICE TO CURRENT AND/OR PAST OWNERS
AND OPERATORS OF PROPOSAL TO ADD
CONTAMINATED PROPERTY TO DEQ's
CONFIRMED RELEASE LIST (CRL) AND
INVENTORY**

Beaver Army Terminal (Former)
Kallunki Road, Clatskanie, Oregon
ECSI #3839

Dear Ms. Fowler:

The Oregon Legislature has directed the Department of Environmental Quality (DEQ) to develop and maintain two lists, the Confirmed Release List (CRL) and Inventory, for the purposes of tracking sites with releases of hazardous substances. The CRL includes all sites where releases of hazardous substances have been confirmed. A release is considered to be "confirmed" when DEQ documents a release of a hazardous substance that may pose a significant threat to human health or the environment. The Inventory includes those sites with a confirmed release where DEQ has determined that additional investigation or cleanup is necessary. Both the CRL and the Inventory are updated quarterly and made available to the public upon request.

This letter is notification that DEQ proposes to include the Beaver Army Terminal located at Kallunki Road in Clatskanie on the CRL and Inventory. DEQ requests that you provide any comments you believe will correct or supplement this listing information. All comments must be received by DEQ within forty-five (45) days from your receipt of this notice. If you are unable to respond within the initial 45-day comment period, you may request an extension of forty-five (45) days.

The Department reviews and responds to all comments received on listing proposals.

Listing this property does not necessarily mean that you are responsible for the contamination, investigation or cleanup. Various provisions in state and federal laws prescribe responsibility for

these activities. The site can be removed from either the CRL or Inventory after all necessary actions are taken to ensure protection of human health and the environment. We appreciate the work you have done to investigate this site and hope we can continue to work together to eliminate threats to Oregon from hazardous materials.

Comments and requests for extensions should be sent to:

Oregon Department of Environmental Quality
Environmental Cleanup Program, Attn: Gerald Gamolo
700 NE Multnomah Street, Suite 600,
Portland, OR 97232

Enclosed, please find several supporting documents that outline current site conditions, explain the listing process, and document how the site meets the listing criteria described in state laws and administrative rules. If you have specific questions about the CRL, Inventory, site activities, or want copies of the Oregon Environmental Cleanup Law, please contact Northwest Region's Listing Coordinator, Gerald Gamolo, at (503) 229-6361, or at the address shown above.

Sincerely,



Keith Johnson, Manager
Environmental Cleanup Program
Northwest Region

Enclosures: 1) Site Summary Report; 2) Fact Sheet; 3) Site-Specific Data Sheet; 4) Oregon Statutes & Rules

cc: ECSI File #3839
Mike Greenburg, Project Manager, DEQ NWR/Portland Office



Site-Specific Data Supporting a CRL and Inventory Listing Proposal by the Oregon Department of Environmental Quality

This document references the facts and judgments that DEQ has relied upon to propose the site shown below for the Confirmed Release List (CRL) and Inventory. This document, with the attached summary of listing statutes/rules and the ECSI site summary report, also shows how the listing proposal satisfies applicable Oregon law and administrative rules. (This document presents only the minimum documentation requirements for CRL and Inventory listing; more detailed information about the site can be found in the ECSI files in DEQ's regional offices.)

- A. Site name and ECSI #: Beaver Army Terminal (Former), ECSI # 3839**
- B. Site address: Kallunki Road, Clatskanie, OR**
- C. DEQ is proposing this site for the: Confirmed Release List (CRL) and Inventory**
- D. Date of listing proposal: February 1, 2017**
- E. DEQ has documented a confirmed release at the site based on:**

Laboratory data from on-site sampling contained in the site file, specifically "Construction Completion Report" dated December 5, 2016.

Type(s) of contamination documented at the site: **Petroleum hydrocarbons from diesel and other fuel oils and associated components including volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs).**

Is this contamination present above background levels: **Yes**

- F. DEQ has determined that CRL listing exclusion criteria do not apply to this site because:**
 - 1. The release is not of *de minimis* (insignificant) proportions; and
 - 2. The release is not known to have dissipated; and
 - 3. Neither DEQ nor EPA has authorized the release by permit (or the release was permitted, but has accumulated or migrated); and
 - 4. The released substance is not a registered pesticide product applied appropriately (or it is such a product that has accumulated or migrated); and
 - 5. DEQ is not aware of any remedial action that has eliminated all risks the release may have posed to human health or the environment; and
 - 6. DEQ is unable to conclude that the release requires no further investigation, cleanup, or long-term controls to protect human health or the environment.
- G. DEQ has completed the required documentation for CRL listing, as follows.**
 - 1. Facility address, location, and description: refer to items A and B above for site address and location, and the ECSI site summary report for known information about the facility.

2. How and when the release occurred (if known): **Historic releases and a recent spill event which occurred on or about March 16, 2016.**
3. Types and quantities of hazardous substances involved: **Petroleum hydrocarbons (unkown volume) and associated components including volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs).**
4. The nature of facility contamination and status of remedial action (if known): **Bulk contamination was excavated in the fall of 2016. Some contamination remains due to location under footings, etc. Amendments were added to backfill materials to accentuate biodegradation in areas where petroleum hydrocarbons exceeded DEQ Risk-Based Criteria values.**
5. Persons who may have owned/operated the facility when the release occurred: **PGE and prior owner/operators.**

H. For Inventory proposals, DEQ has documentation of an on-site confirmed release and has used information supplied to determine that long-term controls are needed at the site to ensure ongoing protection of human health and the environment.

I. DEQ has completed the required documentation for Inventory listing, as follows.

1. Description of additional investigation, remedial action, or long-term controls DEQ believes is needed at the site: **None at present, on-site contamination appears to be stable.**
2. Description of threats the facility may pose to humans or the environment: **The site is being assigned Low priority as contamination appears to be stable and not migrating off-site. Potential exposure to contaminants at the site is low due to location at depth below ground surface. Listing is based on potential of long-term presence of contamination in the subsurface which should be re-evaluated during future work or transfer of property ownership.**
3. Ranking of site threats: **Low**
4. The source of funding for remedial action: **n/a**

Polycyclic aromatic hydrocarbons and risk to threatened and endangered Chinook salmon in the Lower Columbia River estuary.

[Yanagida GK¹](#), [Anulacion BF](#), [Bolton JL](#), [Boyd D](#), [Lomax DP](#), [Paul Olson O](#), [Sol SY](#), [Willis M](#), [Ylitalo GM](#), [Johnson LL](#).

Author information

Environmental Conservation Division, Northwest Fisheries Science Center, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, 2725 Montlake Blvd. E., Seattle, WA 98112, USA.
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Abstract

Polycyclic aromatic hydrocarbons (PAHs), derived from oil and fuel combustion, are ubiquitous nonpoint source pollutants that can have a number of detrimental effects on fish and wildlife. In this study, we monitored PAH exposure in outmigrant juvenile Chinook salmon from the Lower Columbia River to evaluate the risk that these contaminants might pose to the health and recovery of threatened and endangered salmonids. Juvenile Chinook salmon (*Oncorhynchus tshawytscha*) were collected by beach seine from five sites in the Lower Columbia River from Bonneville Dam to the mouth of the estuary (Warrendale, the Willamette-Columbia Confluence, Columbia City, Beaver Army Terminal, and Point Adams) and from a site in the Lower Willamette near downtown Portland (Morrison Street Bridge). Sediment samples were also collected at the same sites. Concentrations of PAHs in sediment samples were relatively low at all sites with average total PAH concentrations <1000 ng/g dry weight (wt.). However, we found PAHs in stomach contents of salmon from all sites at concentrations ranging from <100 to >10,000 ng/g wet wt. Metabolites of low and high molecular-weight PAHs were also detected in bile of salmon from all sites; for metabolites fluorescing at phenanthrene (PHN) wavelengths, concentrations ranged from 1.1 to 6.0 µg/mg bile protein. Levels of PAHs in stomach contents and PAH metabolites in bile were highest in salmon from the Morrison Street Bridge site in Portland and the Willamette-Columbia Confluence, Columbia City, and Beaver Army Terminal sites. Mean PAH concentrations measured in some stomach content samples from the Columbia City, Beaver Army Terminal, and Morrison Street Bridge sites were near the threshold concentration (approximately 7200-7600 ng/g wet wt.) associated with variability and immune dysfunction in juvenile salmonids (Meador et al., *Can J Fish Aquat Sci* 63:2364-2376, 2006; Bravo et al., *Environ Toxicol Chem* 30:704-714, 2011). Mean levels of biliary fluorescent aromatic compounds (FACs)-PHN in juvenile Chinook collected at the Morrison Street Bridge site in Portland, at the Confluence and Columbia City sites, and at the Beaver Army Terminal site were at or above a threshold effect concentration of 2 µg/mg protein for FACs-PHN linked to growth impairment, altered energetics, and reproductive effects (Meador et al., *Environ Toxicol Chem* 27(4):845-853, 2008). These findings suggest that PAHs in the food chain are a potential source of injury to juvenile salmon in the Lower Columbia and Lower Willamette rivers.

PROJECT : PORT WESTWARD POWER GENERATION FACILITY, Clatskanie, Oregon



Stone Column Installation

Cornforth Consultants (CCI) was retained by PGE to provide geotechnical and foundation design services for a new combined-cycle gas power plant on the banks of the Columbia River near Clatskanie, Oregon. Several potential sites were under consideration by PGE and exploratory drillholes revealed highly variable conditions ranging from very soft, organic silts to interbedded, predominantly sandy silts (Columbia River Alluvium). CCI determined that a sandy site nearer the river would be less expensive to develop than the highly compressible silt further inland, which would have required extensive preloading to mitigate potential settlement. In addition, heavier turbine structures would still require deep foundation support.

The sandy site, however, contained potentially liquefiable foundation materials. Several mitigation options were considered including soil-cement columns, blast-induced densification and deep, dynamic compaction. Ultimately, 4,000 stone columns were considered most effective. CCI developed acceleration time histories and performed ground response analyses prior to stone column treatment. Estimates of cyclic shear stress were used to provide a target improvement density for the ground between stone columns. Pre- and post-explorations, cone penetrometer and SPT blowcounts, were performed to assess the success of ground densification. Cost estimates indicate that mitigating the sandy site for liquefaction saved several million dollars over preloading the alternative sites.